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Lecture Capture
In Differential Equation Class
Tanvir Prince, Hostos Community College, City University of New York (CUNY), USA

ABSTRACT

In the fall 2015, for the first time, I have used “Panopto” for capturing my lecture in the Differential Equation class. In this short paper, I describe my personal journey of how I used this as a pedagogical tool in my teaching. This is coming from someone who is not a tech-savvy professor, but from someone who is willing to use and try different technology in the classroom but at the same time hold on to some of the traditional methods of teaching. What happens when you mix traditional techniques of teaching with technology? I will also explore some of the advantages and disadvantages of using “Panopto” as a first time users in this technology. If someone is willing to explore this technology in the near future in their classroom, I hope this article will give some insight and feedback to him/her. At the end, I also share some of the student’s opinion of using “Panopto” in the classroom.

Keywords: Panopto, Lecture Capture, Mathematics Education, Technology in the Classroom
Student Summer Research And Its Impact On The Method Of Teaching
Nieves Angulo, Hostos Community College, City University of New York (CUNY), USA
Tanvir Prince, Hostos Community College, City University of New York (CUNY), USA

ABSTRACT

The Hostos Community College, as part of the City University of New York, conducted student summer research from 2012 to 2016. There are four components to this research: undergraduate students, high school students, high school teachers and college faculty as a mentor. This is possible through a collaborative research grant with City College of New York. As part of this grant, we have developed modules in linear algebra to bring application inside classroom. The presentation will discuss the various aspect of the student summer research and also how these modules are implemented in the classroom setting to improve critical thinking and creativity skills, hands-on, team oriented, and interdisciplinary learning via collaborative research projects.

Keywords: Summer Research, Module, Mathematics Education, Method of Teaching
A Conceptualization For Evaluating Service Quality In Online Shopping
Umit Basaran, Bulent Ecevit University, Turkey

ABSTRACT

Quality is defined as an elusive and indistinct construct (Parasuraman et al., 1985). Moreover, perceived quality can be defined as the consumer's judgments about a product's or service's overall excellence or superiority (Zeithaml, 1988). Customer evaluations of service quality are strongly linked to perceived value and future behavioral intentions (Parasuraman et al., 2005). To provide superior service quality, online shopping companies must understand how consumers perceive and evaluate the quality of shopping sites, and their online customer and transaction services. Primarily, service quality was conceptualized by Parasuraman et al. (1985) and examined by Parasuraman and Zeithaml (1988); Cronin and Taylor (1992) as a construct consisting of tangibles, reliability, responsiveness, assurance and empathy dimensions (SERVQUAL). Based on the SERVQUAL conceptualization electronic service quality has been also conceptualized, measured and predicted in a multi-dimensional manner or in accordance with several attributes.

Zeithaml et al. (2000) expressed in their conceptual framework that consumers consider reliability, responsiveness, access, flexibility, ease of navigation, efficiency, assurance/trust, security/privacy, price knowledge, site aesthetics and customization/personalization dimensions when they evaluate e-service quality. Barnes and Vidgen (2000) developed an instrument consists of four categories and eight sub-categories labeled ease of use (navigation and general ease of use), experience (visual impact and individual impact), information (finding information and information content) and communication & integration (external integration and communication) for assessing web-site quality (WebQual). Yoo and Donthu (2001) developed an instrument consists of four dimensions labeled ease of use, aesthetic design, processing speed and security to measure the perceived quality of an internet shopping site (SITEQUAL). Wolfinbarger and Gilly (2003) develop a measure consists of fulfillment/reliability, website design, privacy/security and customer service for predicting e-tail quality (eTailQ). Parasuraman et al. (2005) tested an electronic service quality scale (E-S-QUAL) of four dimensions labeled efficiency, system availability, fulfillment, privacy and also created an electronic recovery service quality scale (E-RecS-QUAL) consists of three dimensions labeled responsiveness, compensation and contact. Bauer et al. (2006) developed a transaction process-based scale consists of functionality/design, enjoyment, process, reliability and responsiveness for capturing service quality in online shopping (eTransQual).

Based on the information mentioned above, the purpose of this study is to give point of view about electronic service quality in online shopping context. For this purpose, a conceptual model was developed intended for the determinants of the electronic service quality. In the conceptual model, efficiency, information, website design, fulfillment, security/privacy, responsiveness, compensation and communication constructs are the determinants of overall e-service quality. Efficiency refers the ease of use, availability and well organized structure of the site. Information indicates the adequacy, accuracy and timeliness of the directions and inputs provided by the site. Website design represents the appearance of the site. Fulfillment denotes the promises about the orders, products, services or delivery time kept by the site. Security/privacy expresses the degree about the safety of the site from intrusion, and the protection about payment and shared information. Responsiveness indicates the helpful and willing service that responds to customer inquiries or problems quickly. Compensation refers the making up the problems created by the site. Communication represents the ways provided by the site to communicate with the customer easily.

This study offers a conceptual framework about electronic service quality and proposes a theoretical model for the determinants. Therefore, it is planned to be completed in the future research through an empirical data. The structured questionnaire is intended to apply on consumers who already made a purchase from a web site. It is expected that the results obtained from the empirical study will provide some theoretical and managerial implications.

Keywords: service quality, e-service quality, online shopping

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Venture Capital And Rural Entrepreneurship: Nigeria Evidence

Olamitunji Dakare, University of Lagos, Nigeria
Ben E. Akpoyomare Oghojofor, University of Lagos, Nigeria
Mutiu Galubi, NYC Human Resource Administration, USA

ABSTRACT

Rural entrepreneurship has become an increasingly important channel through which communities and rural entrepreneurs contribute to economic development. Perhaps, for this reason, rural entrepreneurs have taken interest in active venture capital financing, as it also provides a source of professional support, which rural entrepreneurs need in order to reach their fullest economic potential. This article set out to examine the level of awareness of Venture Capital (VC) financing and its managerial input in boosting rural entrepreneurship and industrial development in Nigeria. The descriptive survey research design was adopted for the primary data, obtained through copies of the questionnaire, prepared for the study. The sample for the study consists of 396 rural entrepreneurs, located in the six geo-political zones in Nigeria. Data collected for this study were analysed and interpreted with descriptive statistics. Results from the study revealed that rural entrepreneurs in Nigeria were largely oblivious of the potentials for VCs in bridging their business financial gaps. The findings also revealed that venture capitalists were not willing to finance rural entrepreneurs in Nigeria, owing to their unpredictability, incapability to meet the requirements of venture capitalists and their inexperience in business financial management. Rural entrepreneurs in Nigeria were found to be barely in partnerships, which denied them the equitable capital base requisite to attract VCs. Thus, it was suggested that all levels of government (local, state, and federal) should take the necessary action to build and maintain instituted enterprise support networks and structures that would help to educate rural entrepreneurs on the benefits of VCs as a source of financing their businesses and that would take them through understanding the informational content for obtaining the VCs.

Keywords: Entrepreneurship, Financing, Rural entrepreneurs, Venture capital, Entrepreneurial ventures, Nigeria.
Antecedents Of Employee Intention To Stay: A Study Of Employees In Zimbabwean SMEs
Elizabeth Chinomona, Vaal University of Technology, South Africa

ABSTRACT
Most research that has been done on the influence of employee perception of equity (EPE), organisational citizenship behaviour (OCB) on organisational commitment (OC) and turnover intention (ITS) has been on large organisations and little attention has been paid to SMEs. Studies on employee perception of equity and organisational citizenship behaviour has not filtered down to SMEs in developing countries. The primary objective of the study is to investigate the influence of OCB, EPE and OC on ITS in Zimbabwe’s SME sector. It also sought to ascertain the kind of relationships between OCB and OC, EPE with OC, OCB with ITS, EPE with ITS and finally OC with ITS. Structured questionnaires were distributed to SMEs in 5 major cities. A quantitative method using Smart PLS was employed to test the relationships among the three hypotheses. The results showed that there is a positive relationship between the three proposed hypotheses. Based on the findings, recommendations will be made to both the government policy makers and the SME owners. The proposed study is expected to have practical and theoretical implications to both the policy makers in the government and the owners of small businesses in Zimbabwe. In addition, it will provide added insights and added new knowledge to the existing body of literature on human resource management, hitherto not studied extensively in developing countries of Southern Africa and Zimbabwe in particular.

Keywords: Equity Theory, Small And Medium Enterprises, Organizational Citizenship Behavior, Employee Perception Of Equity, Organizational Commitment, Employee Intention To Stay.
Keynote Address:
International Business
And Economics Scholarship
From The Space Of Mindfulness
David Borker, Manhattanville College, USA

Learning how to balance your mind, cultivate awareness, build emotional resilience, develop self-compassion and generate compassion for others, see and listen deeply.

ABSTRACT

Mindfulness meditation and contemplation practices have influenced all levels of education, including undergraduate and graduate teaching in colleges and Schools of Business. This teaching has penetrated the business world, through such means as executive educational programs, resulting in the spread of mindfulness meditation practices in many types of organizations. Although there is scholarly and professional research on the role of mindfulness in business higher education and business organizations, little if any attention has been paid to the potential impact of mindfulness practices on business and economic scholarship itself. This is the subject of our keynote address. The first part of the presentation describes intellectually and demonstrates experientially the basic concepts and practices of mindfulness meditation as they have been actively utilized and transmitted for several millennia in the East. The second part summarizes briefly the benefits that have been derived from integrating mindfulness meditation practices into both business higher education and into actual business organizations. The third part examines the characteristics of scholarly thinking, research, writing and discourse and identifies the unique benefits that can be derived by integrating mindfulness meditation and contemplation practices into these activities. The conclusion offers a vision of international business and economics scholarship transformed by the mindfulness of its authors.
The Decline In National Football League Television Viewing: An Of Loyal Fans
Craig A. Martin, Western Kentucky University, USA

ABSTRACT

Nearly all major professional sporting leagues experience fluctuations in television ratings, especially when compared over multiple year increments. These ratings ebb and flow as a multitude of factors influence the television viewing habits of fans of these sports. The decline of television ratings for the National Football League (NFL) gained notoriety in 1985 when the executives of networks broadcasting NFL games expressed concern over the fragmenting sports television viewing habits of consumers (Taaffe, 1985). NASCAR, after record-setting television ratings in the mid-2000’s, has seen race attendance and television viewing decline consistently for nearly a decade (Gluck, 2016). The National Basketball Association (NBA) has experienced significant growth in perceived fan interest and media coverage in recent years, but its average regular season television rating for the 2015-2016 season was less than one half of its average for the 1995-96 season (https://en.wikipedia.org/wiki/National_Basketball...). Although these ratings fluctuations are often expected, one of the most alarming television viewing declines is taking place in the current 2016 NFL season, where midway through the season, television ratings across all networks broadcasting NFL games are down nearly 20% as compared to the previous season (Gillette, 2016). The ratings have been so disastrous that the networks broadcasting NFL games on television are being forced to give away advertising spots at an alarmingly 40% greater frequency than merely one season ago (Smith and Shaw, 2016).

The potential explanations for the drop in television ratings for NFL games are numerous. Some suggest that the actual games are causing the decline. Whether it is a poor on-field product (often explained simply as bad football), disjointed games because of inconsistent officiating and instant replay breaks, or a lack of star quarterbacks who in the past have been significant draws for television audiences, many media outlets feel that the game of football is less enticing simply because the football being played is not enjoyable to watch (Gillette, 2016). Other possible causes identified by the popular press include the increasing number, and potentially life threatening effects, of concussions. The NFL has become the focus of a variety of critics who suggest the NFL’s lack of concern about concussed players is inhumane, and driven by greed (Simmons and Gladwell, 2016).

Other suggested causes of the increasing lack of interest in televised NFL games include fragmented media options due to NFL broadcasts being available in numerous outlets, and the recently emerging phenomenon of younger consumers relying on mobile viewing options for entertainment. In other words, the NFL is attempting to entice greater television viewing from its fans as the next generation of television viewers move away from traditional television viewing. And there is more. Many NFL fans now participate in fantasy football leagues, focused less on the results of games and more on the individual statistics of star players, leading to a greater reliance on web-based sources for this up-to-the-minute information. The NFL also recently introduced the “NFL RedZone”, which allows viewers to watch only those games where teams are close to scoring points, a favorite of fantasy football fans. Off the field issues are plaguing the NFL as well. It has been posited that high-profile sexual assault cases involving NFL players are leading to a drop in female fans. Fans have also expressed disgust and disappointment related to the recent national anthem protests by certain NFL athletes (Gillette, 2016). In sum, NFL fans have a variety of reasons, real or imagined, to move away from NFL television viewership.

The present study will attempt to assess the most pressing reasons that the NFL is seeing recent declines in the television ratings of its games. The reasons for declining NFL television ratings will be examined in the first months of 2017 after the current NFL regular season has concluded. Surveys have been designed to assess the television viewing habits of loyal NFL fans. To insure that those surveyed qualify as loyal fans, potential respondents will be pre-screened to determine typical NFL television viewing habits, and the length of time potential respondents have...
been NFL fans. Respondents will then complete questionnaires assessing individual television viewing habits, attitudes toward specific factors hypothesized as potential causes of decreased NFL television ratings, and demographic characteristics. A total of 1000 questionnaires will be distributed by trained researchers, with the goal being to obtain 750 usable responses. Initial data analysis should be completed for presentation at the 2017 International Academic Conference on Business.

REFERENCES:


Bringing Educational Relevance To Enhance Student Learning And Engagement
Hong Lin, University of Oklahoma, USA

ABSTRACT

Research indicates that traditional instruction of college students often focus on knowledge and technical skills – subject matters, without relevant contexts and real-life examples. The traditional instruction treats subject matters as a stand-alone component and ignores the rapidly changing environment where students live in. With this caveat in mind, simply teaching students subject matters outside of real-life relevance does not promote active learning and can be ill-afforded in the long term.

This presentation will introduce a framework of relevance to enhance active learning and improve student engagement that can be applied to many disciplines. The framework, which was tested in a graduate course, includes the triangulation of four major components: subject matters, contexts, stakeholders, and professionalism. In other words, the triangulation contextualizes the teaching of subject matters into complex and relevant environments and people. Used this framework, students reported significant learning gains, improved educational experience, and enhanced confidence in joining the workforce in the future. This presentation will discuss the framework and the study results.
Risk Induction / Mitigation
In Knowledge Intensive Companies
W. David Holford, University of Quebec at Montreal (UQAM), Canada

Organisations are continuously pre-occupied with the notion of risk in terms of its assessment, characterization, and management. Yet, as reflected across the ever-growing interest in the field of knowledge (Nonaka et al, 1995 and 2004), such organisations are also fertile grounds for the knowledge they possess as well as create. Furthermore, knowledge creation leading towards enriched or complexified knowledge can be viewed as having both a ‘defensive’ and ‘offensive’ role within organizations: ‘defensive’ in that it is primordial in terms of trouble-shooting, problem solving and avoiding deleterious consequences; and ‘offensive’ in that it is essential for innovating products and services innovation. Surprisingly, the literature providing an explicit and in-depth examination as to the possible inter-relationship between knowledge and risk is relatively scarce. This of course, discounts the numerous ‘passing’ comments made in regards to their relationship. For example, Kloman (2001) in arguing that risk cannot be avoided states that “every decision, no matter how carefully conceived or studied by the experts, creates consequences that are impossible to anticipate” and that we must “recognize the limits of our knowledge”. Should we construe that risk is immanent and cannot be reduced beyond a certain level of knowledge?

Along similar lines, Weick’s (2001: 44) “…knowledge and ignorance grow together; when one increases so does the other…” would almost have us accept our ‘fateful’ destinies. Yet, a closer look at Weick’s (2001: 30, 59 and 62) position gives us an altogether different view: “simplifications produce blind spots…” and “…with more differentiation comes a richer and more varied picture of potential consequences”; or that “safety is elusive because it is a dynamic non-event – what produces the stable outcome is constant change rather than continuous repetition”. What Weick seems to be alluding to is that on-going and never-ending collective complexification of knowledge can better prepare entities to deal with complex and ever-changing environments. In other words, to stop learning increases risk. For Weick (2001), the complexification of knowledge provides increased systems’ “resilience” (that is, provide flexible, low impact environments to better face unexpected events); or provide enhanced readiness for a given event so as to limit its damages (e.g. crisis management).

At the societal level, Beck (2001) presents the paradox of how Modern Society is now a ‘Society of Risk’, despite all the knowledge it has attained. Beck (2001), who partially agrees with Kloman (2001) in that risk appears to be generated with every decision taken, nevertheless argues that the mitigation of risk can be attained via the generation of a more ‘balanced’ knowledge. Implicit throughout Beck’s (2001) arguments is that knowledge enrichment can only be achieved by ‘re-balancing’ various ‘contradictory’ or opposing concepts such as critical vs instrumental reasoning, the explicitly measurable vs the tacitly intangible, analysis vs synthesis, the individual vs the collective, private interests vs social well-being, etc.

A closer look at contradiction suggests that it plays an important role in regards to both the creation of risk and creation of knowledge and their inter-relationship. For example, if we are to believe the words of Quinn and Cameron (1988), contradiction is inherent in human beings and their social organisations. Yet the presence of contradiction or antithetical concepts, as Poole and Van de Ven (1989) explain, has often been viewed as an “indicator of poor theory building”. Yet if contradiction abounds everywhere, is it not a ‘risky’ proposition to ignore, refuse or repress it, especially in today’s ever-changing and turbulent ‘environments’, whereby we more often than not place great emphasis on being ‘efficient’ and ‘getting to the point’? Interestingly, certain advocates of knowledge creation and its management such as Nonaka et al (2003 and 2004) see the recognition (and subsequent synthesis) of antithetical concepts as being a key factor in creating richer and more innovative knowledge. If we begin with Nonaka et al (1995) and Weick’s (1995) words that organisational knowledge creation and sense-making begins with the individual, and if we entertain the notion that the way we view contradiction can perhaps provide insights as to how risk and knowledge may manifest themselves, then how is contradiction viewed in daily organisational activities between individuals within workgroups? Does this manifest itself as risk, as knowledge or both?
It is within this context that we ask ourselves these questions, whereby our proposed research aims to understand how knowledge and risk are created, so as to eventually propose an organizational approach that would simultaneously mitigate risk while encouraging knowledge enhancement and innovation.
The Socio-Economic Value Of French Language Education In Lesotho: The Learners’ Voice
Makhulu A. Makumane, University of KwaZulu-Natal, South Africa
Sandiso Ngcobo, Mangosuthu University of Technology, South Africa

ABSTRACT

The introduction of a foreign language, especially that whose native country holds an esteemed position in the global economy, promises to be an instrumental tool in promoting individual, national and socio-economic development. In recent years the Ministry of Education and Training in Lesotho opted to reintroduce French as a foreign language in secondary schools. As the government forges on with this educational approach it becomes necessary to garner various stakeholders’ attitudes on this issue. Hence, this article explores learners’ attitudes on the value of French language education in an effort to understand whether their views correlate with politicians’ aspirations or not. The study uses a questionnaire with both open-ended and closed-ended questions among secondary school learners where the French project has so far been piloted by the government and where it has not been piloted. The findings suggest a shift in attitudes as the majority of participants, including those that have not studied French, generally embrace multilingualism with French as one of the languages that should be developed together with Sesotho and English in Lesotho. French is viewed as having the potential to open doors for further education and job opportunities. This makes it necessary for Lesotho government to extend the teaching of French.

INTRODUCTION

Since the independence of Lesotho from Britain in 1966, education has been considered as an essential tool for social transformation. Education has also been seen as a vehicle for promoting socio-economic development at individual and social levels. For instance, the Constitution of Lesotho states that education should be ‘directed to the full development of the human personality and sense of dignity and strengthening the respect for human rights and fundamental freedoms’ (Government of Lesotho (GOL), 1993/1998:28a). This implies that the government of Lesotho perceives education as the foundation of human development. Similarly, the Ministry of Education and Training (MOET) documents are aligned to the Constitution.

For instance, the MOET in Lesotho revised its language education policy in 2009 as part of the overall education vision, with the aim of better responding to societal needs through an improved approach to languages as resources available to the nation. The MOET states that ‘[A]t secondary level, [the] purpose of [education] should be to serve as a preparation for tertiary education, further personality development as well as preparation for the world of work’ (2009b:x). The introduction of French as one of the subjects in secondary schools has thus been aimed at supporting personal development, notably for the betterment of individuals affected by the introduction of the language in question. This is supported by MOET (2012:3) in asserting that:

[French] has become one of the most important languages used for the purposes of socio-economic development as it facilitates international diplomacy, trade and commerce as well as the resolution of certain crises. The re-introduction of French in post primary schools in Lesotho must, therefore, be seen in the broad context of the country’s Vision 2020 which, among other things, expresses commitment to the raising of the standard of living in Lesotho.

Kamwangamalu (2016) laments this language policy approach that has been taken by many African countries which put foreign languages on a pedestal at the expense of indigenous languages in their conduct of the business of the state. Yet, Kamwangamalu (2016) acknowledges that the approach is influenced by Africa’s economic dependency on Western donors. He then proposes a full investigation on the consequences of these language policies.
In the same breath, this paper notes with concern that the Lesotho’s Ministry of Education and Training has decided to (re)introduce French as a foreign language in secondary schools with an understanding that it will help to bolster the contribution of education in socio-economic development. This happens despite the fact that there are locals who have previously shown not to recognise French language education as a viable move towards advancing personal and socio-economic development as well as participation in globalization. A prevailing opinion among Basotho concerning French is that it is useless and a waste of time (Manyawu, 2007a). The opposing public view suggests a discord between the government and the society it is supposed to serve. This may indicate a lack of proper consultation and a top-down approach on the part of the State. Most importantly for this article, there is a paucity of research that should have been undertaken to inform policy. In recognition of the dynamic nature of language attitudes, the study seeks to garner the participants’ views on the continued teaching of French in Lesotho, especially as the country celebrated its 50 years of independence in 2016. The idea would be to evaluate if attitudes towards foreign language have changed to be positive or not. Moreover, the study of this nature is supported by Kormos and Kiddle (2013) who argue that there is scarcity of research in the area of foreign language competence in developing countries. This lack of research attention ignores the fact that foreign language competence has the potential to open up new opportunities and breaking social barriers for learners from lower social classes (Kormos & Kiddle, 2013).

Hence, this paper aims to establish if French is viewed by learners as having a prominent impact on the socio-economic development of Lesotho. Such a study is considered significant in the context of Lesotho as a developing country that is in dire need of economic injection from foreign first world nations.

**LITERATURE REVIEW**

Arcand and Grin (2013:5) posit that the term ‘economics of language’ has since the mid-1960’s been utilised to explore the effect of language skills on labour income and evaluation of language policies. The authors’ concern is, however, on the subfield of development economics that has paid little attention to language. Their view is shared by Kormos and Kiddle (2013) who lament the scarcity of research on the motivation of disadvantaged learners on learning a foreign language. Kormos and Kiddle’s (2013: 399) propagation for a focus in this research area is that foreign language competence might open up new opportunities and assist in breaking social barriers for students from disadvantaged communities. Kormos and Kiddle (2013:400) further note that the existing findings on the role of socio-economic factors in foreign language learning ‘clearly highlight the importance of social context in influencing foreign language learning outcomes’. Hence, this study explores the role of French as a foreign language on socio-economic development in an African state called Lesotho.

Lesotho is apt for an investigation of this nature because it is a less developed country. The country is festering in a marsh of least developed countries and is currently struggling to become advanced economically and socially. As a landlocked country that is completely engulfed by South Africa, Lesotho relies on South Africa for much of her economic activity. For instance, approximately 90% of the imported goods consumed are from South Africa and a high number of locals benefit from remittances from family members working in South Africa (Central Intelligence Agency (CIA), 2015). Lesotho also relies on customs duties from Southern African Customs Union (SACU) for government revenue (The Heritage Foundation, 2015). Lesotho’s principal exports are mainly diamonds and water. Furthermore, this country has been a subsistence-based agricultural economy despite recurrent droughts that continue to cause devastation on harvests (Economic Development, undated).

Arcand and Grin (2013:4-5) argue that while development within a country ‘is a multidimensional process that can be measured along a plethora of dimensions’, the GDP per capita remains the only indicator ‘applicable across all countries’. Lesotho’s GDP in 2014 was estimated at $5,575 billion, with a 5 year compound annual growth of 5.2% (CIA, 2015). Other numerous challenges facing Lesotho include, but are not limited to, high unemployment rate and slow economic growth, poverty, rampant HIV and AIDS, environmental degradation, gender equality and equity, and political conflicts causing disruptions in business activities (MOET, 2009a; Nseera, Salami & Bhatia, 2015). All these issues combined have a negative impact on the already fragile economy. It then becomes necessary for the government to explore various ways in which it can contribute to socio-economic development.

In an attempt to curb these economic challenges, the government of Lesotho (GOL) in the year 2000 devised a Vision 2020 document which presents a framework of how to combat socio-economic challenges and work towards an economically stable country come year 2020 and beyond (GOL, 2000). The document seeks to uncover effective
options for economic, political and human development, to explore different developmental strategies suitable for the Lesotho situation and to promote a process of open and consultation with socio-economic groups countrywide (GOL, 2000). The Lesotho Vision statement reads as follows:

By the year 2020 Lesotho shall be a stable democracy, a united and prosperous nation at peace with itself and its neighbours. It shall have a healthy and well-developed human resource base. Its economy will be strong, its environment well managed and its technology well established. (GOL, 2000:4)

The GOL (2000) document identifies seven pillars of development namely: democracy, unity, peace, education and training, economic growth, management of the environment, and advancement in technology. The government projects on strengthening these pillars and thus improving the state of the economy through initiatives from different sectors is embedded in these pillars. However, sixteen years after the Vision 2020 document was proposed, the economy of Lesotho appears to be crumbling, if media reports are anything to go by. The Lesotho Times (2016) notes with concern that the country is set for economic paralysis in 2016. This concern is attributed to a combination of factors within and outside the country’s control. On the home front, there are political and environmental challenges. On the global arena, there are numerous factors that the country cannot do anything about even though such factors would impact negatively on foreign investment and trade. Lesotho, therefore, needs to find strategies that will save it from a total economic collapse. In this regard, education appears to be one of the tools that can be strategically utilised as one of the remedies. This assertion is supported by Osokoya (in Ofoego et al. 2013:2), who is of the view that “[an] educated population contributes to the socio-economic development of the society as a whole and to the well-being of the individuals within the society.” Education, being one of the pillars mentioned in the Vision 2020 document, can correctly be expected to be a developmental tool and a panacea for poverty. Therefore, efforts need to be made to associate education with the national developmental goals.

With the inclusion of other disciplines, foreign language education has seemingly been made part of the overall developmental plan. The goal of language education is to promote the use of linguistic, communicative, literary, creative and other skills necessary for socio-economic development and to enhance positive attitudes and values necessary for effective communication. French language, as part of the ‘other’ languages recognised in Lesotho, and recently having been formally made part of language education, promises to deliver on the said aspirations. The introduction of French, a foreign language whose native country is a key player in the global economy, is seen by the government as instrumental in promoting Lesotho’s economic growth. It would, however, be important to find out if significant sectors of society, such as the youth, share such sentiments. The particular youth of interest should be school learners against a background in which ‘most research conducted with foreign language learners has involved participants who study in tertiary education and younger students who come from middle-class or privileged social backgrounds’ (Kormos & Kiddle, 2013:399).

The school learners of Lesotho are considered significant as participants in this study because they are central to the education system that has been identified as a vehicle for economic development. In this connection, the MOET declares as follows: ‘Upon attaining independence […], Lesotho set itself to reforming the content of education to address its developmental needs’ (2008:3). Attempts were made to correlate education to overall national developmental needs as it was seen as the ultimate tool towards accomplishing the national aspirations of self-reliance, economic autonomy and maintenance of environmental well-being. The modification of the education policy after the 1966 independence greatly affected the presence of French as a subject in schools. French, which was first introduced in the school system in 1868 at the inception of the Normal school, which went through various phases and is currently known as Thabeng High School, was neglected as a subject in most schools as there were inadequate resources to teach it. The teaching and learning of French waned slowly due to the gradual exit of French-speaking missionaries, who taught and trained teachers. This, therefore, resulted in having less people qualified to teach the language, and/or locals who were disinterested in promoting it (Manyawu et al. 2013). The exception were only the schools that had the means or that still benefited from ‘financial and material backing in France’ that continued to offer this language (Manyawu, 2007b:136). The schools totalled a small number of eight that included five private schools, two community schools and one government school (Manyawu et al. 2013). However, in recent years the government of Lesotho recognised the need to reignite French by incorporating it as one of the foreign languages into the curriculum for all schools. The arguments placed forth for this decision were, among others;
• French is a tool for development in this developing country, especially since Lesotho aims at enticing foreign investors.
• Having economic relations with some African francophone countries and France, Lesotho aspires to create job opportunities for the Basotho locally, regionally and internationally (MOET, 2009b).

It is befitting to note that French is the only foreign language incorporated in the education system that does not belong to the former coloniser’s territory. Nevertheless, since it promises ample opportunities for the locals, it is deemed pertinent to include it in the educational system. Manyawu (2007b:136) postulates that ‘... history has [...] shown that it is possible for the African government to deliberately move to teach foreign languages once political and economic benefits for the country have been defined’. Thus, since Lesotho aims at reinforcing cultural, scientific, economic and political relations between herself and France and other francophone countries (MOET, 2009), it proved ideal to include French in the school’s programme, at the secondary level. As not all countries have developed on the level of global economies (Mufwene, 2002), the introduction of a foreign language, especially that whose native country holds an esteemed position in the global economy, has proven to be an instrumental tool in promoting economic growth for the country in question. Mankolo (2006 in Manyawu 2007a:89), states that ‘globalisation requires the adaptation of educational content to meet both personal and national demands’. This, therefore, suggests that a foreign language is no longer an indulgence of sorts but rather a necessity to properly align the country in question with the demands of globalisation.

It may also be worth noting that invariably, French is a global language, as it is the only language, alongside English, that is taught in every country in the world (Consulate General of France in Houston, 2009). As Lesotho is an avid member of regional organisations such as the United Nations (UN) and of Southern African Development Community (SADC), with both organisations having French as an official language, it appears to be an opportunistic venture for Basotho children to learn this language. French promises to enhance employment and open career opportunities that would not necessarily be possible without the knowledge of the language. Knowing this language would greatly increase the chances of the locals to compete effectively in the global market as ‘knowledge of a second language is considerable in over 60 occupations’ (Education Office of the French Cultural Services, undated.) This, consequently, insinuates that ‘[t]he teaching of French ... aims at providing Basotho children with the knowledge and skills of participating meaningfully in global and regional initiatives for development’ (MOET, 2009b).

The knowledge of French would also appear to augment greatly the appreciation and acknowledgement of other people, and thus open one’s mind in perceiving the world in a different light. To support this view, Manyawu et al. (2013:13) write: ‘By choosing to teach French, Lesotho’s policy-makers are implicitly choosing to let Basotho youths be influenced by French discourses on various aspects of social life’. The knowledge of French may also open doors for Basotho children to study abroad, especially in French speaking countries. The French government usually offers scholarships to students with a good level of French to study their chosen discipline and, therefore, acquire internationally recognised degrees that would aid in securing opportunities in their chosen career paths and thus help curb unemployment, which is an impeding factor in socio-economic development. Kormos and Kiddle (2013) in writing about English as a foreign language express similar observations. They note that English has become an international language that no longer solely belongs to its native speakers. Kormos and Kiddle (2013, citing Yashima 2002: 57) argue that foreign language learning contributes to ‘willingness to go overseas to study or work, readiness to interact with intercultural partners…and a non-ethnocentric attitude towards different cultures’.

The role of French to the Basotho nation, however, appears to be missing in the Constitution. According to Section 3 of the Constitution, Lesotho is a bilingual country with the majority of her population able to speak Sesotho and English, the two official languages. Such an approach is befitting because Sesotho is spoken by approximately 85% of the population, which makes it dominant in terms of language use (Kula, 2006). It is primarily used for daily communication and as a means of transmitting tradition and culture from one generation to the next. The equal political status Sesotho shares with English should be understood in its colonial history. As noted by Olivier (2009) and Kamwangamalu (2013), English has been officialised because it is a previous coloniser’s language and this has been done in order to preserve the privileges associated with Britain.

In the same breath, despite English being the second most used language in Lesotho it, however, has higher socio-economic prestige than Sesotho because of its dominant use in government, administrative and international
communication (Kamwangamalu & Moyo, 2003). It is along this observation that it is correctly argued that English “is the language by which a person’s actual or potential socio-economic standing in the community is measured” (Kamwangamalu, 2013:162). This position is cemented in the language education policy which states that English is to be taught as a subject from grade 1 and established as a medium of instruction in schools from grade 4 onwards (MOET, 2009a).

Yet, the Curriculum and Assessment policy, which determines the place of languages in the education system, has since been revised and now recognises that there are ‘other languages’ in Lesotho apart from the two official languages. Minor languages like IsiZulu and isiXhosa, for example, which were suppressed by earlier language education policies, can now be taught as subjects and used as mediums of instruction in the regions where they are spoken. It is in the same spirit that the revision of the language education policy also allows for foreign languages, such as French, to be taught as subjects in Lesotho in the category of ‘other languages’. In an attempt to revive and develop this language as a subject in the education system, the government of Lesotho and experts from the National University of Lesotho, the French Embassy in Pretoria, the University of Cape Town and the Alliance Française in Maseru reintroduced French in 12 pilot schools in 2009 (Makumane, 2009).

The sudden interest in French by the Lesotho government should be understood in the context that it is a widely spread language. French has the population of approximately 220 million speakers around the globe, which accounts for 3% of the world population. It is also the second most learned foreign language in the world, after English (French Ministry of Foreign Affairs and International Development, 2015). It has become one of the most important languages as it facilitates international diplomacy, trade and commerce as well as resolution of crises such as poverty, famine and disease (MOET, 2009c, 2012). It, however, remains to be investigated whether the future members of society, in this case, the current high school learners, share the same sentiments.

The timing of the study is apt against a background in which the teaching of French has been so far been limited to twelve pilot schools. However, in a private interview conducted in February 2015 with the senior curriculum specialist for linguistic and literacy area at the National Development Curriculum Center (NCDC), it emerged that only eleven schools remain active after Sacred High School officially withdrew from the pilot project due to lack of funds from government to provide for a grant. It is essential to clarify that this French project is a joint venture between the Ministry of Education and Training and the French Embassy, through the Alliance Française in Maseru. The French government, for its part, provides an expert in the teaching of French as a foreign language and is also responsible for the provision of teaching materials. The materials in question comprise student textbooks and teacher’s guides, and these were all distributed to the pilot schools through the Ministry of Education and Training. The government of Lesotho, on the other hand, ensures that the French teachers working in pilot schools have grants available to pay them. It also organises and pays for workshops and refresher courses that equip the teachers with new emerging trends as far as teaching French as a foreign language is concerned. The purpose of establishing learners’ views on this French project would be to understand if the resources spent are justified by the government of Lesotho. This would in turn help inform future policy revision. It must be acknowledged though that earlier studies suggest that the idea of foreign language learning and teaching has been received with scepticism by many members of Lesotho society (Manyawu, 2007a; Makumane, 2009). It then becomes important to evaluate whether or not such sentiments have changed with time.

Such an evaluation is informed by Parianou’s (2010:168) assertion to the effect that ‘[l]anguage attitudes are changing all the time because the economic situation of a country may change’ and this change also ‘goes for the choice of a foreign language’. Language attitudes are here understood to refer to the psychological construction that informs ‘the feelings people have about their own language or the languages of others’ (Parianou 2010: 167). Bangeni and Kapp’s (2007) study among South African undergraduate students finds that shifts in language attitudes are connected to social factors and individual experiences. For this reason, it is likely for individuals to take an ambivalent position when it comes to their language and a foreign language. Bangeni and Kapp (2007) find that the respondents in their study value English because it signifies social mobility and their African languages because of symbolic roles they play in their identity.
METHODOLOGY

A questionnaire was distributed to learners from two high schools for the collection of data. One school already taught French while the other did not. The participants were in the last class of their schooling which is known as Grade 12 or Form 5. The participants’ level of schooling was considered important in this study because it meant they would be in a better position to express informed views on the role of language in socio-economic development. After passing their last year of schooling they would be expected to either further their studies in tertiary institutions or secure jobs. In both instances, language would be significant as means of communication and medium of learning. This participants’ selection is in line with the MOET document which identifies secondary school learners as in ‘preparation for tertiary education, further personality development as well as preparation for the world of work’ (2009: x).

Before the distribution of the questionnaires, permission was sought from principals of the selected schools. The participants completed the questionnaire voluntary and their anonymity and that of their schools were ensured. The questionnaire comprised of 12 questions divided into two sections. The first section was on respondents’ language background; comprised of 4 questions. The second section was made up of 8 questions that were specifically on language attitudes that the study sought to establish. The aim of the questionnaire was to solicit information relating to the language attitudes of the learners towards the value of a foreign language (French) together with their language (Sesotho) and that of English in their lives and the socio-economic development of their country.

RESULTS

In total, questionnaires were filled in by 36 participants. These were 19 learners from school A which already taught French and 17 learners from school B which did not teach French. All the participants were first language speakers of Sesotho. However, in response to the first question (Q 1) it emerged that only 21% of school A participants spoke Sesotho at home. Sixty-eight percent indicated that they spoke English and Sesotho. This was unlike in school B where the majority (65%) spoke Sesotho at home with only 29% indicating that they spoke English and Sesotho. In both groups there were very few participants who stated that they only used French at home. In group A, 5% spoke French together with Sesotho and English. Not surprisingly, none of group B participants claimed to speak French at home as they also did not learn it at school. Q 2 sought to understand the preferred language(s) among friends. In this regard, 21% of group A participants used Sesotho while in B 35% of participants did so. In group A the dominant languages for communication with friends were English and Sesotho at 53%, while in group B it was a mere 24% that mixed the two languages. Twenty-one percent of group A also mixed these two languages with French whereas in B this was done by 17% of participants.

The third question explored the use of language in the public space, such as in shops and government institutions. The language favoured by group A at 21% was Sesotho whereas a very high number (65%) in group B used Sesotho. The majority of group A participants tended to favour using both English and Sesotho (74%) in public. In contrast, very few of group B (24%) used the two languages in public, despite Sesotho and English being the administrative languages. Question 4 was on languages used when encountering tourists. As few as 11% of group A participants indicated that they converse in Sesotho with tourists whereas as many as 34% of B use Sesotho. Not surprisingly, 36% of A participants addressed tourists in French, a language they also learnt at school. It, however, came as unexpected to note that as close as 29% of group B participants also indicated that they could speak some French with tourists. In A, 26% mixed Sesotho and French and another 26% mixed all three languages. Among group B 18% mixed Sesotho with English and only 6% mixed Sesotho with French. The general interest between the two groups (A & B) in both Sesotho and English as the main official languages and French as a foreign language augers well for socio-economic development. To this effect, Arcand and Grin (2013, citing Arcand 1996) identify the use of a common language among people as critical in lowering transaction costs and facilitating the magnitude of transactions. In Lesotho, this would happen among citizens when using the common local language and when they interact with tourists using either Sesotho, English or French. It is important to highlight that the expressed general interest in multilingualism, as opposed to mainly French, is in line with the conclusion made by Arcand and Grin’s (2013:22) study where they note that a foreign language ‘isn’t ‘special’ in terms of economic development or growth’ because local languages also ‘increase income per capita’. This view is corroborated by Raselekoane (2014) who argues in the case of South Africa that African languages can be used to help improve social, economic and political activities of ordinary people.
Question 5 in the second section of the questionnaire sought to understand the language(s) that the participants were proud of being able to use. According to group A, mainly Sesotho, English and French (63%) were together their languages of pride. None of group A participants picked Sesotho alone as their language of pride whereas in group B there was a 12% of respondents that felt so. Many of group B participants (59%), like those in group A, selected all the three languages combined as a source of their pride. The reasons provided for the general positive attitude and pride towards multilingualism among both groups of participants who selected all languages were:

- Because I can communicate with different people.
- Knowing many languages makes it easy to communicate.
- Because I prefer being multilingual.
- Because some of the people I may talk to may happen to speak one of these languages.
- It gives me an advantage of communicating with others.
- I can talk to most people including foreigners
- If I have to leave my country I should be able to fit into other countries

The recurring theme in the reasons provided is the value of multilingualism in facilitating communication among fellow citizens, foreigners and outside the home country. The findings of this study contradict those earlier made by Manyawo (2007a) whereby the Basotho people viewed French as useless and a waste of time for their socio-economic development. This confirms that language attitudes shift as the economic situation of a country changes (Bangeni & Kapp, 2007; Parianou, 2010).

The languages that were selected in Q 6 as having a social advantage by group A were distributed among English (26%), French (39%) and all three Sesotho, English and French (26%). Only 9% of group A participants chose French as a language with a social advantage. In group B the results were different in that English was highly rated at 41%, followed by Sesotho, English and French at 35% with as few as 12% choosing French. The reasons provided by both groups in their selection of English were:

- Because it is an international language.
- Almost all of the world’s population speak English.
- Almost everybody understands it.

When it came to the languages of business (Q 7), group A participants were equally divided between those that chose all three (37%) and those that felt it was English and French (37%). Twenty-six percent of group A participants chose English. This was unlike in group B where as many as 41% of respondents selected English with 35% indicating all three languages and 22% opting for English and French. The reasons for almost the same (A = 37% & B = 35%) selection of all three languages for use in business by both groups were:

- One could find a job of their choice knowing the three languages.
- Sometimes one might need to do business with people from other nations.
- Most people travel to different countries which speak different languages.
- One can work as a translator.
- People who are linguists earn a lot of money.
The selection of English only (A = 26% & B = 41%) was supported as follows:

Almost all job application forms are in English.

It is useful when applying for a job.

The choice for both English and French appeared to be functional in that they also related to job opportunities and assisting tourists:

One’s literacy level improves.

Most tourists who come into the country speak these languages

They give an advantage to apply for jobs in other countries

One common theme that appears to dominate in reasons given by both groups is job opportunities that are provided by different languages, including French. This suggests that the government of Lesotho (GOL, 2000) is on the right track in encouraging the learning of a foreign language together with official languages as this could in the long run assist towards combating socio-economic challenges and addressing the issue of dependency in other countries such as South Africa (CIA, 2015).

In response to Q 8, group A felt that the languages that needed to be developed in schools and colleges were mainly all three (58%) followed by English and French (37%). In contrast, group B participants’ support for all three languages was at 24% with 47% of participants in favour of the development of both English and French. On the one hand, group A results suggest that the learning of a foreign language has influenced their appreciation of the value of multilingualism. On the other hand, group B also appears to desire multilingualism and the learning of French. The reasons provided by the two groups for the development of all languages was:

They all have their distinct importance.

That could help if one were to study abroad.

So that we will be able to communicate and be taught with others.

The reasons for the desire for English and French were:

The understanding is that people already know Sesotho, so why encourage it at school.

They are spoken almost world-wide.

They are a great help when going to a foreign country for higher education

So that students know two more languages apart from theirs

Students will be able to study overseas

Responses to the next question (Q 9) that related on languages that were considered to be useful for college and university education produced a similar trend that was evident in response to Q 8. This was so in that group A participants were mainly in favour (58%) of all three languages followed by English and French (42%). Group B participants were divided between all three languages (41%) and English and French (41%). The reasons provided by both groups for all languages’ support were:

Because I believe there will be people from different countries with different languages.

I will be able to communicate with people who speak different languages.

So that some people will be able to understand everything
We are sometimes taught by lecturers of different languages

The reasons for the support of English and French as useful in education were:

I will be able to communicate with foreigners.
They are going to aid me to be multilingual.
Because I would like to study law.
I would like to do tourism.
All subjects are taught in English with French as an alternative.

The few respondents (18%) from group B that only identified English as a language to be developed in education stated the following reasons:

Because most subjects are taught in English.
Most universities teach in English.

The general high support for French together with all other languages or with English is in line with the MOET document and literature. The teaching of French in secondary schools is justified as important for the country’s development and relations with African francophone countries and France as this has the potential of creating jobs for the Basotho people at home and elsewhere (MOET, 2009a). The teaching of French is also an instrumental tool in socio-economic development and globalisation (Mankolo, 2006, in Manyawu, 2007a).

The languages that would help one secure jobs (Q 10) were mainly English and French (53%) followed by all three languages (37%), according to group A. Group B participants also followed a similar pattern in that the majority said it was English and French (47%) followed by all three languages (35%). The reasons provided by both groups for their support of all three languages were:

I will be able to communicate with local and international citizens.
Some business owners might be of different languages.
Different occupations need certain languages.
I will be able to find a job almost anywhere in the world.

Reasons for English and French in securing jobs were:

They are internationally spoken.
The employer can see that I have knowledge of different languages.
Some jobs require people who can speak different languages.
French will be a bonus language
I will be able to talk to and understand foreigners.

Responses to Q 11 about the languages that were perceived to be useful in raising the standard of life among the Basotho people depict a close agreement between the two groups of participants. Group A mainly chose all languages (37%) and English and French (38%). Similarly, group B mainly opted for all languages (29%) and English and French (29%). The few reasons provided by both groups in respect of this trend were:
To unite Basotho culture with other cultures.

To help us communicate with tourists and foreigners.

To enable the Basotho people to compete on a global scale.

The above quantitative and qualitative data of Q 8 -11 that support either all or English and French are in harmony with the reviewed literature. The positive recognition of Sesotho together with other languages is due to its dominance in terms of language use (Kula, 2006) and the equal official status it shares with English (Oliver, 2009; Kamwangamalu, 2013) in Lesotho. This happens despite the fact that English has a higher socio-economic prestige as an administrative language than Sesotho (Kamwangamalu & Moyo, 2003). The inclusion of French points to its recognition as an important language when it comes to international diplomacy, trade and commerce (MOET, 2009c, 2012). The results contradict those that emerged in South Africa when Setswana speaking university students who while displaying favourable attitudes towards their L1 also revealed that it had limitations in wider society (Ditsele, 2016).

The last question (Q 12) was on the language(s) the respondents considered important for the unity of the Basotho people. This question was considered to be in line with the GOL (2000) document which identifies unity as one of the seven pillars of development. In group A the majority (47%) of participants identified Sesotho followed by 37% that chose all three languages. However, in group B there was an overwhelming selection for Sesotho (77%) with only 18% opting for all three languages. In both groups there appears to be agreement that their own language is important for internal unity. This is not surprising in a country in which one African language dominates at 85% usage (Kula, 2006) and is the home language of the participants in this study. The majority’s view of Sesotho as a language of unity suggests that while foreign languages (English and French) are preferred because of their potential for socio-economic development this should not be done at the expense of the local language.

Respondents believed that their L1 had limitations in wider society; and that it had prestige, albeit a covert one. Generally, they held favourable attitudes toward their L1.

CONCLUSION

The philosophy of education in Lesotho has progressed to respond to socio-economic challenges and integrating French into the curriculum has been one of the evolutionary attempts to enhance the rather inconsistent economic growth of this country. The reintroduction of the French therefore, appears to have enlivened the enthusiasm that once surrounded French in the 19th century, before its attenuation, following the colonisation of Lesotho by Britain. Having introduced this language in secondary schools is a commendable and fruitful attempt, especially since the educational aspirations of Lesotho include the wish to promote personal growth and national development as well as to encourage tolerance and respect towards different cultures, races and religious affiliations (Makumane, 2009). It thus appears to have augmented greatly the chances of Lesotho being part not only of globalisation but also of socio-economic development. It is encouraging to note that the youth in secondary schools who have been identified by the government for the learning of French also support this move. What needs to be done, it would appear, is to pronounce the benefits of learning French to different stakeholders so as to increase its appeal to the public and other schools in the country. These efforts would, however, require sustainable financial support from the government of Lesotho and outside donors. Future research could do well to explore the parents and educators’ views on the role of French in the socio-economic development of Lesotho.

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Improving Human Resource Management For Total Quality Education In Nigerian Universities

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ABSTRACT

Quality education has always been a matter of discourse and concern for the government, parents and other stakeholders at all levels in Nigeria. Deplorable working conditions in the tertiary institutions, particularly in the universities, have been a source of concern and thus have implication for quality in tertiary education in Nigeria. Other noticeable manifestations of sliding quality of education at this level are the inadequate motivation of lecturers, lack of mentoring, extra teaching hours, examination malpractice, inadequate welfare packages, brain drain, burn out, production of unemployable graduates, inadequate infrastructure and irregular payment of salaries. It is imperative, therefore, to find out how human resource management could be improved in the Universities to enhance the quality of services rendered and the quality of output. The aim of such findings is to build the total man in the educational system in Nigeria.

Keywords: Human resource management, Total person, Quality education

INTRODUCTION

University education has been the quest of every Nigerian parent for their children or ward as they have the conviction that it is a means for social mobility, self-development, and self-actualization. University is the peak of educational institution all over the world and it is seen as the key engine of knowledge and each person strives to acquire this knowledge maximally. The major personality that bears this brunt in the Universities are the lecturers. The lecturers stand as pillars that impart knowledge into the students in the universities. Nigeria education needs a lot of reform and innovation by injecting new ideas, methods, and strategies to improve human resource for total quality education in the universities for building the total man in the educational system in Nigeria.

WHAT IS HUMAN RESOURCE MANAGEMENT?

Human resource management (HRM) is of critical importance in educational management given that educational organizations are ‘service’ organizations. They do not manufacture any tangible product but rather, they provide a service to the community, to parents, and to students. (West-Burnham, 1991). The quality of services rendered depends directly on the capability, commitment, and motivation of the people who provide it as universities are ‘resourced’ predominantly by lecturers, together with significant numbers of administrative or non-teaching staff employed who perform supporting roles. Hence, It would not be an underestatement to say that the human resources available to educational organizations constitute both their most valuable asset and their greatest management challenge. Oyedeji (2012) perceived human resource management as one of the keys to the effective operation of any organization. Whether an organization is profit-seeking or not, the most valuable resource are people. He further added that people are the coordinators of all other factors of production to produce and distribute goods and services. According to Fisher (2003), human resource management (HRM) encompasses all policies adopted by management which have direct bearings on the work force of an organization. While the chartered institute of personnel and development (CIPD), a professional body opined that human resource management deals with the design and execution of strategies aimed at getting the best performance out of the workers in an organization including development of different methods to back up the strategies already put in place. Human performance in organization reflects on knowledge, skills, behavior and values. Since the abilities and skills by lecturers will help the organization to better performance and productivity, expenditure on education and development is a long term investment as long as the organization can benefit from it.
Investment in education is a great asset as it will lead to greater efficiency. An organization like the University can improve and enhance the quality of lecturers by providing a conducive work environment for the workers and learning organizations should invest more in people since they are treasured human capital capable of bringing added value and innovations to organizations. Organizations can exist temporarily without physical structures, but no organization can exist without people. It is an indubitable fact that the main asset of an organization lies in the people, quality, productivity, profitability and the image of any institution depends largely on training, coordination, and motivation of the lecturers. Stakeholders and other relevant agencies often measure the success of any institution by the willingness of the lecturers and the ability to work effectively. For this reason, improving human resource management in tertiary institutions should not be handled with levity. Inadequate human resource management can result in an institutional breakdown of laws and order, and this may result in myriad of problem that can hinder the performance of the institution. Such problems include inadequate welfare packages, brain drain, and burnout.e.t.c. If the essential ingredients for improving human resource are not available in the universities like providing necessary equipment for workers to perform, lack of mentoring, irregular payment of salary may lead to demotivation and production of unemployable graduates.

WHAT IS TOTAL QUALITY MANAGEMENT?

One of the current challenges confronting schools, colleges, and universities are how to manage quality. Quality is a powerful tool which any organization will be foolish to ignore. Total quality management is a means of assuring quality and standard in education. It provides a philosophy as well as a set of tools for improving quality (Edward, 1993). He further added that the principal idea behind TQM is that lecturers and their interests should come first: an easily understood idea, but one whose implementation demands a high degree of commitment. Quality is at the topmost agendas of many leaders but improving quality is probably the most important task facing any institution. Despite the importance of quality, many people find it a most enigmatic concept. It is perplexing to define and even more difficult to measure. There is no specific definition for quality as one person’s idea of quality conflicts with another’s. Everybody loves the quality, but in our everyday life, we usually take quality for granted when authorities or individuals provide it regularly. People are too acutely aware when it is lacking. Quality is what makes the difference between things being excellent or run-of-the-mill. As a matter of fact, quality makes the difference between success and failure. To succeed in Nigerian Universities, it requires strong and purposeful leadership who will see the need for improving human resource and manage it well. For total quality education, lecturers are the pillars who shoulder the responsibility of imparting and inculcating good knowledge, skills, and values into the students. If the body saddled with the responsibility of catering for the physical, psychological, and emotional needs of lecturers can manage their resources very well, lecturers will have the passion for academic excellence by paying more attention to their work and the students they teach. If the school management motivates the lecturers through robust and regular package, provision of research grants and facilities, and also put in place other favorable conditions of service, brain drain and burnout will drastically reduce. Lecturers will develop passion and dedication to their work and forestall examination malpractices and see to studying well to pass and reduce the rate of unemployable graduates. If the number of unemployable graduates reduces, it will invariably increase the quality of services rendered, and the quality of the output as total quality is about attempting to do something right every time rather than checking once in a while if it has gone wrong.

AIMS OF HIGHER EDUCATION IN NIGERIA

The national policy on education (FGN; 2014) defined higher education as education given after secondary education in the universities, college of education, polytechnics, mono technics, including those institutions offering correspondence courses. Tertiary institutions in Nigeria are established to achieve certain goals, and these goals are clearly spelled out in the national policy on education. Such goals include: to develop and inculcate proper values for the survival of the individual and the society, to contribute to the national's advancement by providing high-level personnel training; to develop the intellectual capability of individuals to understand and appreciate their local and external environment, and to acquire the necessary intellectual skill which will equip individuals to be self-relevant and useful members of the society. It is also to promote and encourage scholarship and community service, to forge and cement national cohesion and also enhance national and international mutual understanding and interaction. Higher education contributes in no small measure to national development. Mohammed and Gbenu (2007) opined that investment in higher education is a key contributor to Nigeria’s economic growth. They further added that the national
policy on education had saddled higher institutions in the country with the responsibility for training the nation’s professional personnel such as managers, scientists, engineers, and technicians, who take part in the formulation, adaptation, and diffusion of inventions in the country. According to national policy on education (FGN; 2014) it is the lecturers that should train the categories of personnel mention above hence, in order for the lecturers to successfully accomplish the task of training the personnel referred to above, there is an urgent need to improve on the human resource in the tertiary institutions, it will translate the efficiency and national development and the output shall be the development of the total man.

MOTIVATION

Human resources are without a doubt the most significant asset of any organizations and a resource which the management need to manage, unlike physical resources, organizations do not own people. People are individuals who bring their perceptions, feeling, and attitudes towards the organizational system and strategies of management, their functions and responsibilities, the circumstances under which they carry out the taxes assigned to them. Whatever the nature of the organization, a leader or manager achieves the result through the performance of the other people. Recognition of the needs and wants of the lecturers and the nature of the grievances is a right step in spurring them to optimum performance. Good human relationship and effective human resource management and practice have an effect on the effectiveness and of dedication of the lecturer to realizing the goals of their institution as well as on the quality of service they offer. Effective management of the people takes into account the philosophy of the institution and attitudes which they bring to bear on the relationship with staff and the problems which affect them influences the management and the people. Human resource management can be improved if the school management not only spells out the needs of the lecturers in the institutional policy but also meets these needs adequately. Such need includes the recognition of people’s needs and expectations at work. Motivation is a process that begins with a physiological or psychological inadequacy or needs that trigger a behavior for the purpose of achieving a goal. There are various means by which university authority can motivate lecturers in the university. On many occasions these lecturers have disagreements with school authorities and government over issues such as / agitations for better remunerations, demand for a supply of teaching and learning materials, agitations for sabbatical appointments, and demand for promotion of staff at the appropriate time. Apart from the above, granting of loans to lecturers, provision of befitting office accommodation and conducive lecture halls for lecturers and students respectively, and provision of good health facilities are other ways through which management can motivate lecturers. All these packages will in no small measure motivate and stimulate the lecturers to work harder in the tertiary institutions. A conducive work environment has a magnetic effect even on ineptitude workers. These packages will also produce job satisfaction and maximization of staff productivity for total quality management.

MENTORING ON THE JOB

Mentoring is an essential leadership skill to managing and motivating people; it is also an important way to help others learn, grow, and become more effective on the job. Bollough and Draper (2004), perceived mentoring as a close, intense, mutually beneficial relationship between someone older, wiser, more experienced, and more powerful with someone younger or less experienced. Allen, Eby, and Lentz (2006) saw the role of a mentor as an experienced person, usually someone higher in an institution, having a personal relationship with the mentee and act as a guide, role model, and sponsor of less protégé. He provides the mentee with the knowledge, advice, challenge, counsel, and support to career opportunities, institutional strategy and policy, institutional politics, and the like. Education is dynamic, and it changes from time to time to meet the dynamic nature of the society, and the lecturers are employed from time to time to meet an exigency of the time without making adequate provision to mentor these new lecturers, who probably come from different fields. The school management left many of the newly employed lecturers without a mentor with the result that many of them do what they think is the best and which in the real sense of it maybe abnormal in the university system. Many of them possess no prior knowledge of what lecturing in the university entails, hence, they are totally ignorant of examination etiquette getting students results ready on time and keeping of vital academic documents. Apart from the above, many of them know nothing about academic integrity, the act of communicating and imparting good knowledge to the student using good methods. It is imperative then for the university leadership to organize effective mentoring programs for the lecturers to improve human resources in the University for total quality development. Luthans (2005) corroborated this by saying that lecturers need a trusted counselor or advisor who will provide advice and assistance to help and support members of diverse groups in the performance of their
job, socialize them in the culture, values of the institution and pragmatically help their chances for development and advancement. Weber, Gabbert, Pynes (2007) observed that universities do not have formal programs to establish this type of interaction between novice and expert teaching professors. Shim and Reth (2012) established the need for universities to systematize the ways in which novice or newly employed lecturers connect, observe, and collaborate with older professors and that the sharing of expertise between workers and their mentees should not be left just to chance encounters. Competent and experienced teachers can especially be a valuable resource for beginning teachers, as well as for the experienced teachers (Akomolafe, 2013, p. 177). The effective mentor-mentee relationship will in no small measure contribute to the effectiveness of sound pedagogy in the universities. Both the mentor and the mentee would also learn from one another to enhance effectiveness, total quality, and sound finished products, qualified persons and educated school leaver as output.

EXCESS TEACHING HOURS

Many Nigerian universities admit many students that they cannot cope with all in the name of generating funds internally. Nigeria’s economy has been bastardized by our leaders, to the extent that the universities can no longer be maintained the way they should be, to facilitate effective teaching and learning. Many of the universities admit students that they do not have enough facilities to cope with, thereby causing a lot of stress or tension for the lecturers. This situation makes the lecturers have more work than they can cope with, causing a lot of stress and fatigue for them. Despite the agreement between the Federal Government and Academic Staff Union of Universities (ASUU) about student-lecturer ratio 1:35 depending on the course and faculty, the student population is growing at an exponential rate, making the lecturers have more students to handle. Another reason for admitting more students in the universities particularly state-owned universities is to collect money from the students to fund and maintain the universities while adequate facilities are not provided to care for the student’s population. Classes are overfull with more students to teach. Lecturers begin to sweat and cope with a lot of stress and rigor. The university management does not pay the allowances for excess hours put into teaching. The school management should pay attention to the payment of allowances to lecturers who are due for it for the purpose of improving human resource management. Other incentives could be introduced to facilitate effective work from the lecturers for total quality management and effective output. When the population of a class is moderate, the school management can manage it better by employing more lecturers to maintain student-lecturer ratio to improve the quality of teaching which has declined over the years. When lecturers have too many scripts to mark, grade or evaluate, there is no way that it will not hinder total quality.

EXAMINATION MALPRACTICE

Examination malpractice involves different types of intentional cheating in an examination which gives an undue advantage or disadvantage to one or more candidate. It is an illegal act perpetrated by a candidate or a group of candidates in examination hall or outside examination hall. The examination malpractice may come in different forms such as copying from another student, copying from answer cheat, bringing in cheat notes, impersonating another student, talking or holding a discussion in the examination hall, etc. The conditions of lecturers make some often collude with these students to cheat during examinations all in the quest for money or some other advantages, particularly from the female students. Some can even go to a ridiculous extent of bringing students to their homes to rewrite university exams, which are tantamount to violating the ethics of the profession. When the school management or government does not pay lecturers’ salaries and allowances promptly to enable them meet their various obligations, they can get involved in examination malpractices, thereby losing their integrity. Institutions, therefore, need to introduce new structures and approaches to improving human resource management to practice total quality management. One of the approaches could be holding regular seminars, talks on personal integrity and academic integrity. The onus then is on the managers of these institutions to give incentives to lecturers to discourage such evil practices among them. Around the 1970s, the federal government and other stakeholders in the educational sectors organized the universities very well by meeting the needs of the academic staff adequately. They had satisfactory compensation, deserved benefits and regular basic needs for whatever work they did but now the working condition is no longer encouraging. If the school management can supply the needs of the lecturers make remuneration enticing so that they have enough financial resources to meet their needs and social obligations, the lecturers will exhibit more commitment and dedication to their work. They will also shun any unethical practices such as getting themselves involved in examination malpractice. Also, they will fully instill academic discipline into the students and adequately
take a disciplinary measure against erring students rather than collecting bribes from them and in the process stain their integrity and ethics of the profession.

**BRAIN DRAIN**

Over the last few years, the Nigerian university system has been affected seriously by a consistent brain drain of its experienced, skillful staff. In other words, the phenomenon of brain drain has adversely affected the quality of teaching and research in Nigerian Universities. Merriam-Webster Dictionary (2016) writes that brain drain arises when several educated people or professional people move from their profession to another or from one geographical environment to another usually for better pay or living conditions. This phenomenon could be traced to the decline in oil revenues when the oil boom era ended in the late 1970s. The decline in oil revenue started in 1986, led by the Babangida administration to introduce the Structural Adjustment Program (SAP). This situation became unbearable to Nigerians and particularly the university lecturers who found it difficult to make ends meet. Many of the lecturers had to look for greener pasture elsewhere particularly outside the country. Many higher institutions in Nigeria have lost numerous valuable skills to outside countries. This loss of skill is a waste of human resources, as Nigeria could not manage their human resources well. A way to improve human resource management to forestall brain drain among the lecturers is to revisit the policy and philosophy that established the institutions and amend the welfare packages and incentives for the lecturers. The pay packages should be as robust as their counterparts in other countries. The school management should revisit the work environment and make it conducive for lecturers to perform their duties well. At the inception of universities in this nation, the government and other stakeholders saw lecturers as a priority, there was the provision of staff quarters, staff schools for lecturers’ children, sports centers, health centers, and a healthier environment to work effectively, the school management must provide modern technological teaching materials and also take care of their physical, mental, emotional, and psychological needs. Apart from the above, the school management must duly pay the salaries and allowances of the lecturers in order to enable them to meet their social obligations. If the school authority could regularize all the above, these lecturers will be ready to put in their best to attain effectiveness and excellence on the job. There will be enthusiasm and commitment to perform which invariably will enhance total quality through innovative works and eventually result in building the total man in the student through a conscientious work. Brain drain will eventually be a forgotten thing as there is no place like home.

**BURNOUT**

Scholars have identified burnout as an important matter among the university lecturers; it is also a growing problem in business, institutions, and organizations particularly in the universities. Many lecturers complain of stress, fatigue, anxiety, and overload. Maslach (2003) opined that burnout is a psychological situation in which people experience emotional exhaustion, a feeling of lack of personal achievement and have the tendency to depersonalize other people. Individuals suffering from burnout, experience a depletion of physical and emotional resources, develop cynical attitudes / and feel a loss of professional self-efficiency (Maslach, Jackson and Leiter, 1996). Varma (1998) noticed that the most persuasive symptoms of lecturer’s burnout are a conspicuous reduction in the level of job commitment, a lack of zeal and interest, a feeling of dissatisfaction, and detachment. The work environment of any university can influence staff behavior positively or negatively, depending on whether the work environment is friendly or hostile. Lecturers could experience burntout if the work environment is harsh and drab not meeting the needs of lecturers. Maslach and Jackson (1981) identified work environmental conditions conducive to burnout. In Nigeria universities today, lecturers complain of physical exhaustion and stress due to much work experienced in the schools. Lecturers experience burnout in five areas: physical, intellectual, social, psycho-emotional, and spiritual symptoms and these may invariably lead to insomnia, absenteeism, tardiness, and chronic cold. Effective use of the intellectual ability of lecturers as human resources in the universities can help in the advancement of the universities and the society at large. Effective management of human resources in the universities will involve making the work environment enticing, and the welfare of staff given the utmost high priority. School management should accord priority to Promotion, Advancement, Remuneration, Health and recreation of lecturers. Lecturers work and read under hard conditions in Nigeria, unlike their counterparts in developed countries. Government and school management should endeavor to provide Internet facilities and modern technology for universities. Our leaders have bastardized Nigeria’s economy to the extent that the electricity supply has been inadequate, which hinders performance in universities. Writing meaningful academic papers requires surfing the internet. University managers should make sure that there is...
sufficient light to enable lecturers to work effectively. With the increasing number of university, lecturers have lots of things to do. These include: teaching, supervision of examinations, marking, recording of students’ marks, acting as course advisers to students and performing a host of other administrative duties in the school. Sometimes, the school management may not be able to regularize the school calendar because of incessant strikes, and lecturers could not even plan their leave and be off the tension of the job. All these could contribute to lecturer burnout, giving them a sense of frustration and helplessness. Managing this human resource will include increasing the incentives for lecturers, providing funds for research work, libraries to be well-equipped for research work, proper, and good connectivity of lecturers, and regularizing of school calendars to enable lecturers to plan leave with their families. The above mentioned points will reduce burnout and turnover and make lecturers work assiduously for total quality management.

INADEQUATE WELFARE PACKAGES

Since the lecturers are the stakeholders needed in our educational system to impart learning for total quality management; the school authority needs to improve on their condition for better performance and motivational factors to enhance total quality management. Lecturers should no longer be deprived of their entitlements or marginalized by paying them ridiculous salaries that could not compare favorably with their counterparts in other parts of the world. Where workers are comfortable, their productivity will be high and this will enhance total quality. Where lecturers are favorably disposed to the system, the transformational process becomes effective, and this will have a positive effect on the output which is students. A conducive environment has a magnetic influence on ineptitude lecturers. Availability of functional physical resources, such as lecture rooms, office accommodation, laboratories, libraries, recreational centers, resource centers, and staff quarters, appears to play a key role in facilitating the teaching-learning process (Ahunanya and Ubabudu, 2006). Teachers are the most important input in the educational system.

INADEQUATE INFRASTRUCTURE

One of the vital ways of improving human resource management is by providing adequate infrastructure for them to work. Employment of staff without adequate infrastructure is a mere waste of time. Good lecture rooms with adequate technological facilities that will enhance quality teaching and learning should be provided by the school authorities, also, good and convenient seats for both students and lecturers, and well-ventilated rooms with lighting for both students and lecturers. Furthermore, school authority should supply well-equipped offices for lecturers with a good connectivity of information to perform their job and availability of books in sufficient quantity and quality for good research work. All these will enable lecturers to put in their expertise and affect life positively for total quality management.

IRREGULAR PAYMENT OF SALARIES

The economic recession and politicization of education in Nigeria have slowed down the rate of payment of lecturers salaries. Peretomde and Peretomode (2001) wrote that no authority in an organization questions the need for employees to improve on their knowledge, skills, attitude and behavior value on the job is rarely questioned. If the government or the school management does not pay workers’ salaries regularly, it will lead to demotivation of lecturers and may slow down the pace at which they work psychologically. Both the federal and state government should see education as an investment and budget money for it and the payment of lecturers’ salaries on time. The university management should make salary payment a priority and not divert the money to any other capital development. Also, internally generated funds should be judiciously used to pay salaries and allowances to boost the morale of the lecturers. The university authority should look for ways to generate funds so that lecturers’ salaries will not suffer.

CONCLUSION AND RECOMMENDATION

Education in Nigeria is an investment, and it is an instrument for individual and national development. Lecturers are indispensable. The indispensable human resource in realizing the educational goals and objectives in the universities, hence the need for university managers to re-adjust their policies and philosophy to suit the lecturers in all facets to enhance effective productivity and training of well-educated and sound minded graduates as output. Both the federal and state government should make education a priority to be well financed, and at the same time make adequate arrangement to cater very well for the needs of the lecturers to avoid brain drain and withdrawal of service.
REFERENCES


Empower Your Students With PowerPoint Karaoke

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ABSTRACT

Most university students find it a challenging task to give a presentation in front of an audience, even if the audience were their classmates. They often judge their own work as dull, irrelevant or confusing, which in many cases it is. It is not only what they say (verbal) that constitutes a problem, but how they say it (vocal) and what the audience sees about the presenter (visual) are points to consider as well. The teacher, as a result, finds it an arduous task to help the students develop effective oral presentation skills. Practice is a key component that helps make student oral presentations both relevant and interesting.

This talk aims to show how presentation training at an intensive English program in an EFL context becomes both motivating and challenging for the students through using short PowerPoint Karaoke sessions. PowerPoint Karaoke is an improvisation technique where an individual gives a presentation to an audience without knowing the content of the slides. The slides are meant to be funny and baffle the presenter, making the result both entertaining and challenging. The challenge lies in the attempt to give a compelling presentation that is cohesive and meaningful at the same time. The presentation takes from four to six minutes, depending on the number of slides included, with slides auto advancing every 15 seconds. The presentations are judged by either a panel or by popular vote. Content, credibility, flow and getting through all the slides are among the judging criteria.

The idea itself sounds terrifying, but in one sense it is liberating (Berkun 2012). The fact that the speakers do not know the content of the slides leads to energy in the hall. The challenge to find appropriate content to comment on the slides surpasses the anxiety of standing in front of an audience, which makes the speakers eager to make something of the given slides that are somehow funny on their own without the speakers’ contribution.

The presenter will walk the audience through the steps followed in helping EFL students give effective presentations through using PowerPoint Karaoke. She will begin by giving an overview of PPT Karaoke and the rationale behind using it, then explain how the activity was graded, moving from more controlled to less controlled practice, and ending with students giving presentations without the teacher’s interference. Discussion on how to make the best use of PowerPoint Karaoke in an academic setting will follow.

REFERENCES

Analysis Of Online E-Portfolio Reflections By Family Medicine Students To Determine Their Utility In Their Understanding And Application Of Medical Professionalism Traits

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Geraldine Kershaw, United Arab Emirates University, UAE
Sami Shaban, United Arab Emirates University, UAE

ABSTRACT

Background: The definition of professionalism, its incorporation into the medical school curriculum, and its assessment vary widely. Assessing the understanding and application of medical professionalism in clinical settings has been challenging.

Aim: The study retrospectively analyzes reflections posted by final year medical students during their family medicine clerkship to determine if they can be used to assess professionalism traits taught in the curriculum.

Methods: Reflections from a single cohort of final year medical students posted online as part of their e-Portfolio assessment were reviewed. The reflective posts were read and analyzed independently by two faculty members utilizing predefined criteria based on the Good Medical Practice document on professionalism developed by the General Medical Council of the United Kingdom. Content of each reflection was categorized into domains and sub-domains based on the major professionalism themes identified and discussed by the student. Reflections were graded from level I to III based on a modified version of Driscoll’s structured model of reflection. Discrepancies in analysis and rating were addressed by discussion to reach consensus. The information was then collated to assess the knowledge and application of professionalism traits by this group of students.

Results: Reflections posted by 82 final year medical students during a 4-week family medicine clerkship were reviewed. The major domains identified were noted to be communication, partnership and teamwork, and maintaining trust. Traits of professionalism identified were confidentiality, privacy, empathy, patient rights, and accessibility with a majority of the reflections in the first and second level without guidance from faculty.

Conclusions: Final year medical students make a concerted effort to incorporate professionalism into their reflective practice, suggesting the effectiveness of teaching professionalism, however emphasis needs to be placed on guidance to promote a deeper critical reflection and application.
Leadership – Challenges For The 21st Century CEO
Michael Nastanski, Saint Leo University, USA

ABSTRACT

The challenges for an organization’s CEO are increasingly complex and often filled with competing demands and increased complexity. The challenges include managing the current business while simultaneously and rapidly, adapting to change in their industries including the environment. CEO skills and competencies developed through prior experiences may have limited effectiveness in this increasingly uncertain, complex and rapidly changing environment.

This paper outlines the significant changes that have impacted the role of CEO over the last 50 years including the impact of technology, global competition and environmental dynamics that increase the complexity and the skills and practices needed for the CEO to succeed.
Inclusion In Higher Education – Challenges And Issues
Matome Jack Mashiapata, University of South Africa, South Africa

ABSTRACT

Students with disabilities generally come from a school system which provides specialised services and education through special schools. In contrast the higher education sector is comprised of mainstream institutions which are open to all learners. The ratification of the UN Convention on the Rights of Persons with Disabilities (United Nations, 2010) and subsequent legislation has set clear imperatives for the higher education sector to increase access for students with disabilities. Challenges exist as more students with disabilities seek to enter and to complete higher education. The students face both physical and educational challenges these students face within the university environment. Universities face challenges with regard to the provision of tuition and academic support to the students with disabilities. Some suggestions are made regarding the provision of services to students by the academic and support services in higher education.

Keywords: Accessibility; Career Guidance; Counselling Support; Inclusion; Mainstream Institutions; Students With Disabilities; Universal Design
Cultural Adjustment Experiences Of Saudi Women International Graduate Students Studying For The First Time In A Mixed-Gender Environment At Middle Tennessee State University

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Laura Clark, Middle Tennessee State University, USA

ABSTRACT

Main Question: What are the cultural adjustment experiences of Saudi Women International Graduate Students studying for the first time in a mixed-gender environment at Middle Tennessee State University?

This study is in process and will be completed by end of August 2017.

Saudi women were not encouraged to study abroad prior to 2010; as a result, they have been largely underrepresented in past research studies. Since male students have been both scholars and participants in multiple research studies in the past decades, the focus of this study is on Saudi Women International Graduate Students.

Questions for the study will invite the Saudi Women International Graduate Students to share expectations about coming to study in the United States and the reality of their experiences as international students. They will discuss what they most and least enjoyed about studying and living in the US including cultural differences, acculturative stress, cultural adjustment at different time periods (arrival to present), English proficiency, social support, and communication / relationships with Americans.

Themes should emerge from the qualitative data gathered and the data analysis coding process that indicate how the Saudi Women International Graduate Student participants viewed various personal and external factors impacting and influencing their cultural adjustment experiences as international graduate students studying abroad in the U.S. at MTSU for the first time in a mixed-gender environment. Findings may be used to make the unique cultural adjustment process easier and / or more positive for Saudi Women International Graduate Students who are studying and interacting with Americans in a mixed-gender environment which is significantly different than the segregated-gender environment of their homeland. Also, potential areas needing extra supportive measures may be identified such as English language proficiency and or mentors / tutors in this area for the Saudi Women International Graduate Students. Information gleaned from results of the study, as well as the research study design, will be shared with session participants.
Faculty Driven Assessment
Of Graduate Degree Programs: Process, Technology, And Proven Results

Manuel Rosa, Keiser University, USA
Yan Luo-Beitler, Keiser University, USA
Jessica Fuda Daddio, Keiser University, USA

ABSTRACT

This paper presents a model of a graduate program assessment led by faculty from an institution offering online degrees. A culture of assessment that goes beyond data collection and demonstrates how to use direct and indirect means of assessment to improve student learning outcomes and educational practice in general will be shared. An assessment of student learning is critical to student and institutional success. An institution must document student learning, but more importantly, foster a culture of continuous, integrated, institution-wide evaluation and improvement. This is important for a myriad of reasons, not the least of which is the scrutiny of the public, external evaluators, students, stakeholders, and the federal government. This institution, offering online graduate degrees, has developed a faculty driven process that uses technology for both learning outcomes assessment, summative and formative assessment, and record keeping purposes; employs both direct and indirect means of assessment; integrates institutional and professional accreditation standards; and provides evidence of analysis, action plans, and program improvement resulting from the process. The following main areas are addressed: Documenting what students know; validating how students learn best; fostering continuous improvement; developing culture of improvement; ongoing and integrated research-based planning and evaluation; and showcasing a robust, meaningful institutional effectiveness program that promotes student learning.

Keywords: Assessment, Process, Faculty-Driven, Student-Learning, Improvement
“Opportunity Or A Set Back” – Impact Of Reforms On Civil Litigation Costs
Nilashis Ghosh, Bath Spa University, UK

ABSTRACT

The research topic is focused on the implications of reforms on the use of quantum accountancy expert evidence in civil litigation cases. The purpose of the research was to investigate the implication insofar for the Personal Injury and Clinical Negligence market, and to provide recommendations that could be implemented.

Pragmatic Research underpinned by a mixed method was undertaken involving a quantitative online questionnaire intended for solicitors, barristers and judges who dealt with Personal Injury and Clinical Negligence cases and a series of follow-up in-depth qualitative interviews.

The findings of the study were that the reforms had implications for the use of experts, though little change was anticipated in the larger cases for those experts who adapt well to the changing market needs (timing/cost budgets) and there were opportunities for new services in the lower value cases and in alternative expert capacities. The key recommendations related to the capitalisation of the opportunities evident in the research findings covered increased pro-activity, justification and accountability regarding emerging case costs budgeting and management needs. Also, new service offerings relating to fixed fee work, a subcontractor service and exploration of the defendant market was recommended. The research consultancy process and findings should be utilised for marketing purposes.

The key conclusion of the study was that the reforms did represent a changing landscape in the Personal Injury and Clinical Negligence market where Quantum Accountancy Expert Evidence is used, but that there was opportunity for forward thinking firms to adapt to meet the new order.

Introduction and Background

The reforms to costs in civil litigation known, as the ‘Jackson reforms’, come under LASPO ‘Legal Aid, Sentencing and Punishment of Offenders Act 2012’, which came into force on 1st April 2013. Justice (2013) outlines key changes through these reforms, which have implications for civil litigation cases, extending to legal costs management, proportionality of costs, abolishment of the no-win-no-fee structure, imposition of sanctions to encourage early settlement and (relevant to this study) the use of expert evidence, as per Lord Justice Jacksons 2010 proposals for costs in civil litigation (Legal World News: 2012:596). The reforms had a controversial passage into implementation and were greeted with praise and opprobrium (McIvor 2011). During the three-month consultation on the proposed reforms, the Ministry of Justice received 600 submissions, mostly in disagreement with Jackson’s recommendations.

The Jackson reforms was anticipated to result in a sea-change to the funding, budgeting and management of litigation (Manski: 2013), whereby parties would have to file detailed cost budgets before trials begin (Samuel: 2013). Thus the reforms are anticipated to alter the way Quantum Accountancy Expert (QAE) is used. The research addresses this from the positive perspective of attempting to capitalize on opportunities emerging from the Jackson reforms by altering and adapting QAE business models and service provision. The Jackson reforms have particular relevance to personal injury and clinical negligence cases where no-win-no-fee ‘Conditional Fee Agreements’ (where lawyers’ costs can be uplifted by as much as 100%) have been used extensively and where there has been criticism that an overuse of experts has added to litigation becoming too costly (Solon: 2011).
Literature Review

According to Lord Dyson the Jackson reforms were designed to re-establish ‘equality of arms’ between plaintiffs and defendants in personal injury cases to reduce illegitimate claims and improve defendants’ ability to defend claims (Solicitors Journal 2013). The Jackson reforms are thus intended to transfer the funding of civil litigation from defendants, and their insurers, to claimants and their lawyers and are intended to improve access to justice to make costs more proportionate (McIvor: 2011). This was in response to the perception that costs of civil litigation were disproportionately high (Crouch: 2011). The reforms are also about case efficiency, Steward and Pratt (2013) suggest the reforms are designed to introduce a more robust approach to case management due to a perception that courts had become too tolerant of delays and non-compliance, now with tougher sanctions for those who fail to comply with case management directions. Further details of the reach of the reforms for civil litigation are outlined in Table 1.

Table 1 The Main changes of the Jackson Reforms on Civil Litigation

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Implication</th>
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<tr>
<td>Funding</td>
<td>The success fee in a condition fee agreement (CFA), which was the usual funding agreement between a solicitor and a client, and the cost of an insurance premium against the risk of paying an opponent’s costs, cease to be recoverable (Brookes and Davies: 2013). An alternative, Damage Based Agreements (DBA) where solicitors take a percentage of the damages awarded to their client, have been capped at 25% in PI cases. The high volume PI industry is faced with extension of the portal (online facility for road traffic claims) vertically and horizontally due to parallel changes being introduced lifting the current £10K ceiling to £25K and extending range of injuries covered under the scheme (Robins 2012:18-21).</td>
</tr>
<tr>
<td>Qualified one way cost shifting (QOCS)</td>
<td>In a PI claim, the winning claimant can recover costs but the losing claimant would not have to pay defendant’s costs (with some exceptions) (Brookes and Davies: 2013).</td>
</tr>
<tr>
<td>Costs management</td>
<td>For all ‘multi-track’ cases (typically claims over £25K), except where sum exceeds £2M in certain courts, parties are required to prepare cost budgets in the prescribed format. The court will manage both the steps of litigation and the costs to be incurred mindful of dealing with cases justly and proportionately (Brookes and Davies: 2013). According to Bindman (2012), the power had always been there for judges to manage costs but they tended to shy away from this.</td>
</tr>
<tr>
<td>Experts</td>
<td>Parties must provide the court with an estimate of their costs of the proposed expert evidence when applying for permission to rely on expert evidence. If permission is given, the order granting permission can specify the issues the evidence addresses (Brookes and Davies: 2013). Decisions on costs of expert evidence would be ‘fact sensitive’ Davidson (2012).</td>
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Initial Interpretations and Reactions to the Jackson Reforms

There was controversy surrounding the way Lord Justice Jackson’s report proposals were implemented, which had attracted a lot of criticism (McIvor: 2011). McIvor (2011) also outlined a study of 11 legal academics’ views on the prospects of the Jackson reforms, which found the Jackson Report to be ‘misleading’ and predicted that the reforms would prove ‘excessive’ and ‘unwarranted’. Consequently believing that they would have an adverse impact on access to justice, due to a preference in the recommendations towards the defence lobby over the claimants’ financial interests.

Bowman (2012) states that such controversial legislation would have consequences for the business models on which law firms’ run. Though there is consensus that the ‘unsustainable’ PI industry did need to change, due to high and disproportionate costs apparent in civil litigation, which the Jackson reforms legislation targets through Civil Procedure Rules (CPR) changes (Broadbent: 2013) many stakeholders had spoken unfavourably of the changes.

Tonks (2012) outlines that much of the ill feeling originates from legislative decisions being taken before the consultative process had finished. Amendments to the Jackson Reforms were still taking place 24 hours before
legislation came into force, therefore interpretations and consequently understanding of the legislation was still being formulated. Waller-Davies (2013) suggested that lawyers had broadly welcomed the reforms but criticized the implementation of them whereby there were mistakes and confusion due to a rush to implement them and so an ‘imperfect’ set of reforms emerged. New Law Journal (2012) suggests the problem was worse because there was a refusal by the rules committee to produce a practice directive to accompany the new proportionality test. Hyde (2013) reported that a High Court judge had told parties involved in some Clinical Negligence claims to ignore the Jackson reforms for at least six months amid concerns that the courts were not prepared for new costs management rules. Davidson (2012) outlined (Master of the Rolls) Lord Neuberger’s prediction that courts would be dealing with satellite litigation next year as the Jackson reforms bedded-in. Proportionality law would need to be developed on a case-by-case basis.

Robins (2012) reported Karl Tonks’ (President of Association of Personal Injury Lawyers) concerns over a frightening lack of detail regarding the changes. These concerns relate to the sanctions for solicitors who fail to comply with cost management rules around filing cost budgets for every multi-track case, and the risks of running over budget.

However there was some optimism in the industry, Patrick Allen (Senior Partner, Hodge Jones & Allen) predicted that in the face of anti consumer referral fee bans, firms would still secure their economic interest; like water they will find a way. Regan (2013) suggest the reforms would make law firms run more like businesses should and may provide the drive towards efficiency desired by clients. According to Susskind (2013) the legal market is in an unprecedented state of flux and it is predicted that over the next two decades the ways in which lawyers work, will change radically, so that entirely different ways of delivering legal services emerge. Gibb (2013) suggested change would be felt most by the Personal Injury market. However, the industry would be expected to restructure itself to match the new order (Abrahams: 2013).

Bindman (2012) outlines a positive reaction in the costs industry sector, suggesting that in light of new pressure on lawyers around budgeting and costs, there was commercial opportunity for elite cost lawyers (whose skills may be needed more at the start of cases and intervals throughout) to assist with adherence to proportionality and any resulting satellite litigation. This was reflected in Cost Lawyers’ views on Jackson, whereby 23% thought the reforms would increase their practice, according to a survey by Association of Cost Lawyers (ACL). However, Hyde (2011) reported that despite the majority of cost judges being in support of recommendations by Lord Justice Jackson, three cost judges from senior courts office had ‘broken ranks’ in objection to the reforms. The report suggested that many of Jackson’s proposals were inappropriate and these judges voiced concerns that seriously injured claimants, could lose thousands of pounds intended to pay for their care. Going on to suggest that ‘inept’ claims handling by defendants had actually been the cause for spirally costs. Thus there was no guarantee of viability of access to justice at a reduced cost.

**Anticipated Implications of Jackson Reforms for Expert Witnesses**

Table 2 outlines the new rules of the Jackson reforms that concerned expert evidence, which apply on applications for permission to rely on expert evidence made after 1st April 2013.

**Table 2 Elements of Jackson affecting Expert Witnesses, Burn (2013)**

<table>
<thead>
<tr>
<th>Aspect of Jackson reforms</th>
<th>Implication for expert evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPR Part 35</td>
<td>Changes designed to manage costs of expert evidence and better focus experts on the issues in dispute.</td>
</tr>
<tr>
<td>Rule 35.4 (2)</td>
<td>Requirement of an estimate of the costs of any expert evidence.</td>
</tr>
<tr>
<td>Rule 35.4 (3)</td>
<td>The court is now able to specify the issues to be covered by the expert evidence and the type of expertise necessary.</td>
</tr>
<tr>
<td>Paragraph 11.1-11.4 of PD 35</td>
<td>The court can order experts from like disciplines to give evidence concurrently rather than sequentially as part of ‘their’ party’s evidence (a practice known as ‘hot tubbing’). This first involves the judge questioning the experts together about disagreements in the joint statement and then by the parties’ advocates. The pilot scheme took place in Manchester indicated that this would save time and costs and assist the judge in assessing the difference of views between experts.</td>
</tr>
</tbody>
</table>
Landon-Down (2012) stated that the Jackson Reforms attempt to reduce the involvement of expert witnesses and promotes the use of SJEs. Such uptake is said, however, to be universally uncertain at practitioner level due to perceived bias issues of using SJEs. Solon (2012) found that appointment of experts to act as SJEs had actually fallen in recent years.

The implications of the Jackson reforms were proving to be an increasingly topical issue in the legal industry. The Law Society’s Commercial Litigation Conference was held on 15th October 2013, is titled six months after Jackson reforms (Law Society: 2013). Also, MASS (Motor Accident Solicitors Society) held a panel talk on LASPO and Jackson Reforms – six months on assessing four areas of the new reforms and how they are bedding in, at their annual conference on 25th October (MASS: 2013). Though as yet there does not appear to be many examples of experts reacting so proactively to demonstrate changes to their practice and business model based on Jackson. Regarding expert’s thoughts on Jackson, Solon (2012) found that over a third of expert witnesses believe that the reforms proposed by Lord Justice Jackson in his 2010 report will lead to injustices according to an expert witness survey. Otherwise there appears to have been little collective response by experts to the reforms.

The Research Objectives for the current study are as follows:

1. To assess the processes and technicalities of expert witness forensic work and the full implications of the Jackson Reforms.
2. To gain a comprehensive insight into stakeholders’ (customers) perception of the impact of legislation changes.
3. Make insightful recommendations based on stakeholder perceptions and full implications of the Jackson Reforms.

Research Methods

A pragmatist research philosophy underpinned the investigation, to best facilitate the integration of data from a range of stakeholders. The epistemology of a pragmatist philosophical approach enables a focus on practical applied research, which integrates different perspectives. According to Wedawatta et al (2011), Action Research (AR) differs from other research strategies in its explicit focus on the promotion of organizational change through examining implications of a change by investigating those who directly experience the changes. This was relevant for a study, which sought to establish a greater understanding of stakeholder views of an external factor.

In order to gather the necessary data for the project the assistance of a range of stakeholders was required who were approached to participate in the study. This consists of a mix of self-selection sampling when data was collected from those who respond to requests for research participation and purposive sampling, useful for small samples relevant to case study type approaches (Saunders et al: 2009).
**Actual Participants**

<table>
<thead>
<tr>
<th>Type</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solicitors in Personal Injury and Clinical Negligence Markets</td>
<td>The survey had 80 responses, of which 64 individual contributors constituted usable data sets. 85% or 54 of the survey contributors included in this analysis were solicitors. Of these 80% had more than five years experience in practice. The majority (85%) identified themselves as claimant solicitors, compared to 15% defendant solicitors. 65% of contributors identified themselves as having a primary area of interest in PI, and 35% in Clinical Negligence (CN). At interview stage 16 solicitors were interviewed, 8 of which were defendant and 8 were claimant. 14 of these were PI specialists and 2 had a CN specialism.</td>
</tr>
<tr>
<td>Barristers in Personal Injury and CN Specialisms</td>
<td>14 barristers completed the survey, all with more than five years experience, a further 6 barristers started the survey but did not complete it.</td>
</tr>
<tr>
<td>Judges</td>
<td>Due to Judiciary Office restrictions to interviewing judges this proved difficult, though a part-time Deputy District Judge was interviewed, a Deputy District Judge completed the survey and a Designated Civil Judge provided a comment on the study.</td>
</tr>
<tr>
<td>Insurance Industry</td>
<td>No response to requests for input but gained some understanding of their stance from defendant solicitors.</td>
</tr>
<tr>
<td>Expert Witness representative bodies</td>
<td>No commentary received</td>
</tr>
</tbody>
</table>

In order to meet the research objectives, the mixed-method approach used in this study was anticipated to involve:

- Secondary data such as legislation interpretations, professional bodies papers and published adapted protocols (to meet Research Objective 1).
- A Survey campaign with specific questions involving quantitative data with opportunity to input some qualitative data (to inform Research Objective 2).
- A series of qualitative semi-structured/open-ended interviews with the identified stakeholders. (to meet Research Objective 2 and when analysed, inform Research Objective 3).

The administered questionnaire was designed to facilitate more simplistic data and informed the design of the questions at the semi-structured interview phase. It contained a mix of question styles including rating, ranking and some spaces for open-ended responses and elaboration. Given that the study followed an AR strategy this facilitated the critical analysis for alternative possibilities and improvements to design (Wisker: 2008).

Qualitative, semi-structured/open-ended interviews enabled the exploration of the reasons behind participants’ decisions. Such interviews were useful due to scope for divergence, which assisted in capturing opinions and feelings (Wisker: 2008). The survey results were analysed to create a subsequent set of questions based on responses to probe the answers in more detail. This enabled the questions to be focused on emerging issues, perspectives and ideas as per iterative approach and facilitated more depth at interview level, as basic facts around usage and perceptions of quantum experts had already been established and available time was then spend on more advanced questioning. To address ethical implications of the project, the research was designed in accordance with ESRC (2012), a research ethics framework, which aimed to protect all groups involved in research throughout the lifetime of the research and dissemination process. Based on this framework, through this project consideration was made to maintain privacy and confidentiality for participants, who maintained the right to withdraw from the project at any point and omit questions they did not wish to answer.
Principle Findings and Recommendations

Use of Accountancy Experts

80% of contributors had used a QAE witness before and 70% had used a QAE in an adviser capacity. For those who had not used a QAE witness or adviser before, the most prevalent reason for not doing so was the ability to do calculations in house.

Alternatives to use of QAEs

Some defendant solicitors at interview said they tended to deal with quantum aspects themselves instead of using a shadow expert in smaller/less complex cases and would consult the Annual Statistics of Hours and Earnings Tables in a PI manual if the condition was predictable and the claimant was employed. Insurance companies were said to expect solicitors to deal with quantum aspects themselves, so they would only use an expert for the more complex cases, such as where the claimant has had frequent changes of job, the value of claim is high. Though it was noted that less experienced colleagues probably did rely on QAE input more.

Aspects of Cases Quantum Expert Witnesses Used For

The most widespread and frequent use was for quantum aspects relating to business losses, self-employed matters and pensions. There was less use for employed aspects in a case and also for quantum matters in fatal/dependency loss (although this is a more niche/specialist area).

Table 3: Use of QAE Witnesses

<table>
<thead>
<tr>
<th>Aspect of case</th>
<th>% of those who use QAE witness</th>
<th>% of those who use expert witness for this aspect of case once a year or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit loss business trader</td>
<td>90%</td>
<td>65%</td>
</tr>
<tr>
<td>Pension loss – self employed</td>
<td>75%</td>
<td>60%</td>
</tr>
<tr>
<td>Loss of Chance</td>
<td>70%</td>
<td>60%</td>
</tr>
<tr>
<td>Pension loss - employed</td>
<td>65%</td>
<td>70%</td>
</tr>
<tr>
<td>Employment benefit loss</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td>Earnings loss - employment</td>
<td>40%</td>
<td>65%</td>
</tr>
<tr>
<td>Fatals/dependency loss</td>
<td>40%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Table 4 demonstrates that participants used QAEs less frequently in an advisory capacity. Though similarly to in an expert witness role, this is most commonly for business trader/self employed and pensions aspects, and less so for employed related earnings aspect. However, use for loss of chance aspects was proportionality less in an adviser capacity that as a witness.

Table 4: Use of QAE Advisers

<table>
<thead>
<tr>
<th>Aspect of case</th>
<th>% of those who use QAE witness</th>
<th>% of those who use expert witness for this aspect of case once a year or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit loss business trader</td>
<td>82%</td>
<td>50%</td>
</tr>
<tr>
<td>Pension loss – self employed</td>
<td>82%</td>
<td>45%</td>
</tr>
<tr>
<td>Pension loss - employed</td>
<td>60%</td>
<td>40%</td>
</tr>
<tr>
<td>Fatals/dependency loss</td>
<td>60%</td>
<td>30%</td>
</tr>
<tr>
<td>Employment benefit loss</td>
<td>60%</td>
<td>30%</td>
</tr>
<tr>
<td>Earnings loss - employment</td>
<td>52%</td>
<td>35%</td>
</tr>
<tr>
<td>Loss of Chance</td>
<td>50%</td>
<td>30%</td>
</tr>
</tbody>
</table>
For those who had used QAEs, all stated that the reason for doing so was due to the complexity of quantum issues in the case. Other prevalent reasons were due to the size of quantum and because it was felt to be easier than doing calculations in house. It appeared rare to appoint an expert in response to the other party having one. At interview stage it became apparent that the claimant usually appoints an expert first then a defendant may then also instruct a similar expert, based on the facts of the case.

Defendants mentioned a rare use of QAE advisers due to their own experience. The exception was for very unusual earnings/complications where sometimes they used QAE’s in a dual role, whereby the QAE starts as an advisers and then becomes an Expert Witness. This would sometimes be because initially the court would not allow an expert. It was felt that it was easier to justify the use of a QAE with the more complex/higher value cases. There did seem to be a view that defendants use shadow experts less as they don’t seek to recover costs, whereas if a claimants instructs an adviser but does not disclose this, they would fear that at end of case the defendant might refuse to pay the cost.

Choice of Expert

The most important considerations participants cited when choosing an expert as relevant experience, previous instruction and reputation. The aspects emerging as least important were price/payment terms, client directed/panel and timing of service deliver, location and size of case. Interviewees reiterated the view that prior experience of an expert and of that expert with a specific scenario (to match the expert to type of quantum issue) is particularly important. It seems it is very rare to use an expert, who had not been used before, at least by colleagues or Counsel. For defendants, choice tended to be bound by insurers’ panels of preferred experts (more so than survey statistic implies), which was typically a few big accountancy firms, although there tends to be some discretion for these lawyers to choose an expert outside of the panel and this varies across case size/type.

Timing of Appointment of Quantum Accountancy Expert

Timing Pre-Jackson

The most prevalent time to appoint an expert was when establishing the level of loss to put in a claim issue proceeding i.e. ‘pre-issue’, though 45% did say timing of appointment would depend on the case and other variables were mentioned, included the availability of source materials (accounts etc.). At interview stage the importance of having first determined the nature/severity of the injury and liability/viability to determine the case prognosis before instructing a quantum expert pre-issue or just post-issue was clarified. Defendants tended to look at the claim put forward by claimant and assess if an expert was needed and if so they would usually instruct pre-issue asking for a full report. Where an expert might be instructed later than just post-issue was if both sides where still arguing about liability, whereby they would delay instruction till this was determined. Defendants said claims tended to come in accompanied by a QAE’s report (or its obvious that a QAE has had input). The comments by claimants agreed that invariable the claimant does obtain QAE evidence first and certainly never in response to a defendants’ quantum report. This fits with very few participants stating they would instruct a QAE because the other side had one. There was comment from the defendant side that increasingly where a claimant has already instructed a lot of different experts, it can be better to only counter-instruct corresponding experts on the most contentious and complex issues to have the best chance of having the cost of expert evidence allowed by the courts.

Timing Post-Jackson

Almost 80% of respondents thought the Jackson reforms did influence when a QAE expert was appointed. There were suggestions that it became more beneficial to involve an expert earlier, at the costs management stage, due to the need for cost budgeting and to show viability of proportionate quantum. Though some felt appointments happened later as parties were more inclined to wait to see whether courts granted permission for experts first. Those who said experts were appointed as before, felt the reforms didn’t affect the need for expert input, only the recoverability of associated costs.
Usage of QAEs Services Pre-Action

Regarding usage of QAEs services, pre-action to assist with the decision to pursue a case, 26% stated they still use and would be likely to use this more in the future. When asked if participants were likely to use QAE services to determine proportionality/justify use of quantum to the court in the future, there was a more positive response with 43% stating they were likely to.

SJEs

90% of respondents said they never or rarely used QAE Single Joint Expert (SJEs). It was felt that use of SJE’s was unlikely with quantum accountancy aspects because of the contentious nature of the issues. There were also concerns of being bound by SJE evidence whereby parties feared not getting permission to get their own expert if they don’t like what the SJE says. Others stated that it only works in the ‘right case’ as often, privileged discussions are vital. This fits with Pugh and Pilgerstorfer (2005), which found that SJE were only suitable for rare and unusually demanding cases. Some respondents did stress that whilst it may create savings, this could be at strong risk of not providing the best service to clients. It was also felt that if a claim was worth say £25-50,000 and an SJE report cost £3,000, the saving of £ splitting the cost between parties would not be particularly relevant. 67% of participants agreed that an increase in the use of SJEs as an intended outcome of the Jackson reforms and several participants expected more SJEs by court order. This corresponds with the literature e.g. Landon-Down (2012) found the Jackson reforms were an attempt to promote the use of SJEs. However, only 30% of participants said their likelihood to increase their use of SJE’s.

Cost of QAE Input

During interviews it became apparent that defendants needed to pay a premium for what they perceive to be better quality experts, if this should reduce damages overall. This is because insurers want to settle the claim quickly and cheaply, so are not concerned with proportionality in the way Jackson intended. This contrasts with the claimant side appearing to be more price sensitive, due to a need for budget disclosure. Most contributors had not noticed changes to the use of QAE evidence since April 2013. It was reported that solicitors issued many claims just before 1st April to delay the effects of Jackson where possible. Of those that had noticed changes whilst there seems to be no uniformity, anecdotally they reported more instances of applications for use of expert witnesses being disallowed by court or their costs limited and fewer applications for use of experts. This fits with predictions in Landon-Down (2012), where the Jackson reforms were expected to reduce the involvement of expert witnesses. There appeared to be general uncertainty and confusion with interpreting the practical implications of Jackson, with suggestions that judges were just as ignorant as practitioners due to a lack of training. This finding agrees with the literature where despite, Davidson (2012), outlining that judges, would be given additional training Hyde (2013), was critical of any such training.

Front Loading of Expert Evidence

A number of contributors observed an increase in ‘frontloading’ of expert evidence. Whereby, due to difficulty with justifying cost of experts at Cost Management Conferences (CMCs), solicitors are increasingly instructing experts pre issue with the idea that if they got it in before formal court proceedings are issued its harder for judges to disallow. No respondents said they use more QAEs across any cases and on average 65% said they use the same level of QAEs, compared to an average of 18% who said they use less. This fits with Lord Dyson suggestion that post Jackson, courts may reach decisions based on less evidence than they have in the past (Solicitors Journal: 2013) although the research suggests not significantly so.

Limitations and Recommendations

There are some limitations to this study to take into account when considering the recommendations. Firstly, this was a relatively small-scale study, involving only about 25 firms. Additionally, due to access issues, the study was not so representative of barristers/judiciary, insurance industry, interest groups or expert witness groups. Recommendations were developed from the research findings across the areas initially identified to be explored as consequential.
opportunities, taking into account any risk implications of Jackson, as required in the research steps, as summarised below:

**Summary of Recommendations**

| Need for Proportionate costing and case dealing | * No need to drop prices and continue to commission on hourly rate for large complex cases  
* But more pro-active about costs and timing-jurisdiction and update terms of reference |
| Changing business model to accommodate cost budgeting | * Realistic quote at start of case and broken down by key activity components.  
* Develop exemplar quotes and conduct further past case analysis |
| Tailoring offering to customer needs | * Advertise a fixed rate for lower value cases  
* Subcontractor service |
| Prospects and potential to act as a single joint expert | * Market ability to act as SJE further as unpartisan, taking time with instruction from both sides and address different scenarios |
| Education of lawyers in best use of quantum post Jackson reforms | * Seminars and training sessions, website contents, research finding paper. |
| New resulting markets to exploit | * Continue to seek and position high value complex cases  
* Promote subcontractor model  
* QAE early input into case planning (costs justification)  
* Seek more defendant work- explore how to get on panel and warm calling |

**Conclusion**

The main findings of the study regarding use of QAE experts was that the market is not particularly price sensitive, though it appeared to be more-so on the claimant side than the defendant side. The choice of QAE tends to be based on previous instruction or recommendation from a colleague or Counsel though insurers panels often bound defendants with some discretion over choice. There did seem to be a lot less impact over high value, multi-track claims. There was a general feeling of uncertainty regarding the practical interpretations of Jackson with suggestions that initially the judiciary was just as ignorant as solicitors on the reforms in practice.

There were different takes on proportionality however, with claimant lawyers more concerned with the need to act proportionately. Whereas defendants felt that insurers were not concerned with proportionality, as they would pay for the evidence that should reduce payable damages. There were concerns that experts initially were not able to adhere to the new rules and felt the culture change helped experts to demonstrate their ability to turn around reports more quickly in order to comply. There was an acknowledgement that the Jackson reforms did lend to increase the appointments of SJEs, although it was felt that large and complex cases still warrant two experts, so contributors didn’t anticipate their usage of SJEs increasing significantly.

Taking everything into account there does appear to be a changing legal landscape affecting the use of QAE experts with a number of suggestions in the literature there is a need for the industry to change. Susskind (2013) outlines the three stages of change; denial, re-sourcing and disruption. The legal industry appears to have been undergoing much structural change in recent years, perhaps Jackson had formalised this and will create the ‘disruption’ necessary to enable more powerful, positive changes. Such market disruption would point to opportunities for Firms to take advantage of some of these changes and adapt their business models, concerning timing, offering and pricing, to fit with lawyers’ emerging future needs of QAEs. This is in order to demonstrate to lawyers that they understand what needs to change and can comply with the implications of Jackson. Such as by developing skills in designing cost budget elements for QAE costs, offering subcontractor quantum services and fixed-fee lower quantum model to counter any possible reduction in QAE instructions and provide lawyers with a cost effective alternative.
References


Designing And Implementing English For General/Specific Academic Purposes Courses For Science Majors: Challenges Faced And Lessons Learned

Ella Kit-Chi Leung, The Chinese University of Hong Kong, Hong Kong

ABSTRACT

Due to a massive education reform in Hong Kong in recent years, language centers of various universities had to develop new English language curricula. This paper examines the challenges of designing and implementing English for General/Specific Academic Purposes courses to science majors of a Hong Kong university. The framework of the course design including course materials and assessments will be discussed. Lessons learned through student feedback will also be shared.
Academic Support Programmes
In Higher Education: A Necessary Evil?
Moloko Sepota, University of South Africa, South Africa

ABSTRACT

Tertiary institutions as knowledge producers are expected to respond to the economic and developmental needs of the communities they serve. Unfortunately, South African universities seem to be far from meeting these needs.

Many parents assume that, in the post-apartheid era, their children would receive quality education. They also expect the massification of education to be accompanied by reasonably high throughput. Unfortunately, on both accounts, this is becoming a fading dream. Tertiary institutions are thus expected to provide academic support to their students in order to minimise the current attrition rates. This concept paper aims to explore the type of academic support activities needed to assist the students, who to offer and when? The main general question that will be looked into here is: How are academic support activities conceptualised and contextualised? The paper posits that at the moment the level of readiness within tertiary institutions in South Africa to provide an acceptable level of academic support is to a certain extent influenced by economic and socio-political factors. More often than not, such interventions are negatively impacted by these factors. The data used is from practical observation, policy documents, and published articles.

The paper does not in any way claim to be having clear solutions but its highlight is to share experiences and present prevalent challenges, both structural and systematic that might bedevil the quality output at tertiary level. The conclusion will offer a proposal on possible solutions which will notably include the transformation of the current programmes.

Keywords: Academic Support; Attrition Rates; Conceptualisation Of Support Activities
Pre-Service Teachers And Implementation Of Integrated Science And Technology Lessons In Elementary Teaching
Mamta Singh, Lamar University, USA

ABSTRACT
Self-efficacy beliefs of pre-service teachers in developing and implementing science and technology integrated lessons in the elementary classroom is an important issue to discuss. To address today's digital student's needs, the administrators are prompted to increase technology in public. Despite the increased access to technology in schools, few teachers are integrating technology for instructional purposes in the elementary science classroom. Therefore, elementary pre-service teachers must be trained with adequate content knowledge of both science and technology to create an advantageous learning experience in science classroom. This study was conducted in the science methods for teachers course and pre-service teachers conducted research in selecting and developing integrated science and technology lesson plans incorporating 5-E instructional model using Explore Learning and implemented in their science classroom.
Correlate Of Corporal Punishments And Junior Secondary School Students’ Academic Performance In Mathematics In Calabar Metropolis Of Cross River State, Nigeria

A. N. Meremikwu, University of Calabar, Nigeria
Mark Odock, University of Calabar, Nigeria

ABSTRACT

This study was designed to correlate corporal punishment and junior secondary school students’ academic performance in Mathematics in Calabar Metropolis of Cross River State, Nigeria. The study therefore seeks to measure the relationship between corporal punishment (flogging, spanking, pick pin, castigating) and junior secondary school students’ academic performance. A 20 item questionnaire and 20 item MAT were used for data collection from the sample 200 students randomly drawn from the population. Data generated from the administration of this were subjected to statistical analysis using Pearson Product Moment Correlation at .05 level of significance. The result obtained from the analysis revealed a negative relationship between corporal punishment (flogging, spanking, pick pin, castigating) and junior secondary school students’ academic performance in the research area. Based on this finding, it was recommended that Mathematics teachers should employ other youth-friendly disciplinary measures instead of corporal punishment in their bid to curb learners’ delinquencies.

Keywords: Correlate, Corporal Punishment, Junior Secondary School, Performance, Mathematics

Introduction

It is obvious that learning cannot take place in an indiscipline environment. Indiscipline is a term that is associated with disobedience, immorality, disloyalty, lateness, cheating etc. Udo (2010) defined indiscipline as any mode of behaviour, action and conduct which deviates from the established rules and regulations of a school. The source reiterated that indiscipline brings mental disposition which instill disorderliness, uncontrolled habit and disobedience to set rules of conduct which can paralyze effective academic performance of students. Considering how important discipline is to effective learning of students, one will agree that indiscipline must be eradicated to the barest minimum for effective teaching and learning of Mathematics. Udoma (2003) in a similar manner revealed that the use of discipline in the development and education of children is one of the strongest influence contributing to learning, since learning is a complex process which combines a number of factors in order to achieve desirable results.

One of the commonly used disciplines in schools today is corporal punishment. Corporal punishment refers to all forms of physical punishment that involved the deliberate infliction of pains in order to punish a person convicted of a crime. Frud (1999) sees corporal discipline as the deliberate infliction of pains and suffering intended to punish a person or change his or her behavior. When severe (corporal) discipline is involved, aggression may be displayed and though compliance in the school is obtained; the discipline behavior may only last in the presence of the discipline agent. Corporal punishment can take many forms; it can be presented through verbal or physical abuse (Ellen, 1998).
While most persons support the establishment of corporal punishment in secondary schools, many are seriously in
opposition to it. This study is aimed at investigating the relationship between corporal punishment and effective
learning of Mathematics in Calabar Metropolis of Cross River State, Nigeria.

Statement of the problem

Mathematics is such an important and necessary subject that at the secondary school level, all students are mandated
to offer it. Despite how indispensable Mathematics is, it has been dreaded and erroneously assumed by many as a
subject that can be offered only by supper intelligent students. This has discouraged many students from putting their
interest in Mathematics. Many dread it such that they have concluded that they cannot pass its examinations. This has
led to massive failure in Mathematics in internal and public examinations.

Many stakeholders of education have suggested several possible causes to this unpleasant trend such suggestions
ranges from government policies, lack of equipped Mathematics teachers, student perception of the subject matter,
attitude of Mathematics teachers towards slow learners and those not willing to put in their best in studying
mathematics.

However, not much has been done in the area of disciplinary pattern. In view of this, this study seeks to investigate
the extent to which corporal punishment affects junior secondary school students’ academic performance in
mathematics.

Purpose of the study

The purpose of this study is to investigate the influence of corporal punishment (flogging, pick pins, castigation and
spanking) on junior secondary school students’ performance in mathematics.

Literature review

Naz, Waseem, Umar, Muhammed and Qaisar (2011) observed that both mild and severe corporal punishment has
adverse impact on students’ academic performance. Their observation also revealed that both mild and severe corporal
punishment have negative effect on students’ confidence, create fear, hesitation, and hindrance towards learning and
resulting in poor academic performance. The source reiterated that students who are severely beaten tend to be
modeled towards aggression and wrath. And such aggressive approach from teachers and re-aggression from students,
causes apprehension and hooliganism rather than to correct their behaviour and conduct in class.

Pandey (2001) is of the opinion that corporal punishment serves as a catalyst to the learning process, and as a means
of disciplining children and students, and this can be achieved if the punishment is meticulously planned and executed
with great sensitivity. Nakpodia (2012) observed that, the fact that corporal punishment as a disciplinary measure is
not part of any education curriculum indicates that corporal punishment has no place in the classroom at every level;
and that discipline can and should be taught by examples.

To spank means to beat, smack, or slap a person’s buttocks, with bare hand or other object as punishment. Bolarinwa,
Alabi, Tukura and Omodara (2013) stated that effective discipline means discipline applied with respect in a fair, firm,
reasonable and consistent way, which is to help children organize themselves, internalize rules and acquire appropriate
behavioural patterns. And that this way of discipline does not instill shame, negative guilt and sense of abandonment
or a loss of trust. Instead, it instills a sense of greater trust between the child and parent.

Naz et al (2011) observed in a study that punishment is mostly regarded as a tool that brings jeopardy to both the social
and psychological wellbeing of the effected. The source further stressed that the use of corporal punishment whether
mild or severe has adverse impact on the mental level of an individual as it causes depression, lowers self-esteem of
students, causes pessimism among students and prevails apprehension figured. And that though mild corporal
punishment is regarded as a discipline oriented activity which brings punctuality and well-disciplined personality, it
is accompanied by numerous disorders in the students’ personality. Such disorders include suppression of students’
opposed corporal punishment based on the fact that it is cruel, unreasonable and too difficult to prove in court. It holds
considerable potential for child abuse and tends to be discriminating, and also that there are more effective non-physical alternative that can be used in correcting students’ misbehaviour. Nakpodia (2012) opined that harsh physical punishment do not improve students’ in-school behaviour or academic performance but one way or the other cause more harm than what we have already.

A frequently punished child will be a problematic person tomorrow because the child being sensitive reacts to the behaviour and disciplinary practices of adults either at school or at home (Kaur, 2005). Alhassan (2013) observed that the modern concept of discipline which incorporates mental hygiene principles assures that order which results from compulsion is not necessarily good discipline, and that good discipline is the hearty performance of duties, as well as freely chosen activities.

Pick pin is a form of corporal punishment where one stoops on one leg, then touches his one finger on the ground and maintains the position. Such punishment inflicts pains on the back, head, legs and the finger touching the ground. Alhassan (2013) observed that this form of physical punishment overtime has a very deceptive advantage. It tends to snowball, and administrators of the punishment become more aggressive and those receiving the punishment develop many problems such as dependency, anger and resentment.

Ghana News Agency (2012) revealed that in a survey conducted in four Districts of Ghana by the Campaign for Female Education (CAMFED), indicated that 94 percent of Ghanaian parents endorsed corporal punishment as a means of correcting misbehaving students. The survey which sampled 2,314 parents, students and graduates revealed that 92 percent of students support corporal punishment, while 89 percent of female graduates endorse it, 64 per cent of teachers said corporal punishment must be tolerated. Such finding may differ in different countries especially in Nigeria where there are directives from ministry of education banning the use of corporal punishment.

Castigation here means to subject a student to severe reproof or criticism. Sanderson (2003) opined that discipline in raising and teaching of children is necessary if they are to become social, productive and responsible adults and that punishment is a method of discipline and corporal punishment is only one aspect of punishment. Umobong (2004) also observed that the use of sinister languages in addressing students, such words/phrase like “idiots”, “never do well”, “I know you will never perform better” etcetera; the use of such words/phrase not only belittle the child but may ridicule and lead to lack of concentration and withdrawal of student to themselves and eventually dislike of school.

The child who suffers continual physical punishment or is subject to harsh, demeaning words can become aggressive and out of control. And when a caregiver yells at children using sarcastic language or yanks a child who is out of control, we must understand that this are signals that shows that our own anger has escalated to a potentially harmful level. In such a situation the link between the teacher and students that should enhances learning is disconnected thereby making it difficult for utilitarian learning to occur.

Bolarinwa, Alabi, Tukura and Omodara (2013) observed that harsh discipline such as humiliation (verbal abuse, shouting and name-calling) will also make it hard for the child to respect and trust the parent or teacher. When a students is castigated, in most cases it leads to loss of self-esteem. When individuals feel that their self-esteem needs are threatened, they tend to become violent; it is obvious that a classroom where violence prevails cannot facilitate learning.

**Research method**

The research design adopted for this study is ex-post facto design. Ex-post facto design is a non-experimental design in which the phenomena of interest has already occurred and cannot be manipulated in any way (Idaka & Anagbogu, 2012). The population of the study is comprised of seventeen thousand one hundred and eighty-two (17,182) students in the sixteen (16) public secondary schools in Calabar Metropolis (Local Government Education Authority, Calabar, 2016).

The researcher used simple random sampling method to select five (5) schools from the sixteen public secondary schools in the research area. The same approach was used to draw the sample of 200 students used for the study using the hat and draw method. A 20 item questionnaire and Mathematics Achievement Test were developed as instruments.
by the researcher for data collection. Data generated from the administration of the instruments were subjected to statistical analysis using Pearson Product Moment Correlation at .05 level of significance.

**Presentation of result**

There is no significant influence of corporal punishment (flogging, pick pins, castigation and spanking) on junior secondary school students’ performance in mathematics.

**TABLE 1**

Summary of Pearson Product moment correlation analysis of the relationship between corporal punishment (flogging, pick pins, castigation and spanking) and students’ performance in mathematics.

<table>
<thead>
<tr>
<th>Variables</th>
<th>( \sum X )</th>
<th>( \sum X^2 )</th>
<th>( \sum XY )</th>
<th>r-cal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flogging (X₁)</td>
<td>2748</td>
<td>40036</td>
<td>24361</td>
<td>-0.167</td>
</tr>
<tr>
<td>Spanking (X₂)</td>
<td>2210</td>
<td>28146</td>
<td>19584</td>
<td>-0.145</td>
</tr>
<tr>
<td>Pick pin (X₃)</td>
<td>2321</td>
<td>28721</td>
<td>20562</td>
<td>-0.171</td>
</tr>
<tr>
<td>Castigation (X₄)</td>
<td>2313</td>
<td>30099</td>
<td>20376</td>
<td>-0.198</td>
</tr>
<tr>
<td>Students’ academic performance (Y)</td>
<td>1783</td>
<td>17749</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant at 0.05; df = 198; Critical r = 0.138

The results presented in Table 1 show that calculated r-values for X₁, X₂, X₃ and X₄ are -0.167, -0.145, -0.171 and 0.198 in that order are found to be statistically less than the critical r-value of 0.138 at .05 level of significant and 198 degrees of freedom. With this result, the null hypothesis was retained on the ground that the calculated values were found to be statistically less than the tabulated value.

**Discussion of findings**

The results of the analysis of the data collected for this study revealed that there is a negative correlation between corporal punishment (flogging =X₁, spanking =X₂, pick pin =X₃, castigation =X₄) and students’ academic performance in Mathematics. According to Joshua (2005), negative correlation implies that increase in one variable say X leads to decrease in the corresponding variable say Y. While the negative correlation demonstrated in this study was not statistically significant, the implication is that increase in corporal punishment may diminish students’ academic performance in Mathematics in the research area.

The finding of this study is in accordance with the earlier position of Naz et al (2011) that both mild and severe punishment has negative effect on students’ confidence, create fear, and hesitation, hindrances toward learning and resulting in poor academic performance.

The result that emerged from the analysis collected in respect to variable X₂ revealed that spanking has a negative correlation with students’ academic performance in Mathematics. This is supported by Nakpodia (2012) who stated that harsh physical punishment do not improve students’ in-school behavior or academic performance, but in one way or the other causes more harm than what we have already. This is also in line with Molly (2012) who discovered that though spanking gets quick result, it does not induce the desire behaviour, in addition to detrimental psychological effect, it may also inflict lasting emotional damage that inhibits the learning process.

The results of the analysis data collected in respect to variable X₃ revealed a negative correlation between Pick Pin and students’ academic performance. Implying that pick pin can affect students’ academic performance negatively. This is in line with the findings of Mawhinney and Peterson (1986) who stated that inconsistent or over use of punishment in harsh and unskilled way can have undesirable effect on students who may develop personality traits
such as disliking the punishing persons, develop strong fear and anxieties, obstacle to learning, avoiding the person, place or things associated with such punishment. As corporal punishment breeds anxieties, Johnson and Medinnus (1991) revealed that anxiety is likely to hamper the intellectual functioning of a child to an extent that efforts and concentration are diverted towards coping with the anticipated problem of learning task. The use of corporal punishment by mathematics teacher can create anxiety in the student about the subject. This can be very incapacitating, interfering with the normal process of the thought like memory, decision making, problem solving and concentration thereby affecting academic performance. Though the direction of this present finding revealed a negative relationship between pick pin and students’ academic performance in mathematics, the relationship was not statistically significant. This implies that other factors apart from pick pin may contribute significantly to the academic performance of students.

The finding also showed correlation coefficient that indicates negative relationship between castigation and students' academic performance in mathematics. Which is in line with the earlier findings of Umobong (2004) who observed that the use of sinister languages in addressing students, such word/phrase like “Idiot”, “Never do well”, etc will not only belittle the child, but may ridicule and lead to lack of concentration and withdrawal of students to themselves eventually disliking school. Bolarinwa, Alabi, Tukuraand Omodara (2013) also agreed to this when they stated that the use of harsh discipline such as verbal abuse, shouting and name calling will make it difficult for the child to respect and trust the parent or teacher as well as lead to loss of self-esteem. When individuals feel that their self-esteem is threatened, they tend to become violent, thereby hampering the learning process.

Conclusion and recommendations

The study reveals a negative correlation between corporal punishment and students’ academic performance in Mathematics but the strength is very weak. This is not statistically significant, implying that though corporal punishment can influence the academic performance of students negatively, there are several other variables other than flogging, spanking, pick pin and castigation that may negatively influence students’ performance.

Based on this result, it is recommended among others thus:

1. Mathematics teachers should employ other disciplinary measures instead of corporal punishment in their effort to curb learners’ delinquencies.
2. If corporal punishment must be used, it must be meticulously planned with sensitivity.
3. A disciplinary committee should be established by law to deal with all disciplinary cases in schools.

REFERENCES


Secure Your Students Jobs
Through Presentation Skills
Suzanne Salah El-Din, The German University in Cairo, Egypt

ABSTRACT

Due to today’s limited and competitive work opportunities, EFL learners strive to present themselves as professional speakers; a skill needed in different vocational settings. In this presentation the participants will be introduced to how undergraduate students are taught to become professional public speakers regarding aspects in both content and delivery.
Financial Support For SMEs In Poland Under The EU Smart Growth Operational Program
Bożena Mikołajczyk, University of Lodz, Poland
bomik@op.pl

ABSTRACT

The Smart Growth Operational Program (SG OP) is intended to foster the development of innovation and entrepreneurship, especially in SMEs which account for 99.8% of all enterprises in Poland. The premise of this program is support for the whole process of introducing innovations, that is from the phase of formulation of the idea, through research and development activities, to commercialization of research results. SG OP is to ensure better adjustment of the supply of R&D to the market needs but also to stimulate demand of enterprises for innovation and research and development. The program will support actions promoting individual research and development activities, as well as R&D conducted in consortia. Particular emphasis is put on the cooperation between science and business. Science should enable better targeting of activities at the needs of enterprises.

The aim of this paper is to present new investment directions in the so-called smart specializations, that is the selected areas of science and economy which constitute the development potential and funding structures necessary for raising the level of innovativeness of SMEs within the Smart Growth Operational Program.

Keywords: R&D Expenditures, Innovation Indicators, Financial Instruments, EU Funds
Social Engagement Of Polish Financial Institutions
Krystyna Kietlińska. University of Social Science, Poland

ABSTRACT

This paper deals with the social responsibility of Polish financial institutions.

The aim of the study is to assess the scope of social activity of these institutions.

The results of the survey conducted by the Donors Forum are presented on the background of the general theoretical considerations. The survey concerns the subjective and relevant scope of social engagement of the examined financial institutions.

In order to formulate conclusions the social activities of a bank (PKO BP SA) and an insurance company (PZU Group) were presented as an example.

Keywords: Social Responsibility, Financial Institutions, Survey
The Influence Of Sustainable Tourism Development In Pattaya, Chonburi Province

Nak Gulid, Srinakharinwirot University, Thailand
Supinya Yansomboon, Srinakharinwirot University, Thailand

ABSTRACT

The objective of this research is to study sustainable tourism development in Pattaya, Chonburi province classified by demographic characteristics. Quantitative techniques were employed in this study and questionnaires were used to collect the data. Four hundred Thai tourists were interviewed in this process.

The results of this research are as follows:

The majority of Thai tourists are female, ages ranging from 25 to 34, and single. They are employees of private companies, have a monthly income of over THB25,001, and are resident in Bangkok. Their attitudes concerning the environmental and social attributes of sustainable tourism are at a very good level, whereas attitudes toward the economic and community attributes of sustainable tourism are at a good level.

The result of testing the hypothesis is as follows:

Thai tourists of different ages, occupations, and domiciles expressed different attitudes toward the economic and community attributes of sustainable tourism in Pattaya, Chonburi province with statistical significance at the .01 and .05 levels.

Thai tourists of different monthly incomes and marital status expressed different attitudes toward the community attribute of sustainable tourism in Pattaya, Chonburi province with statistical significance at the .01 and .05 levels.

Keywords: Sustainable Tourism, Demographic Characteristics, Pattaya

INTRODUCTION

Pattaya City is a popular attraction in Thailand due to its proximity to Bangkok, the capital city. The number of tourists (both domestic and international) has increased from three to eight million over the past ten years (www.skyscrapercity.com, December 2015). Due to such popularity, Pattaya City is facing several problems such as environmental pollution, crime, degraded tourist destinations and increasing urbanization to the east outside of Pattaya. In 2008, the city of Pattaya officially requested DASTA (Designated Areas for Sustainable Tourism Administration) to consider Pattaya as a sustainable tourism area. Two years later, DASTA proposed a project which aimed to focus on environmental issues along with emphasizing local traditions, culture and the rich heritage of the region to ensure sustainable tourism development in the future. This project is also useful to the local population who may benefit in terms of quality of life and a positive impact on economic, social and environmental issues. In focusing on sustainable tourism, tourists are the most important stakeholders of the negative environmental, economic, and social impacts of their activities. Swarbrooke (1999) stated that sustainable tourism development should emphasize the role of tourists and their attitudes. The reason is that if tourists are not seriously interested in and responding to sustainable tourism, positive development may not be attained (Wehrli et al., 2012). This study is mainly focused on Thai tourists’ attitudes concerning sustainable tourism development classified by demographic characteristics. The findings of this study will identify the target groups and the characteristics of tourists in sustainable tourism development.
CONCEPTUAL FRAMEWORK AND HYPOTHESIS

The purpose of this research is to study sustainable tourism development classified by demographic characteristics. The proposed model is shown in the following figure:

**Figure 1: Conceptual Framework**

![Conceptual Framework Diagram]

**HYPOTHESIS**

The following research question will be addressed:

H1: Sustainable tourism that includes economic, social, environmental, and community aspects can be classified by demographic characteristics.

**LITERATURE REVIEW**

**Sustainable Tourism Development**

The World Tourism Organization (1993) defined sustainable tourism as tourism that meets the needs of current tourists and the host population while enhancing opportunities for the future (Nicholas and Thapa, 2010, p. 842). This concept emphasizes the desires of tourists and host populations. Hunter (1997) stated that the paradigm of sustainable tourism development is based not only on the needs of local residents and tourists, but also on environmental conservation. Furthermore, many scholars have concluded that the attributes of sustainable tourism development include three dimensions: economic, environmental, and social (Butler 1999, Murphy and Price 2000, Swarbrooke 1999, Wight, 1993). The economic attribute of sustainable tourism concentrates on the need to promote and enhance the viability of a company by maximizing benefits and minimizing costs (Nicholas and Thapa, 2010, p. 843). The environmental attribute of sustainable tourism concentrates on the protection and management of the environment, such as ecological processes. The social dimension receives less attention than the environmental dimension. It emphasizes the impacts of tourism on the socio-cultural fabric of the host community. The tourism industry should operate with integrity when dealing with tourists, suppliers, local residents, and travel intermediaries (Nicholas and Thapa, 2010, p. 843). In the tourism industry, the major stakeholders include local communities, tourists, the government/public sector, and the industry/private sector. Many scholars (Bass et al. 1995, Caffyn and Jobbins, 2003; Choi and Sirakaya, 2005; Cole, 1997; Getz and Jamal, 1994; Jamal and Getz, 1999; Medeiros de Araujo et al., 1999, Nicholas et al., 2009, Penning-Gray 2005, Simpson, 2001, Timothy, 1998) have stated that residents in local communities are the key stakeholders in the sustainable tourism development process. Moreover, Wehrli et al. (2012) included a local attribute on sustainable tourism because it is the most important attribute. This attribute includes local products, the local community, and the local culture. Hence, in this study, the researchers conclude that there are four attributes of sustainable tourism development: economic, social, environmental, and community.

In focusing on sustainable tourism, tourists are the most important stakeholders concerning the negative environmental, economic, and social impacts of their activities. Swarbrooke (1999) stated that sustainable tourism development should emphasize the role of tourists and their attitudes. Arboleda, Wang, Shelley and Whalen, (2003)
found that different demographic characteristics, such as gender and ethnicity, express different involvement characteristics. If they are more involved with their community, they tend to be more satisfied with their living environment. Jones and Hill (2003) stated that people who are more involved in community service are more willing to participate. Hence, tourists with different demographic characteristics should express different attitudes, perceptions, and behaviors.

**RESEARCH DESIGN AND METHODOLOGY**

This study employed quantitative methodology and used a survey technique to collect data. Jamieson (2003) concluded that visitor expectations can be understood via visitor surveys/interviews, observations, and focus groups. The sample size is 400 Thai tourists in Pattaya, Chonburi province. Judgmental sampling was employed to interview Thai tourists at the most popular attractions in Pattaya, which includes museums, temples, shopping areas, and beaches. Convenience sampling was used to select the respondents at each attraction.

**Measurement**

In this study, sustainable tourism is divided into four dimensions: economic, social, environmental, and community. Economic, social, and environmental attributes were measured by using the items proposed by Choi and Sirakaya (2005), Swarbrooke (1999), Thapa and Graefe (2003), Wahab (1997), Nicholas and Thapa (2010). Economic and social dimensions included 6 items, whereas the environmental dimension included 5 items. The community dimension was derived from Baumgartner (2001), WTO (2004), Clark (1997), Hunter (2007), Miller (2001), Wehrli (2012). This dimension included 3 items. All dimensions on sustainable tourism used the five-point Likert scale of 1 = strongly disagree to 5 = strongly agree.

The reliability of the four dimensions in sustainable tourism (economic, social, environmental, and community) was estimated by computing its Cronbach alpha, which was equal to .747, .772, .759, and .739, respectively. All measures achieved the Cronbach alpha beyond the recommended level of 0.60 (Hair, Bush, and Ortinau, 2003).

**RESULTS**

**Respondent Profile**

The majority of respondents were female (69.25%), ages ranging from 25 to 34 (60%), and single (89%). They are employees of private companies (54%), have monthly incomes of over THB25,001 (47.75%) and are resident in Bangkok (59.75%).

Their attitudes concerning the environmental and social attributes of sustainable tourism are at a very good level (mean value = 4.67 and 4.36, respectively). Moreover, attitudes toward the economic and community attributes on sustainable tourism are at a good level (mean value = 3.60 and 3.42, respectively).

**Findings**

An independent t-test and one-way analysis of variance were employed to test the hypothesis. The results are shown in the following table:
Table 1: Results of Thai Tourist Attitudes on Sustainable Tourism Classified by Gender

<table>
<thead>
<tr>
<th>Sustainable Tourism</th>
<th>Levene test for equalities of variances</th>
<th>Mean</th>
<th>t-test for equality of means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>Male</td>
</tr>
<tr>
<td>Economic Attribute</td>
<td>4.583*</td>
<td>.033</td>
<td>Female</td>
</tr>
<tr>
<td>Social Attribute</td>
<td>.038</td>
<td>.846</td>
<td>Male</td>
</tr>
<tr>
<td>Environmental</td>
<td>1.521</td>
<td>.218</td>
<td>Female</td>
</tr>
<tr>
<td>Community Attribute</td>
<td>.233</td>
<td>.630</td>
<td>Male</td>
</tr>
</tbody>
</table>

* Statistical significance at the 0.05 level

As seen in the above table, the results show that Thai tourists of either gender do not affect the difference of sustainable tourism in any attribute (sig. = .406, .062, .165, .102, which is more than .05) at the statistically significant level of 0.05.

Table 2: Results of Thai Tourist Attitudes on Sustainable Tourism Classified by Marital Status

<table>
<thead>
<tr>
<th>Sustainable tourism</th>
<th>Levene test for equalities of variances</th>
<th>Mean</th>
<th>t-test for equality of means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>Single/divorced</td>
</tr>
<tr>
<td>Economic Attribute</td>
<td>.393</td>
<td>.531</td>
<td>Married/Cohabit</td>
</tr>
<tr>
<td>Social Attribute</td>
<td>.031</td>
<td>.859</td>
<td>Single/divorced</td>
</tr>
<tr>
<td>Environmental</td>
<td>3.164</td>
<td>.076</td>
<td>Married/Cohabit</td>
</tr>
</tbody>
</table>

* Statistical significance at the 0.05 level

The results in the above table show that Thai tourists of different marital status do not affect the differences on sustainable tourism in three attributes (sig. = .410, .273, .078, which is more than .05) at the statistically significant level of 0.05. However, Thai tourists of different marital status affect the difference on sustainable tourism in the community attribute at the statistically significant level of 0.05 and the mean score of Thai tourists of married and cohabiting status is greater than those of single/divorced status.

Thai tourists classified by age, occupation, monthly income, and domicile are presented in the following table:
### Table 3: Results of One-Way Analysis of Variance

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Levene test</th>
<th>Sig.</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Tourism: Economic Attribute Classified By Age</td>
<td>Levene test</td>
<td>Sig.</td>
<td>df1</td>
<td>df2</td>
<td>Brown-Forsythe</td>
<td>Sig.</td>
<td></td>
</tr>
<tr>
<td>Between Groups Within Groups Total</td>
<td>.224</td>
<td>.799</td>
<td>3.680</td>
<td>90.264</td>
<td>.184</td>
<td>8.437**</td>
<td>.000</td>
</tr>
<tr>
<td>Sustainable Tourism: Social Attribute Classified By Age</td>
<td>4.881**</td>
<td>.008</td>
<td>2</td>
<td>214.100</td>
<td>.688</td>
<td>.504</td>
<td></td>
</tr>
<tr>
<td>Sustainable Tourism: Environmental Attribute Classified By Age</td>
<td>8.644**</td>
<td>.000</td>
<td>2</td>
<td>261.588</td>
<td>2.921</td>
<td>.056</td>
<td></td>
</tr>
<tr>
<td>Sustainable Tourism: Community Attribute Classified By Age</td>
<td>6.385**</td>
<td>.002</td>
<td>2</td>
<td>226.426</td>
<td>9.340**</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Sustainable Tourism: Economic Attribute Classified By Occupation</td>
<td>Levene test</td>
<td>Sig.</td>
<td>df1</td>
<td>df2</td>
<td>Brown-Forsythe</td>
<td>Sig.</td>
<td></td>
</tr>
<tr>
<td>Between Groups Within Groups Total</td>
<td>1.588</td>
<td>.177</td>
<td>3.246</td>
<td>90.264</td>
<td>.812</td>
<td>3.684**</td>
<td>.006</td>
</tr>
<tr>
<td>Sustainable Tourism: Social Attribute Classified By Occupation</td>
<td>1.765</td>
<td>.135</td>
<td>1.662</td>
<td>72.864</td>
<td>.415</td>
<td>2.305</td>
<td>.058</td>
</tr>
<tr>
<td>Sustainable Tourism: Community Attribute Classified By Occupation</td>
<td>5.159**</td>
<td>.000</td>
<td>4</td>
<td>149.554</td>
<td>1.156</td>
<td>.332</td>
<td></td>
</tr>
<tr>
<td>Sustainable Tourism: Environmental Attribute Classified By Occupation</td>
<td>2.925*</td>
<td>.021</td>
<td>4</td>
<td>149.052</td>
<td>8.417**</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Sustainable Tourism: Economic Attribute Classified By Monthly Income</td>
<td>Levene test</td>
<td>Sig.</td>
<td>df1</td>
<td>df2</td>
<td>Brown-Forsythe</td>
<td>Sig.</td>
<td></td>
</tr>
<tr>
<td>Between Groups Within Groups Total</td>
<td>.831</td>
<td>.506</td>
<td>1.776</td>
<td>90.264</td>
<td>.444</td>
<td>1.982</td>
<td>.097</td>
</tr>
<tr>
<td>Sustainable Tourism: Social Attribute Classified By Monthly Income</td>
<td>2.082</td>
<td>.082</td>
<td>.262</td>
<td>72.602</td>
<td>.066</td>
<td>.357</td>
<td>.839</td>
</tr>
</tbody>
</table>
The results in Table 3 indicate that Thai tourists of different ages, occupations, and domiciles affect the differences of sustainable tourism on economic and community attributes at the statistically significant levels of 0.01 and 0.05, respectively. Furthermore, Thai tourists with different monthly incomes express a difference of sustainable tourism on community attribute at the statistically significant level of 0.01.
Table 4: Results of LSD and Dunnett T3 Tests-Multiple Comparisons of the Different Groups

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Mean Differences of Second Group</th>
<th>Mean Differences of Third Group</th>
<th>Mean Differences of Fourth Group</th>
<th>Mean Differences of Fifth Group</th>
<th>Mean Differences of Sixth Group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sustainable Tourism: Economic Attribute Classified by Age (LSD)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Group (15-24 years old)</td>
<td>Mean = 3.45</td>
<td>-.171** (.003)</td>
<td>-.299** (.000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Group (25-34 years old)</td>
<td>Mean = 3.62</td>
<td></td>
<td>-.128* (.047)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third Group (35 years old and over)</td>
<td>Mean = 3.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sustainable Tourism: Community Attribute Classified by Age (Dunnett T3)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Group (15-24 years old)</td>
<td>Mean = 3.16</td>
<td>-.333** (.000)</td>
<td>-.383** (.001)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Group (25-34 years old)</td>
<td>Mean = 3.49</td>
<td></td>
<td>-.050 (.944)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third Group (35 years old and over)</td>
<td>Mean = 3.54</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sustainable Tourism: Economic Attribute Classified by Occupation (LSD)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Group (Employees in private company)</td>
<td>Mean = 3.61</td>
<td>-.105 (.187)</td>
<td>-.081 (.355)</td>
<td>.136* (.022)</td>
<td>-.212* (.049)</td>
</tr>
<tr>
<td>Second Group (Government officers)</td>
<td>Mean = 3.71</td>
<td></td>
<td>.023 (.830)</td>
<td>.241** (.007)</td>
<td>-.107 (.394)</td>
</tr>
<tr>
<td>Third Group (Entrepreneurs/Professionals)</td>
<td>Mean = 3.69</td>
<td></td>
<td></td>
<td>.217* (.024)</td>
<td>-.131 (.320)</td>
</tr>
<tr>
<td>Fourth Group (Students)</td>
<td>Mean = 3.47</td>
<td></td>
<td></td>
<td>-.348** (.002)</td>
<td></td>
</tr>
<tr>
<td>Fifth Group (Other, i.e., freelancers)</td>
<td>Mean = 3.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sustainable Tourism: Community Attribute Classified by Occupation (Dunnett T3)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Group (Employees in private companies)</td>
<td>Mean = 3.47</td>
<td>-.223 (.063)</td>
<td>.165 (.215)</td>
<td>.362** (.000)</td>
<td>-.437** (.007)</td>
</tr>
<tr>
<td>Second Group (Government officers)</td>
<td>Mean = 3.69</td>
<td></td>
<td>.388* (.019)</td>
<td>.584** (.000)</td>
<td>-.214 (.259)</td>
</tr>
<tr>
<td>Third Group (Entrepreneurs/Professionals)</td>
<td>Mean = 3.30</td>
<td></td>
<td></td>
<td>.197 (.174)</td>
<td>-.602** (.003)</td>
</tr>
<tr>
<td>Fourth Group (Students)</td>
<td>Mean = 3.10</td>
<td></td>
<td></td>
<td></td>
<td>-.799** (.000)</td>
</tr>
<tr>
<td>Fifth Group (Other, i.e., freelancers)</td>
<td>Mean =</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Table 4: Results of LSD and Dunnett T3 Tests-Multiple Comparisons of the Different Groups
(Continued)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Mean Differences of Second Group</th>
<th>Mean Differences of Third Group</th>
<th>Mean Differences of Fourth Group</th>
<th>Mean Differences of Fifth Group</th>
<th>Mean Differences of Sixth Group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sustainable Tourism: Community Attribute Classified by Monthly income (Dunnett T3)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Group (Lower than THB10,000)</td>
<td>Mean = 3.10</td>
<td>-.294 (.352)</td>
<td>-.437** (.005)</td>
<td>.518** (.000)</td>
<td>-.329** (.002)</td>
</tr>
<tr>
<td>Second Group (THB10,001-15000)</td>
<td>Mean = 3.39</td>
<td>-.143 (.989)</td>
<td>-.224 (.791)</td>
<td>-.035 (1.000)</td>
<td></td>
</tr>
<tr>
<td>Third Group (THB15,001-20,000)</td>
<td>Mean = 3.54</td>
<td>-.081 (1.000)</td>
<td>.108 (.985)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fourth Group (THB20,001-25,000)</td>
<td>Mean = 3.62</td>
<td></td>
<td>.189 (.539)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fifth Group (THB25,001 and over)</td>
<td>Mean = 3.43</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sustainable Tourism: Economic Attribute Classified by Domicile (LSD)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Group (Bangkok)</td>
<td>Mean = 3.61</td>
<td>.091 (.182)</td>
<td>-.221* (.026)</td>
<td>.245* (.030)</td>
<td>-0.094 (.282)</td>
</tr>
<tr>
<td>Second Group (Central Region)</td>
<td>Mean = 3.52</td>
<td>-.311** (.006)</td>
<td>.153 (.215)</td>
<td>-.185 (.070)</td>
<td>-.013 (.912)</td>
</tr>
<tr>
<td>Third Group (Northern Region)</td>
<td>Mean = 3.83</td>
<td>.465** (.001)</td>
<td>.126 (.312)</td>
<td>.299* (.027)</td>
<td></td>
</tr>
<tr>
<td>Fourth Group (Southern Region)</td>
<td>Mean = 3.37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fifth Group (Northeastern Region)</td>
<td>Mean = 3.71</td>
<td></td>
<td>.172 (.172)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sixth Group (Eastern and Western Regions)</td>
<td>Mean = 3.54</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sustainable Tourism: Community Attribute Classified by Domicile (LSD)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Group (Bangkok)</td>
<td>Mean = 3.32</td>
<td>-.206 (.051)</td>
<td>-.339* (.027)</td>
<td>-.111 (.523)</td>
<td>-.400** (.003)</td>
</tr>
<tr>
<td>Second Group (Central Region)</td>
<td>Mean = 3.53</td>
<td>-.133 (.442)</td>
<td>.095 (.621)</td>
<td>-.194 (.220)</td>
<td>.158 (.368)</td>
</tr>
<tr>
<td>Third Group (Northern Region)</td>
<td>Mean = 3.67</td>
<td>.228 (.304)</td>
<td>.061 (.754)</td>
<td>.292 (.162)</td>
<td></td>
</tr>
<tr>
<td>Fourth Group (Southern Region)</td>
<td>Mean = 3.44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fifth Group (Northeastern Region)</td>
<td>Mean = 3.73</td>
<td></td>
<td>.352 (.195)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Statistical significance at the 0.05 level  ** Statistical significance at the 0.01 level
Based on Table 4, the results show that the mean score of Thai tourists at the age of 35 and over is the highest mean score on sustainable tourism in both attributes (economic and community), whereas Thai tourists aged between 15 and 24 have the lowest mean score in both dimensions. Moreover, Thai tourists in other occupations, such as freelancers and university officers, have the highest mean score on sustainable tourism in both attributes (economic and community), whereas students have the lowest mean score in both attributes. Thai tourists with a monthly income ranging between THB20,001 and 25,000 have the highest mean score of sustainable tourism on community attributes; however, tourists with a monthly income lower than THB10,000 have the lowest mean score. Thai tourists from the northern region have the highest mean score on sustainable tourism on economic attributes, while tourists from the southern region have the lowest mean score in that attribute. The result also indicates that Thai tourists in the northeastern region have the highest mean score on sustainable tourism on community attributes, while residents of Bangkok have the lowest mean score in that attribute.

CONCLUSIONS

It has been concluded that Thai tourists can be divided into six groups: 1) sustainable tourists concerned with both the economic and community dimensions, 2) sustainable tourists concerned with the economic dimension, 3) sustainable tourists concerned with the community dimension, 4) sustainable tourists unaware of both economic and community dimensions, 5) sustainable tourists unaware of the economic dimension, and 6) sustainable tourists unaware of the community dimension. Sustainable tourists concerned with economic and community attributes include Thai tourists aged 35 years and over and those with other occupations, such as freelancers, university officers, etc. Sustainable tourists concerned with the economic attribute include residents of the northern region, whereas sustainable tourists concerned with the community attribute include residents of the northeastern region, married/cohabiting status, with monthly incomes ranging between THB20,001 and THB25,000. Sustainable tourists unaware of both economic and community dimensions include Thai tourists who are students between 15 and 24 years old. Sustainable tourists unaware of the economic dimension include residents from the Southern region, whereas sustainable tourists unaware of the community dimension include residents from Bangkok, single/divorced, and with a monthly income lower than THB10,000. According to the above information, stakeholders, especially from the government sector, should be concerned with all these different groups of tourists and provide the right information to the target market. The government sector and related organizations should emphasize the younger generation because they are less concerned with sustainable tourism development. The government can employ social media to provide information about sustainable tourism development to enhance awareness. Furthermore, related organizations should provide a campaign on community sustainability for residents in Bangkok with monthly income lower than THB 10,000 and single/divorced as this group is the least aware tourist group of the community attribute.

LIMITATIONS AND FURTHER RESEARCH

The ability to generalize the findings is limited since this study was conducted only at one destination and targeted only Thai tourists due to limitations of time and budget. Future research can be extended to other designated areas for sustainable tourism administration (DASTA) destinations, such as the Chang islands, the historical parks of Sukhothai, and Na old town. To gain more data, future research should target foreign tourists and compare the findings of both groups.

ACKNOWLEDGEMENTS

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The Relationships Among Achievement Goals, Academic Emotions, And Academic Performance On Vocational High School Students

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Chih-Ling Hsieh, Ed.D., Dayeh University, Changhua, Taiwan, R.O.C.
Chi-Hsian Lin, Ph.D., National Taipei University, Taipei, Taiwan, R.O.C.

ABSTRACT

The present study attempted to examine gender differences on the variables, and to test path model for relations among achievement goals, academic emotions, and academic performance of vocational high school students in Taiwan. One thousand and thirty tenth-grade students participated in this study. A self-report measuring students’ perception of achievement goals (task-approach, task-avoidance, self-approach, other-approach, and other-avoidance), academic emotions (enjoyment, hope, pride, anger, hopelessness, and boredom), and English academic performance were administered. Results indicated that: (1) female students had higher scores on achievement goals (task-approach, task-avoidance, self-approach), positive academic emotions (enjoyment, hope and pride), and English academic performance; but female students has lower scores on negative academic emotions (anger, hopelessness, and boredom); (2) task achievement goals (task-approach, task-avoidance) had direct effects on academic emotions (positive and negative); self achievement goal (self-approach) had direct effects on academic emotions; other achievement goals (other-approach, other-avoidance) had direct effects on academic emotions; (3) academic emotions (positive, negative) also had direct effects on academic performance; (4) these three models proposed in this study fit with the empirical data.

Keywords: Achievement Goals, Academic Emotions, Academic Performance, And Vocational High School Students
Keynote Address:
All Aboard! The Affective Approach
To Increasing Global Awareness
Dr. Rachel Dunbar, ReDirect Consulting, Inc., USA

ABSTRACT

Minority students are less likely to travel internationally for a number of different reasons. They are reluctant to leave their families, believe that traveling is reserved for the majority population, and fear that they are not financially able to afford this “luxury”. This is especially problematic when these students have few faculty members of color on their campuses with whom they can confer for guidance. Given that society is becoming increasingly diverse, there is a need for more faculty of color who are sensitive to the needs of students of color at colleges and universities (Gasman, Kim, & Nguyen, 2011). This is also true for varied industries whose workforce demographics reflect diversity, but not extensive global awareness. To whom can employees turn within their companies to help direct them toward a greater understanding international significance in their professional lives?

The presenter believes that the development and implementation of an early intervention strategy to present individuals with a new perspective on the benefits of traveling abroad will offer the widest range of benefits for students and employees, including increased graduation rates and higher workforce productivity, respectively. Therefore, the purpose of this workshop is to offer insight on how to develop a reciprocal approach to Krathwohl’s learning taxonomy to translate it into an instructional taxonomy. Through interactive, hands-on activities that focus on the affective domain, participants will walk away with a practical tool kit of strategies to utilize in increasing, engaging, and retaining students and employees in diverse society. Further, workshop participants will explore alternative global opportunities including internship, work abroad, and language immersion.
A Framework For Automatically Generating Object-Centric Data
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Chao Chen, National University of Defense Technology, PR China

ABSTRACT

Nowadays, more enterprises are employing object-centric information systems, e.g., ERP, to handle and store their business transactions. Accordingly, a range of researches focusing on analyzing these object-centric data surge. However, since data in enterprises is confidentiality, a lot of researches are facing problems getting available data to verify their techniques. In this paper, we propose a framework for automatically generating object-centric data.

1. INTRODUCTION

In recent years, more and more enterprises are employing object-centric information systems, e.g., ERP, to handle and store their business transactions [3, 7, 8]. Tons of data is created every day and data analysis techniques (such as data mining, process mining, etc.) targeted at such data have become an increasingly significant area of research.

Although data is everywhere, it does not mean it is easy to get appropriate data for research. Most of the time, the data in enterprises is confidential and enterprises cannot provide their data or only can provide incomplete data (after deleting sensitive information). Besides, the raw data may contain useless information and data pre-processing takes too much time. Therefore, some researchers use artificial data to implement experiments [9, 6]. However, results based on artificial data are not convincing since the artificial data may be different from real-life data.

In order to solve the mentioned problems, this paper proposes a framework to generate “semi-real” data, which is achieved easily and is more “real” than artificial data, through automatically operating page-based systems as shown in Figure 1.

First, we design a model (i.e., a Petri net) in the CPN tool [1, 4]. The model is consistent with the scenario how the system will be operated. For instance, if we want to generate data (transactions) related to orders, invoices and payments, we can design a model following the “Order-to-Cash” scenario. Once we have the model, we can simulate it and generate a log with a set of click events. Then, each click event in the log is transformed into a real click on the information system. In this paper, we use the Dolibarr system as the example. When the buttons on the system are
clicked, corresponding transactions will be record in the backstage database. In this approach, we can automatically generate data for research such as process mining and data mining. Besides, this approach can also verify the system through checking if the generated data in the database is really what we expect when we click a button on the system.

The remainder is organized as follows. Section 2 presents a typical ERP system which is used to generate data. Section 3 briefly introduces our approach. Section 4 concludes the paper.

2. OPEN SOURCE ERP SYSTEMS

Nowadays, there exist a lot of open source ERP systems which are page-based, such as Dolibarr, Odoo. These systems are free and available online [2, 5]. Figure 3 shows the homepage of Dolibarr system. As we can see on the menu bar, Dolibarr supports functionalities such as sales, finance & billing, product & stock, etc. Note that each ERP system needs a corresponding database to store transactions in the system.

The basic idea to generate data is that when a system is operated manually or automatically, the corresponding tables in the database connected to the system are filled with transactions. For instance, after we create an order in Dolibarr system, a new row is created immediately in the “llx-commande” table to record the information related to the order.

Based on the above idea, we can manually input required attributes and create objects (such as orders, invoices, etc.) to generate data. However, in the manual manner, it is impossible to create a lot of data in a short time. We hope somehow the system could be operated and generate data automatically. In next section, we illustrate our approach to automatically generate data.

![Figure 2. The home page of an open source ERP system named Dolibarr.](image-url)
3. GENERATING DATA AUTOMATICALLY

An automatic approach to operate ERP systems is quite helpful for generating large scale data. More precisely, the automatic approach can be considered as a robot who can click buttons on ERP systems like a real person. However, it is impossible to generate expected data to make the robot click randomly. In other words, it is necessary to give the robot a list of click events to indicate how to operate systems.

3.1 CPN Models

In order to create large scale data, we use the CPN tool to generate a list of click events with required attributes. More precisely, we design a colored Petri net according to a selected scenario (e.g., OTC), and then simulate the net. In the simulation process, a click event is written into a simulation log as soon as its corresponding transition is triggered. In this way, we can get a simulation log with a list of click events which can guide the robot to operate systems.

In order to make the generated data as realistic as possible, we add attributes on the designed model. For instance, in Dolibarr system, one order has attributes such as “Ref”, “Ref.customer”, “Customer”, etc. Accordingly, we create an order class with the same attributes and assign a possible value (by randomly selecting a value from a redefined list) to each attribute when simulating the model as shown in Fig. 3. Besides, we add proper time delay when executing each transition to make the click events have different timestamp.

3.2 Operating ERP Systems automatically

Given a particular process (e.g., OTC), we can use CPN Tools to design a corresponding colored Petri net and generate simulation logs (consisting of click events). In this part, we use simulation logs to automatically operate Dolibarr system by searching objects, filling in attributes and clicking buttons. Next, we zoom in the “create order” operation to explain how we use simulation logs to automatically operate Dolibarr system.

In a manual manner, we should fill in needed attributes and then click the “Create draft” button to finish creating an order in Dolibarr system. In our approach, the generated simulation log (i.e., a list of events) is employed to realize automatic filling and clicking. More precisely, in the simulation log, there exists a click event (corresponding to the operation) with attribute values generated in Figure 3. We search the text field corresponding to each attribute and fill...
in the values indicated in the simulation log. In this way, we can also find the corresponding click button and trigger it to finish creating an order.

Figure 4. One page and its corresponding (html) source code.

Figure 4 shows the details for how to search an element on a page. Each element on a page has some properties (in terms of html source code) such as tag names, tag values, attribute names and attribute values. For instance, in Figure 4, the input field (d) has some properties (e). More precisely, its tag name is “input” (in red) and it has two attributes “type” and “name” (in orange) whose values are “text” and “ref client” (in blue). These properties can be used as identity information to search an object on a page.

4. CONCLUSION

In this paper, we propose a framework to generate data through automatically operating ERP systems. This approach is rather generic since it can be applied to all page-based systems. Besides, this approach can generate data of different scenarios through designing corresponding CPN models. This approach has some limitations. One is that users need to know some knowledge, such as modeling with CPN tools and primary HTML language. Moreover, this approach is not very fast since it generates data through operating real information systems. Its efficiency depends on the response speed of the systems.

The generated data with this approach is more real than synthetic data since it is generated by real information system. However, it is not as realistic as real-life data due to lacking domain knowledge. In summary, this approach can generate data whose reality is better than synthetic data but worse than real-life data, and whose speed is faster than operating manually but slower than directly executing code.

ACKNOWLEDGEMENTS

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Parental Involvement In The Arab And Jewish Educational System
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Marina Soskis, Academic College Of Education, Israel

ABSTRACT

So far, no comparison was made between the Arab and the Jewish educational system regarding parental involvement. The study attempts to examine the perceptions about parental involvement as described by the pedagogic staff and to compare between the two sectors and between the principals and the teachers. In this study, 16 staff members from 4 elementary schools (two of them were Jewish schools and two of them were Arab schools) were interviewed. In each school, the principal, the principal deputy and teachers were interviewed. The research method was semi-structured interviews that enabled the pedagogic staff to describe how they perceive the concept of parental involvement, the advantages, disadvantages, difficulties and how to improve the parental involvement. The findings indicate that parental involvement in the Arab sector is lower than in the Jewish sector. Parental involvement in the Jewish sector has changed over the course of time and the involvement is more for personal interest (the child benefit) and less desire to contribute to the school. This trend is weakening the authority of the teachers and the school management. In the Arab sector, the parental involvement is for the benefit of the school and the involvement is directed by the principals to acquire resources from the village local council because of the parents kinship relations (the “hamula”/extended family). In the Jewish sector, compared to the Arab sector, teachers and principals often use the terms “negative involvement” or “parental intervention”. In both sectors the principals and teachers express resistance towards parental involvement in the pedagogic contents and the curriculum and view it as an intervention. From their point of view the involvement has to be in activities that contribute to the social aspects of the school (events, parties, etc.). The applications of the findings for the educational system are discussed.
Having A Minimum Word Count Requirement Or Not: Insights For Improving Discussions In The Online Classroom

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Wendy Schmidt, University of Phoenix, USA

ABSTRACT

Scholars of education have long sought ways to improve student writing. Formal and informal assignments allow students necessary practice to improve skills; however, online students have an additional method to practice their writing: written participation. In this paper, the authors examine participation posts, defined as comments made to discussion questions in online forums. They are interested in what value, if any, such participation has in improving writing in an online, asynchronous classroom, specifically in terms of word count requirements. This study will focus on the following questions:

1. Is requiring a word count for participation posts associated with a better participation grade?
2. Does requiring a word count for participation posts contribute to an overall better grade in the class?
3. Does requiring a word count for participation posts contribute to a better quality of writing in participation posts?

The online classroom offers opportunities that traditional classrooms do not; foremost among them is the chance to practice writing. If requiring a more rigorous participation component can improve overall writing performance, this can then be one more tool that instructors, writing or otherwise, can use to increase positive outcomes. To that end, the authors hypothesized that when a word count is required for participation posts, participation grades will be higher, overall academic performance will be higher, discussions may be more robust, and writing may be improved.

There is a growing body of literature focusing on the online learning experience, including but not limited to studies that consider what role participation forums should play. For the most part, a literature review reveals that higher participation rates in such forums do lead to better academic performance (Rovai & Barnum, 2003). Taylor (2014) found that higher number of student posts in online discussions increased success rates, and that instructor interaction within discussion forums, as opposed to email, also increased student success. Those who post earlier in the week also are more successful than those who post later in the week (Warnock, S., Bingham, K., Driscoll, D., Fromal, J., and Rouse, N., 2012). Wang (2015) found that adding an assessment piece, which included a word requirement for participation posts, helped build a constructive learning environment. Dostal and Gabriel (2015, p. 15) assert that “real audiences give students real reasons for writing” which is something that is accomplished in the online classroom by definition. However, a more detailed analysis of whether or not a word requirement improves successful outcomes for students has not been studied.

The author’s study included approximately twenty online sections of humanities and English classes at a university. Students in all sections were required to make eight posts over three days to course discussion threads. Half of the courses mandated a word requirement of 100 words per participation post, while half did not. Both groups were given guidelines on what constituted a ‘substantive’ contribution and thus would merit credit. Participation grades and overall grades were noted in both groups. To understand how word count affected quality of writing, each post was given a ranking: Needs Improvement, Meets Expectations, or Exceeds Expectations. (McNeill, Bellamy, and Burrows, 1999) While partially subjective in nature, this process nevertheless provided an opportunity to determine if the quality of writing and overall academic performance was higher in classes with or without a participation word requirement.
Initial observations imply that classes with a participation word count have more robust discussions; students were less likely to post “I agree” statements and more likely to develop ideas. Classes with a word count were associated with more participation posts as well as higher participation and class grades. Overall, a word count seems to encourage more substantive comments. Discussion forums allow for constant practice under the direction of an instructor and in the company of peers; over time, it is likely that communication skills improve. The authors hope to explore in the future whether or not the large number of participation posts made in the online classroom over several years do contribute to better writing and communication skills.

Keywords: Assessment, Word Requirement, Word Count, Online Asynchronous Discussion, Participation In Online Classroom

REFERENCES


The Effects Of Relaxation Prior To Imagery For Elite Archer Athletes From Junior And Senior High School To Performance, Imagery Vividness And Concentration

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Chih-Ling Hsieh, Ed.D., Dayeh University, Changhua, Taiwan, R.O.C.

ABSTRACT

Researchers have held the different viewpoints whether to carry out relaxation prior to imagery or not. Although relaxation prior to imagery has been considered to increase imagery vividness and concentration on imagery, it has still not been scientifically proved to date. The framework of theory of this study is based on the imagery model of PETTLEP by Holmes and Collins (2001). The purpose is to see the different effectiveness on elite archer athletes’ performance, imagery vividness and concentration between the group of implementing relaxation prior to PETTLEP imagery and the control group of not applying relaxation. Participants were 21 junior and senior high school, being randomly divided into three groups (relaxation prior to PETTLEP imagery, PETTLEP imagery only, and the control), and were applied the quasi-experiment designs called “the experimental group and the control group with per and post measure.” The participants would undergo twenty times of different interventions twice a week, and do it continually for ten weeks. We analyzed the information received based on one-factor of covariance to study the real effect of enacting relaxation prior to imagery for elite archer athletes on their performance, imagery vividness and concentration. Before and after intervention, we then used social validity survey to understand the condition of imagery intervention of participants. The results revealed that implementing the relaxation prior to PETTLEP imagery and using PETTLEP imagery alone didn’t show the significant improvement to the performance and imagery vividness of the archers after twenty times of interventions. However, the relaxation prior to PETTLEP imagery significantly improved their concentration. Finally, for practical applications and further suggestions for future research are also provided.

Keywords: Relaxation, PETTLEP Imagery Model, Imagery Intervention
The Common European Framework Of Reference In Taiwan: Development And Validation Of A Taiwan-Based European Language Portfolio In Tertiary English Classroom

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ABSTRACT

The impact of the Common European Framework of Reference (CEFR) has gone beyond the European education context. Issues and cases on the CEFR application beyond Europe are reported in empirical studies in Asia-Pacific and American regions. While the CEFR serves as a bridge to facilitate change in education policy or practice outside Europe, issues of acceptance, resistance, unfamiliarity with the framework and how the CEFR is situated in relation to local or national policy are being raised.

In Taiwan, the CEFR is introduced by the Taiwan Ministry of Education as a reference tool to measure university graduates’ English proficiency level. However, little guidance is provided for English teachers to apply this framework in teaching. Therefore, this study aims for a small scale project integrating a CEFR’s companion tool, the European Language Portfolio (ELP), in a classroom setting to examine the extent to which the ELP maximizes English teaching, learning, and assessment effectiveness in relation the CEFR. The findings also serve as validity evidence to justify a Taiwan-based ELP.

A total of 70 students who enrolled in two general English classes, focusing on speaking and listening skills at a large Northern university in Taiwan, participated in this study. Four development/validation phases are conducted: (1) a drafting phase that elicits the ELP constructs and corresponding class activities; (2) a preparatory phase that familiarizes students and TAs with the ELP principles; (3) a trailing phase that implements the adapted ELP model; and (4) a validation phase to evaluate the usefulness of the new ELP.

Instruments include document review of existing ELP classroom activities, expert judgment of the selected activities, familiarization sessions for TAs and students to gain better understandings of the ELP principles, development of a social networking website that helps students engage in discussions of learning issues outside the class, TA work logs, a survey, and interviews that assesses students’ ELP experience. Multiple data are integrated during the analysis stage to strengthen the depth of understanding of the adapted ELP.

The findings suggested that students’ understanding of the CEFR is improved through this project, students’ self-esteem is increased upon completion of the ELP, and students treat the ELP useful for future job search. However, the ELP requires a great deal of time for teacher, students, and TA to work closely together, which creates a problem in typical large-sized English classrooms in Taiwan.

The implications of this study are twofold. First, the findings suggest ways for teachers to adapt and introduce the ELP in their own context, particularly in Asia. Furthermore, in the field of language testing, this study will add to the critical dialogue in language testing on the impact of the CEFR beyond Europe.
Teaching Python As A First Programming Course To Undergraduate Computer Science Students

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ABSTRACT

More and more computer science (CS) programs including top-ranked CS departments at MIT and UC Berkeley have started teaching Python as the first programming language for computer science students in last few years. It has surpassed Java, JavaScript, Perl, or C/C++ which has been the dominant introductory teaching language over the past decade. Python may be an appropriate as a first programming language course for CS students because it is easy to learn, read, and use, yet powerful enough to illustrate essential aspects of programming languages and software engineering. However, there are many pedagogical challenges that are to be dealt for teaching it. This paper discuss the teaching experiences of Python as a as the first programming language for computer science students and the challenges that were experienced.

Keywords: Programming, Python, Computer Science, Languages, Scripting Languages

INTRODUCTION

Python offers an interactive environment in which to explore procedural, functional and object oriented approaches to problem solving. Its high level data structures and clear syntax make it an ideal first language, while the large number of existing libraries make it suitable to tackle almost any programming tasks. Using this tool, a teacher or student can write a Python program in the Web browser and visualize what the computer is doing step-by-step as it executes the program. The Interactive Python website has live python books that provide learners the ability to run python code in the browser and see visualizations of their running programs (Lutz, 1996, Watters, et al., 1996).

Python is a particularly appropriate language for this purpose because it is easy to learn, read, and use, yet powerful enough to illustrate essential aspects of programming languages and software engineering. Python is used by Google and many other software development organizations. It has excellent documentation, forums, books, and other help. Python works from a command line and offers first time coder an interactive environment for software programming. Python allows students to write Python program in the Web browser and visualize what the computer is doing step-by-step as it executes the program. The Interactive Python website has live python books that provide learners the ability to run python code in the browser and see visualizations of their running programs. Many schools worldwide have fully switched over to Python, while others have taken a hybrid approach, offering Python in first course and teaching Java in second programming course (Lutz, 1996, Watters, et al., 1996, Zelle, 2012).

PYTHON - THE FIRST PROGRAMMING COURSE

Three years back, we introduced Python as the first programming course for CS students. We made an assumption that due to the simplicity nature and easy coding of the Python programming language, students can learn programming skills such as problem decomposition and data type design much easier than learning in C or a subset of C++ or Java. Students can learn concepts of loops and procedures with user-defined objects with ease as part of their first programming course (Lutz, 1996, Watters, et al., 1996).
For students who have never have programing background before, Python is an easy to master basic problem-solving skills and programming concepts. Many other aspects of Python make it a good first language. Like Java, Since Python has a large standard library like Java, students learn to code reuse.

The class is taught using a combination of Peer Instruction, Pair Programming, and Media Computation. The course incorporates a required laboratory component that involves significant hands-on programming projects. The closed-lab sessions and open-lab projects serve to bridge the gap between theory and practice. The projects counts for a significant part of the final grade. The Course contents include:

a. Digital media: media representation and computation, introduction to copyright law, impact to society, corresponding professional responsibilities
b. Object-oriented programming: Using objects, methods and instance variables, implementing classes, interfaces, inheritance
c. Fundamental data types: numbers, constants, arithmetic expressions, strings
d. Selection: value-based selection (if)
e. Iteration: while and for loops
f. Arrays and Lists: one-dimensional structures
g. Communication: Source documentation, importance of technical communication to project success h. Collaboration: Pair programming.

EXPERIENCES FOR DISCUSSION

Traditionally, computer science programs have emphasized high level programming languages such as c/C++/Java etc for teaching programming concepts. The emergence of scripting languages such as Python, Tcl, and Perl has provided opportunity to computer science departments to offer a scripting language as the first programming course in the introductory classes. Scripting languages are the most appropriate tool for an introductory programming course. Scripting languages generally have simpler syntax and semantics than traditional high level languages (Zelle, 2012). Python is a scripting language and does not use C++/Java syntax. It has expressions, statements, strings, functions, and classes that are expressed roughly in the same way as in C++/Java. Beginners prefer learning Python due to its simplicity, and interactivity. Because Python mimic English sentence structure and has less coding, it is easy to grasp (Zelle, 2012).

REFERENCES

When Does Meeting A Minimum Purchase Requirement Make You Unhappy?
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ABSTRACT

When faced with a minimum purchase requirement (MinPR), consumers may try to find enough items to exceed a given MinPR in the belief that they can benefit from a low unit price. It would not be at all unusual, however, in the process of making purchases to qualify for a discount, consumers are unable to find their first-choice product options and have to settle for those that they did not originally prefer. The present research investigates how an individual makes a favorable or unfavorable purchase to qualify for a discount will shape the direction of counterfactual thinking, which in turn will have an impact on their affect. The results of our study demonstrate that consumers feel disappointed when they make an unfavorable purchase to meet the restriction, and identify counterfactual thinking as an underlying mechanism behind the observed effect.
Integration Of Flipped Instructional Model In Learning And Teaching Of An Undergraduate Program

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ABSTRACT

This study sought to develop active learning curriculum components for large classes not only to make these more interesting and engaging, but to cater for the learning needs of and diversity of backgrounds of students in a class with different educational backgrounds. The contents and/or materials for the courses were delivered through Blackboard Learn, and collaborative activities were carried out during lectures. Changes in the students’ self-perceived subject knowledge were evaluated through the completion of a pre- and post-survey, focus group interviews and in-class observation. The post-course survey contained number of items pertaining to student learning experiences and perceptions of the flipped classroom.

T-tests indicated significant differences (p<0.05) between the students’ pre- and post-questionnaire responses on their perceptions of their achievement of subject knowledge-related learning outcomes. The mean ratings for the subjects on active learning (from 3.69 to 4.01), teaching for understanding (3.65 to 4.09), motivation (3.69 to 3.90) and self-directed learning (3.62 to 3.88) were reasonably high. Students responded positively to the flipped instruction that helped them achieve the intended learning outcomes of the courses, and their overall participation was active and positive. The results of the study showed the effectiveness and usefulness on use of blended learning and flipped instruction to enhance students’ collaborative learning. A manual is also developed to assist the widespread use of the method.
Shakespeare Disrupted: Innovative Use Of Arts Pedagogy In The Development Of Legal Education

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Christina Thompson, Coventry University, United Kingdom
Sonia Ritter, Coventry University, United Kingdom

ABSTRACT

The Innovation

This is an interactive workshop which will actively showcase how Coventry University Law School uses its project, “Shakespeare Disrupted” to create a multi-disciplinary arts pedagogy to engage law students and develop a range of key legal skills in learning disciplinary concepts (relating to complex and real-world problems).

The innovation is a multi-disciplinary partnership involving:

• Christina Thompson: Associate Head of Law
• Alan East: Solicitor-Advocate and Senior Lecturer
• Sonia Ritter: Actor and theatre practitioner

The workshop will involve two scenes performed from Measure for Measure prepared and presented by Sonia Ritter (an established English actor of stage and television). Delegates can observe or take part in this interactive workshop which demonstrates how it enhances law students’ critical thinking skills and nurtures a range of soft legal skills, such as confidence in public speaking, discussion, communication and reflection skills. The scenes taken from Measure for Measure explore key legal concepts such as the processes of a legal defence, the importance of language in law, the power of argument and morality, law and justice.

Research

Theoretical development of pedagogy within legal education in the United Kingdom has been very slow compared to other disciplines and as a result has had little mention in the literature on higher education. The problem appears to be one of resources within institutions. The traditional approach adopted by Law Schools is not resource intensive and fits well with a teacher-centred, lecture plus tutorial approach to teaching and learning (Mackinnon 2006). This traditional ethos in legal education needs to be challenged because of the changing nature of the legal profession. The Legal Education Training Review published in June 2013 was the first independent and systematic review of legal education since the Ormerod Report in 1971. The main objective of this report was to ensure that England and Wales have a legal education and training system, which advances the regulatory objectives contained in the Legal Services Act 2007.

This project provides an opportunity to explore the benefits of pedagogies of partnership which promotes democratic engagement, meaningful dialogue and co-operative working with a range of academics and students. Pedagogies denotes educational approaches, in particular, the use of arts, to teach and enable learning to occur through exploration and inquiry. Learning occurs through critical co-investigation where students and tutors are ‘jointly responsible for a process s in which all grow’ (Freire, 1996:61).

In a pilot study participants were asked to comment on their experiences through interviews and focus groups. The results of the interviews and focus groups will be analyzed and discussed.
Moving forward with this pedagogy and intercultural Online International Learning

Finally it is our aim in this workshop to further demonstrate how this pedagogy is forming part of the Law School’s Online International Learning agenda. This enhances the ability of law students to communicate effectively and appropriately in intercultural situations based on intercultural knowledge, skills and attitudes (Deardorf 2006, 247 - 248). There will be a discussion on how this will be facilitated with a partner institution in the United States.

REFERENCES

Assessing Impact Of Corruption On Economic Growth And Trade Openness In Emerging Markets: An Econometric Analysis
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Please contact Ferdinand Niyimbanira at f.niyimbanira@ump.ac.za for the full paper.
Agency Theory Perspective: A Quantitative Study Of Accounting Performance Measures In Emerging Economies

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Yousif Ali Abid Alasadi, University of Basrah, Iraq

ABSTRACT

Based on the perspective of agency theory, the aim of this study is to empirically investigate the impact of proportion of outside directors and board size on firm performance in Jordan as one of the emerging economies. The methodology and approach used by the current study is PLS, SPSS and Eviews to analyze the data of 2015 on the sample of 80 non-financial companies listed at Amman Stock Exchange to find the relationship between outside directors and board size, and firm performance represented by return on assets and after controlling for factors such as firm size. The current study used return on assets for the aim of measuring the firm performance. The findings suggest that board size has a significant and positive relationship with firm performance. This means, a large board size leads to enhance firm performance and vice versa. Also, independent board has positive impact on firm performance. On the other hand, firm size as a control variable has no impact on firm performance. The present study provides realistic evidence to all parties in developing countries, including policy makers, particularly in Jordan.

Keywords: Boards Size; Non-Executive Directors; Firm Performance; Jordan
Global Excellence In Science Technology
And Innovation: A Comparative Study Of
Developed And Developing Countries
Educational Systems
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ABSTRACT

The issue of disparity in science, technology and innovation among economies has always generated a lot of interest and concern the world over. This is because science, technology and innovation have ever since become the strongest instrument for economic, political, and social progress and general wellbeing of any society. The achievement of global excellence in science, technology and innovation depends largely on the educational system of a country. It has been observed that the educational system of developed countries is responsible for their excellence in science, technology and innovation and hence, their political, social and technological advancement. The opposite of this, is what is obtainable in developing countries. Consequently, the paper critically examines the educational system of developed countries compared to that of developing countries. The paper is of the view that for developing countries (especially African countries) to achieve excellence in science, technology and innovation, they should first and foremost address their basic and fundamental challenges affecting their countries.

Keywords: Global Excellence, Science, Technology, Innovation And Educational System

INTRODUCTION

The issue of science, technology and innovation has always generated a lot of interest and concern the world over. This is because science, technology and innovation have now become the strongest instrument for economic, political, and social progress and general wellbeing of any society. All the ingredients that combine to make life comfortable are traceable to science, technology and innovation. The knowledge and skills of science, technology and innovation is required for the production of scientists, technologists and other technically skilled manpower such as professional teachers, pilots, medical doctors, engineers, agriculturists among several others. It means therefore, no society can decide to ignore or take the issue of science, technology and innovation lightly. Rather, it should be a matter of obligation for any society to make the issue central to its educational, political and economic policies.

The following key words can be identified from the title of the paper, viz: – science, technology, innovation, global and excellence. There is the need to look into their meanings for operational purpose of this paper. The word science comes from the Latin word scientia, meaning knowledge. So in its broadest sense science encompasses all knowledge. However, we normally think of science as referring to that knowledge obtained by observation and experiments. Scientists acquire and expand their knowledge in a systematic way, using what is called scientific method and processes. In this, they not only take note of what they see happen, they also try to find ‘how’ it happens and ‘why’. From their observations and experiments they can find the ‘what’ and ‘how’; they then use their power of reasoning and past experience to develop a theory to explain the ‘why’.

Scientific investigations always result in the production of scientific concepts, principles, generalizations and laws. (These are referred to as scientific products). Progress in science therefore is judged by scientists in terms of how much growth has been attained in the accumulation of scientific concepts.
Science advances our knowledge about what our universe is made-up of, how it is organized and how it operates and functions, but does not directly bring us practical benefits. Only when that science can be applied and put to practice do we benefit. This leads us to the concept “Technology”. When knowledge and skills are applied to solve practical human problems and challenges or produce practical things that assist humans in solving their problems and challenges then, the process is referred to as technology or applied science. Computers, telephones, radios, televisions, fertilizers, medicines etc. are referred to as products of technology. In general in the modern world, we usually come across science in its applied form, as technology. Progress in technology is judged in terms of how much growth has been attained in the production of technological products. However, science and technology are related; because progress in science depends on progress in technology and vice-versa.

Development and progress hinges on innovation. Innovation has been defined as the act or process of introducing new ideas, things, methods or ways of doing things (Oxford Advanced Learner’s Dictionary) Any society that wants to develop and solve its socio-economic challenges must engage in continuous innovation in its human endeavor. Developed countries (US, UK, France, and Japan etc.) are developed because of their innovation in their human endeavor. On the other hand, developing countries are under-developed because of their inability to effectively engage in the innovation in their human endeavor.

The meaning, nature and activities of science, technology and innovation are universal in conception and practice. This is due to globalization brought about by advancement in technology, communication and transportation. Consequently, for any nation (especially developing nations) to achieve any meaningful development and progress in science, technology and innovation, that nation must be aware and keep abreast with the development and progress in science, technology and innovation of other nations (especially developed nations). The globalization of science, technology and innovation has constantly led to the refining of their meaning, nature, activities and applications leading to what could be considered as ‘global excellence’. Keeping abreast as necessary for achievement of socio-economic prosperity. Even progressive nations must try to keep abreast with the global excellence in science, technology and innovations. Progress towards global excellence in science, technology and innovation depends largely on the educational system of country. It has been observed that the educational system of developed countries is responsible for their excellence in science, technology and innovation and hence, there political, social and technological advancement. The opposite of this, is what is obtainable in developing countries. Consequently, the paper critically examines the educational system of developed countries compared to that of developing countries.

EDUCATIONAL SYSTEM OF DEVELOPED COUNTRIES COMPARED WITH THAT OF DEVELOPING COUNTRIES

For the purpose of systematic comparison, key element of educational system of nations are here identified among several others;

A. Educational Curriculum

Educational Curriculum could be regarded as all the learning programme and activities that are found in schools, colleges, institutions or universities. It is always derived from the needs and aspiration of a given society. It is designed, structured and implemented to address the priority challenges of a given society at a particular time. Analysis has shown that the curricular of developed nations were designed, structured and implemented based on these principles. This may have accounted (to a large extent) for their systematic socio-economic development and progress. This could be illustrated by examining Japan’s curriculum system beginning from post-world war II

It should be noted that, Japan is a country with dearest of land for dwelling and agricultural activities and no significant natural resources; consequently it imports all its natural resources and almost all of its food. For example:-

- 66.4% of Japan land is made-up of mountains and hills with little or no agricultural and dwelling significance.
- Only 12.5% and 5% of the land is of agricultural and dwelling significance respectively.
- About 16% of the land is made-up of water, roads and others.
Given this situation, education in Japan was and is still a survival issue. Therefore, educational curriculum has to be designed, structured and applied towards survival. For example, the dropping of atomic bombs in Hiroshima and Nagasaki in 1945 devastated the country and left it in total ruin of lack of food, electricity and water supply, infrastructure and shelter. These led to the spread of diseases causing deaths and sufferings. These factors forced Japan to depart from the conventional science subjects (physics, chemistry and biology) curriculum organization to survival one in terms of provision of shelter, food and water supply, personal healthy living and the production of traditional survival tools. This curriculum organization that lasted for a period of about ten years (1945 to 1954) was systematically re-structured from survival to preparation for industrial and technological take-off, social and economic growth.

Having succeeded in addressing the survival challenges, and fully prepared for industrialization and economic growth, Japan re-designed and re-structured its educational curriculum in 1955 that formed the basis for its present technological and economic growth. Having also achieved technological and economic growth to the extent that, Japan was for a long time the second largest economy in the world after U.S.A., Japan, decided to introduce academic curriculum in its educational system where theoretical academic activities (presentations, conferences, seminars) started gaining grounds and recognition from 1970s to date. The period also saw the expansion of universities and other tertiary institutions in Japan.

Taking a look at the history and the development of curricular in developing countries it could be seen that, the curriculum were not derived from the immediate needs and aspirations of their societies. They were not designed, structured and applied to address the priority challenges of their societies at any particular time. Rather, they were derived to meet the needs and aspirations of colonial masters as of that time. In fact, most, if not all of the curriculum being used by most developing countries were adopted from developed countries. On this, Aboluwodi and Ibuken (2010) observed that the colonial education which was inherited by Nigeria was criticized for being too theoretical to be able to make meaningful impact on the life of Nigerians. According to them, this seems to have continued till date. The fact is, if developing countries want to achieve realistic socio-economic development, they must analyze and prioritized their challenges and re-designed their educational curriculum to address their unique socio-economic challenges at any particular time.

B. Educational Policies

An analysis of educational policies of most developed countries has shown that their educational policies are founded based on the following principles:-

- **Need of people**: provision of basis survival needs
- **Need of society**: provision of basic infrastructure, shelter, qualitative and quantitative education, equality and freedom and decision by majority.
- **Nature of society**: democratic.
- **Nature of curriculum**: Pragmatic – (experimental)and theoretical (academism).
- **Teaching and learning**: learning by doing, problem solving and experimental.
- **Education**: is a right, compulsory and a life time project for every citizen.
- **Intelligence**: developing a philosophy of healthy living, safety, potential producers not consumers. Reflective thinking and functional concepts. Appreciate basic cause and effect relationships in life.
- **Attitudes**: freedom from bias, prejudice and superstitions, open-mindedness, critical-thinking, intellectual honesty and objectivity.

By examining the above principles in which most developed countries based their educational policies in terms of contents and implementation, we could see that, the principles have the potential of producing a society that addresses its challenges and prepare grounds for socio-economic growth and self-reliance. In addition, because education is a right, compulsory and a life-time project, educational policies are drawn to last years and in most cases they are not terminated or changed by government in power.

However, with regard to education policies obtainable in developing countries, it is sad to note that, most of their policies are either not based on the above principles in totality, or if based, they are not implemented as planned and always stands the risk of been terminated or changed by government in power.
C. Educational Budgets

It has been observed (Oseni, 2012) that, no matter how articulate an educational policy or curriculum is, if there is no appropriate and adequate budget to implement it, then, the aim and objectives of such policy or curriculum would not be effectively achieved. Given this, United Nation Educational Scientific and Cultural Organization (UNESCO) recommended that each country is to spend 26% of its annual budget on education. Most if not all developed countries spent close (in some cases more) to that percentage on education annually as reported by Oseni, (2012). For example American spends 22% to 28% of its annual budget on education. These percentages are applicable to most developed countries (Oseni, 2012). On the other hand, the amounts spent yearly on education by developing countries are far lower than the amount recommended by UNESCO. For example, Nigeria spent 6% to 13% of its annual budget on education (Oseni, 2012).

In developed countries annual educational budgets are judiciously spent on education with little or no corruption. What is obtainable in developing countries is a worrisome situation. Only a negligible percentage of the annual educational budgets are spent on education due to politics and other reasons.

D. Teacher Education

The issue of teacher education is critical to any educational system. This is because, effective teaching and learning is contingent to good teacher education system. To ensure this, teacher education must be designed and structured towards professionalism in order to produce professional teachers that are highly motivated in professional teaching. To achieve this, serious attention must be given to the designing of teacher education policies, curriculum, admission policy, certification, salaries and motivation, in-service education and training (INSET), practice of teaching, monitoring and evaluation among others.

An examination of the teacher education system obtainable in the developed countries has shown that they have given effective consideration to the above factors enabling them to be producing professional and highly motivated teachers at all levels of their educational system (Sahlberg, 2010). The case of Japan’s and Finland’s teacher education systems can be cited to illustrate the point being made. In Japan, teaching is a highly respected professional job. You cannot be a teacher at any educational level without passing through the teacher producing process. After passing through the process you must have certificate and the license to teach at a given level of educational system. The license is reviewed after every ten (10) years on passing license examination. It could be withdrawn if one is found not academically or professionally worthy or due to some ethical considerations. The salaries of teachers at all levels are relatively the same. The difference (if any) comes from certain allowance. The minimum (as of 2011) a teacher can earn in a Month is about $1,300 per month. Once you have decided to become a professional teacher it will be impossible to change to another Job that is not related to teaching. For any teacher to become a headmaster, principal or inspector, he/she must undergo a specialized training and interview. In-service and education training (INSET) is a must not a privilege for any licensed teacher and he/she is subjected to continuous teacher professional development throughout his/her teaching carrier to keep abreast with new developments and become competent in the teaching profession.

Sahlberg (2010) observed that teaching is the most admired profession in Finland. According to him, becoming a primary school teacher in Finland is a very competitive process and only Finland’s best and brightest are able to become professional teachers. In addition, candidates must pass a rigorous matriculation examination; successful candidates must have the highest scores and excellent interpersonal skills. The candidates are subjected to rigorous teacher education programme at government expense. Most importantly, teachers and teaching profession are the main reason Finland now leads international pack in literacy, science and mathematics (Sahlberg, 2007) He points out that Finland teachers education system is largely responsible for transforming it from traditional agrarian nation into modern innovation based knowledge economy. Finland teachers earn very good salaries. For example, middle school teachers earn about $38,500 dollars per annum or $3,208 per month. Bachelor degree in education is the minimum requirement to teach in primary and lower secondary, while Master’s Degree in education is the minimum requirement for teaching in upper secondary school and beyond.

Comparing teacher’ education as obtainable in developed countries (Japan and Finland) and that of developing countries. The developing countries teacher education systems obtainable during colonial and immediate
post-colonial era, to some extent have similarities with that of developed countries. Hence, it could be argued that teaching could be regarded as a profession during the era. This could explain the reason why teachers of that era were highly motivated and committed to teaching. What is obtainable in most developing countries today is not only a worrisome situation, but also a disturbing one. In every sense of the word teaching is no more a profession. It has lost its professionalism. Teaching is for everybody. You do not need a license to teach in most developing countries. There is no uniformity in teachers’ salaries. Teacher’s salaries at the primary and secondary levels are disturbingly poor to the extent that their monthly salaries ceased to be adequate for meaningful survival and comforts. It is no wonder teachers not only at these levels have now turned into part-time farmers, petty traders, suppliers and what have you. In fact, teaching is no more the primary assignment of most teachers but, rather, a secondary if not a distracting assignment. The fact is, teacher education in most developing countries has been and is still in a disturbing situation. This calls for government at all levels, education stakeholders and all concerned in developing countries to look into the issue of teacher education with all the seriousness it deserves.

E. Students Admission/Progression System

The educational system obtainable in developed countries is characterized by a high level of selectivity at every stage from primary to university (Sahlberg, 2007). Then, only pupils of high motivation and cognitive abilities got through the selection process for admission into secondary schools and other tertiary institutions. Such pupils could be argued to be adequately prepared psychologically and cognitively to face the demand of schooling and any public examination thereby preventing them from engaging in examination malpractice. The above situations were obtainable during colonial and immediate post-colonial era in most developing countries (Aboluwodi & Ibukun, 2010). Report have it (Bello, 2005) that, in most developing countries selection for admission and promotion from one level to the other ceased to be based on any rational basis and was rather a universalistic approach of almost 100% transition from one leve l to another in the educational system (Aboluwodi & Ibukun, 2010). This could results in producing students who are hardly prepared and confident to face schooling and examination challenges leading them to engage in examination malpractices.

F. Educational Classroom Environment

In discussing educational classroom environment, attention is focused on student classroom population, teaching and learning facilities and learning methodologies among others. Students’ classroom population or class size continues to be at the forefront of the educational system of any nation. This is because; it is believed that the class size of students influences the teaching and learning that will take place in a classroom. It has been observed (Sahlberg 2010) that smaller class sizes are generally perceived as allowing effective teaching and learning take place and ensuring higher performance and vice-versa. In this respect, class size may be viewed as an indicator of the quality of school system. In developed countries, (as observed by Sahlberg 2010) the class size for government education level is found to be ranging from:-

- 10 to 28 pupils per class per teacher for primary education
- 8 to 33 for lower secondary school
- 8 to 36 for upper secondary
- 9 to 22 for tertiary education

The class size for private education levels does not significantly differ from the government education levels as reported by Sahlberg, (2010). Table 1 to 4 below shows the class sizes for tertiary, primary, lower secondary and upper secondary for government education levels for selected developed countries.
Analysis of class size at all levels of education system in developing countries will tell a different story. For example, Kambuga (2013) has reported that class sizes in developing countries ranges from:-

- 50 to 80 for government primary and secondary schools
- 30 to 50 for private schools

Source: UNESCO Institute for Statistics (World Education Indicators Program)
It is a common knowledge that, in most developing countries class size, the pupils or students may not see or even hear the teacher during teaching and learning process due to overcrowdings. Report have it that in some instances, Science classes are held using public address system to groups that ranges from 200 to 300 students. These dismal situations are obtainable in most African countries. For example, Kambuga (2013) reported that class size and teacher – pupils ratio in Tanzanian educational system ranges from;

- 60 to 100 in primary and secondary schools
- 40 to 50 in tertiary institutions.

Coming to the issue of classroom teaching and learning facilities in developing countries, there is no study to be conducted without mentioning the inadequacy or absence of classroom teaching and learning facilities as one of the major challenges. Most public schools, colleges and universities in developing countries don’t have adequate Information Communication Technology (ICT) classroom teaching and learning facilities. On the other hand, Sahlberg (2010) reports that there is no single developed country that does not have adequate teaching and learning classroom facilities in all their educational levels. In fact all of them have information and communication technology (ICT) classroom teaching and learning facilities.

Considering the issues and challenges raised with regards to teacher education, students admission system, classroom size and students teacher ratio, classroom teaching and learning facilities and so on obtainable in developing and developed countries, we could conceptualize the teaching and learning methodologies, approaches and strategies that teachers could employ in the teaching of science and mathematics. Many studies (Okebukola, 1990; Gyuse, 1990; Mari, 2001) have shown that most, if not all teachers employed lecture/teacher centered approach in teaching and learning of science in Nigeria secondary schools. In this, students just hear about science, concepts are presented as a form of history. There is always dead silence in the classroom with only the teacher talking, writing or dictating notes (Awodi, 1992), This classroom situation has the potentials of creating a discouraging classroom environment that could hamper effective teaching and learning of science, mathematics and technology. This could perhaps explain the reason why most students in developing countries hate mathematics and science. However, with regards to developed countries, studies (Sahlberg, 2007, 2010), have shown that teachers employ learners centered approach in teaching science. In this, students not only hear about science, but, they do science; concepts are discovered by the students. The teacher, rather than an authority or a dictator, he is an organizer, facilitator and manager of science teaching and learning. Students are always motivated to high level of inquisitiveness and curiosity in the world of science; they ask questions, investigate and seek answers to their observations thereby making the class to be full of science activities. Teaching and learning is a cooperative venture between teacher and students (Awodi, 1992). This classroom situation has the potential of creating an encouraging and enjoyable classroom that could lead to the effective teaching and learning of science and mathematics.

G. Social Amenities and Set-up

Social amenities and set-up have tremendous influence on global excellence in science technology and innovation. For example, developed countries for long have succeeded in addressing their basic social survival amenities like electricity and water supply, transportation, communication, health care and what have you. In addition, they have conquered to a significant level, the issue of hunger, poverty, shelter, and diseases and illiteracy in their societies( enabling them to fully focus on science, technology and innovation) This, has, in no small measures assisted and is still assisting them in achieving excellence in science, technology and innovation. Another issue of importance is their social set-up. Their social set-up is oriented and based on the followings:-

- Scientific, technological and innovative principles.
- Hard work, discipline, honesty, opens mindedness and dedication.
- Equity, freedom, human right, rule of law and democratic values.

The above perhaps enables them to have stable, good, corrupt free, accountable and results oriented, governments and leaders and also societies driven by science, technology and innovation.
Analyzing the social amenities and set-up obtainable in developing countries, it needs no genius to understand that they have the opposite of what the developed countries have and it would be hard or almost impossible to achieve any meaningful global excellence in science, technology and innovation without addressing the challenges of their social amenities and set-up to meet up with the world’s best practices. This is because, the attention of developing countries are always focused on hunger, poverty, shelter, diseases and political instability, and these factors prevent them from focusing on science, technology and innovation.

H. Research

Generally speaking the progress, development and advancement in science, technology and innovation depends on research. Research could take any of the following:

i. Basic Fundamental Research: This is carried out with the sole aim of finding out the principle behind a given problem or phenomena. The result always leads to the development of new knowledge and theories. It is mostly used in science and social science to develop new knowledge theories and laws.

ii. Applied Research: It is concerned with the application of knowledge or theory to produce practical things for the use of mankind or to solve practical problems. This takes place mostly in industries, research centers and institutions.

iii. Action Research: This is carried out to solve a specific urgent problem(s).

iv. Research and Development: This is carried out with the aim of developing and testing certain products’. The product could be curriculum, textbook, or equipment. The product is produced and tested in field to test the effectiveness or otherwise. This takes place in industries, educational institutions and policy makers.

v. Evaluation Research: It is carried out with the aim of making decisions relating to value or worth of something (materials, methods, programme etc.).

Given the above, we can see that for any country to attain excellence in science, technology and innovation (in order to achieve socio-economic development) that country must pay serious attention to all the above type of research. For this to be achieved, the first step is to establish or identify the institutions, bodies, organizations and universities that will be charged with the responsibilities of carrying out the above identified different types of the research. The organizations should be fully equipped and adequately funded to carry out their research effectively. Their findings should be try-tested, implemented and evaluated. Such organizations should be relatively independent and devoid of political and administrative interference. There should be an appropriate legislation to guide their activities. There should be monitoring and evaluation measures to ensure quality assurance.

Analyses of researchers conducted by developed countries have shown that their researches are conducted based on the different types of research and suggestions mentioned above. This perhaps has given them the opportunity to be carrying out different types of research in all areas of human endeavor and implementing the results of the research, thereby achieving excellence in science, technology and innovation (which is responsible for their socio economic development and general wellbeing of their societies). For example the Committees on Science And Engineering Indicators (2012), indicate that America leads the world because of it heavy investment in science, technology and innovation, empirical research and development, Sehberg (2012) reported that similar investment are obtainable in most developed countries. Figure 1 below indicates average percentage of basic, applied and developmental research in developed countries.

Figure I

Development Research 13%   Applied Research 39%   Basic Research 48%

Source: Science and Engineering Indicators (2012)

Examining the researches that take place in developing countries it could be found out that the above identified types of research are not carried out effectively. Most researchers in developing countries are conducted for the financial
benefits or for the purpose of pursuing higher degrees and promotions in their educational institutions and universities (which has become a social, political and educational survival issues). Most importantly, research centers and researches in developing countries are grossly under-funded and equipped and are always subjected to political and administrative interference.

I. Educational Assessment and Evaluation

Assessment is concerned with students’ academic achievements after a programme of studies, while evaluation is concerned with the value judgment of the result of assessment. In other words, assessment and evaluation are about students’ success or failure. It has been observed that most teachers tend to be pleased to share student’s success but not their failure. Research (Sahlberg, 2007) has shown that students success or failure is rarely his or hers alone, and one of the main concern of any educational system is to identify the causes of success in order to strengthened them and the cause of the failure in order to eliminate them. Assessment is not an end in itself; much of it value lies in the feedback it should provide so that the education process may be improved. The results of Students’ assessment are always evaluated and graded in other to categorize them for placement, admission, employment and other social and academic considerations.

The assessment and evaluation of students should be in all areas of the cognitive (knowledge, comprehension, application and evaluation) domain, Psych motive domain and if possible affective domain. However, for any assessment to be valid there should be a perfect match between the syllabi, student cognitive abilities and demand of examinations.

An analysis of the assessment and evaluation in developed countries has shown that they are based (to a large extent) on the above principles. This, plus other reasons maybe responsible for their student’s high stage of preparedness for schooling and examinations which could be is responsible for their high rate of passes in schools and public examinations. Most developing nation operate an educational system in which the cognitive abilities and level of preparedness of majority of candidates does not match the content of the Senior Secondary Certificate Examination (SSCE) and the demands and nature of the SSCE examination (Gyuse, 1990). This, plus other factors could be responsible for mass failure of candidate in SSCE examinations especially science and mathematics.

Conclusion

Most developing countries especially African countries are far away from achieving global excellence in science, technology and innovation perhaps due to the issues and challenges identified in this paper. To buttress this, the Parliamentary office of Science and Technology Post note of March 2004 numbers 216 characterized the relationship of developing countries to global excellence in science, technology and innovation as analogous to a highway with three groups of developing countries acting as traffic on that highway according to their abilities. Thus:-

- Fast moving vehicles : (India, China and Brazil)
- Slow moving vehicle : (Mexico, South East Asia)
- Pedestrians (African countries)

Recommendations

This paper is of the view that for developing countries (especially African countries) to achieve excellence in science, technology and innovation, they should:

i. Address the issue of illiteracy, hunger, poverty, and diseases.
ii. Address the ethnic, tribal, religious, insecurity and political instability issues.
iii. Address the issue of basic survival amenities (electricity and water supply, transportation, communication, shelter, health care, etc.).
iv. Always developed their educational curriculum based on their peculiar needs at a particular time
v. Restructure their educational systems based on the global best practices.
References


UNESCO Institute for Statistics 2011 (World Education Indicators Programme).
Delivering Value To Retailers And Consumers Using Point Of Sale (POS) Data
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ABSTRACT

Purpose- The purpose of this paper is twofold: (1) To assess how POS data is utilized by supermarkets implementing category management practices to deliver value to consumers and their organizations and (2) Assess the longitudinal effects of changes in private label sales penetration on overall category profitability and sales.

Design/methodology- Secondary Point of Sale (POS) data was obtained for 10 product categories from a supermarket retailer located in the northeast United States over a three year time period. Correlation tests were generated for all 10 product categories selected between (1) Category private label sales penetration and category profitability and (2) Category private label sales penetration and category sales.

Findings- The empirical results of this study indicate that private label brands increase profitability in product categories but may result in overall category sales diminishing. There was a significant positive relationship in five product categories between private label sales penetration and overall category profitability. There was a significant negative relationship in six product categories between private label sales penetration and overall category sales volume.

Keywords: Category Management, Private Label, Supermarkets
Comparison Of Websites And Mobile Applications For E-Learning

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ABSTRACT

Information and communication technology (ICT) applied in the field of education is diverse in nature, and it is progressing continually. Advances in the development of smart phones in terms of both software and hardware capabilities have been considerable, and have provided new opportunities for e-learning. It can be argued that a key goal of companies is to produce applications that are productive, and more importantly, user friendly in nature so that they can deliver the best user experience to their customers. This paper reports on an investigation of user preferences when using an e-learning application designed to meet the needs of e-learners. Data was collected to gather evidence of their preferences with respect to both web and mobile applications. This study is part of a large research project, which aim to investigate the potential of e-learning within higher education using multiple e-learning applications. This paper undertakes the first phase of this research project. In the first phase, two user groups with a relatively similar age group (21-30 years) were asked to experiment the use of two different interfaces: one of a mobile application and the second of a web application. Both applications include information that aim to support international students. The information provided was based on one of the universities located in the USA. The information was obtained from the international office, which included facilities available, directions, events and workshops, important contacts, etc. Feedback on the use of both mobile and web applications was gathered using semi-structured interviews. Four interviews were conducted with two participants from each of the user groups within this study. The results indicate that both background and experience of using ICT applications highly influenced how both (web and mobile) applications were perceived. The analysis show that type of information and its representation play an important role in determining its efficiency and usefulness for the user. This study draws an important insight into the future of both web and mobile applications within the higher education environment. The next phase following this study aims to examine the results gathered in this study on a wider audience. This study provides an important foundation towards support understanding potentials and limitations for both web and mobile applications.
Dialogism In Active Learning Practices As Applied In Royal Commission English Language Classes: Descriptive Perspective
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ABSTRACT
Drawing on Bakhtin’s work of dialogism, this study attempts to examine one of the most argumentative issues in the field of English language learning (i.e., descriptive vs. perspective approaches). It explores the extent to which behaviorism, cognitivism and constructivism would help educators to conceptualize learning English in Saudi Arabia. Therefore, as to address these issues: (a) How dialogism affects learning English in Saudi Arabia? (b) Does active learning process successfully work in the Saudi context when it comes into implementation? (c) What sort of obstacles face the Saudi English teachers when practicing active learning? (d) What is the developmental vision for maximizing the effectiveness of active learning in English language education? The paper analyzes the conceptual framework of the English language textbooks being taught in Saudi Arabia and browses teacher training programs delivered by the Saudi educational system. Moreover, it tries to study the characteristics of the Saudi society in order to reach deep understanding for the whole scene. The study came up with findings that showed certain socio-cultural factors and people attitude play critical role in achieving active learning goals. The author stated some serious challenges and difficulties that face teaching English in Saudi Arabia which are recommended for further research. Finally, competency based learning approach was utilized to develop a vision for improvement.

Keywords: Active Learning, Teaching English, Dialogism, Descriptive Vs. Perspective Approaches
Information Literacy Skills Development: A Case Study Of Management Major At The USCG Academy

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ABSTRACT

The paper demonstrates examples of how information literacy (IL) can be contextualized within coursework assignments. The assignments require students to explore and evaluate information from a wide variety of printed, electronic, scholarly, and popular sources. Students are required to use information, learn, and complete their IL study tasks. When they complete their assignments and write reports they not only learn the subject knowledge but their ability to search for and evaluate information is noticeably improved. The integration of IL assignments within the coursework illustrates an approach to improve students' capabilities to evaluate and apply information in a new learning environment while generating new knowledge. The attainment of the IL educational outcomes at the CGA is based on the Association of College and Research Libraries (ACRL) outcomes and has been adopted for development and assessment in all courses in a specific sequence from freshman year to senior year. The paper delivers examples of IL assignments where students learn how to find, organize, and evaluate, and select the immense array of information that is available across different IL resources. The authors start with an overview of theoretical and applied research and discuss relevant IL issues and concepts. The focus is to present the process of designing and implementing an IL process in an undergraduate program with the use of experiential learning. This process presented has been drawn from the fields of education as well as from library and information science.

Keywords: Business Education, Information Literacy, Strategy, Evidence of Learning
The Clute Institute

Investigating The Root Causes And Management Of Conflicts In Construction Projects In Ghana
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Abstract
Varying interests of stakeholders involved in construction projects make conflict inevitable. Project organizations therefore focus attention on identifying and dealing with the root causes to achieve project success. This study aimed at uncovering the nature and root cause(s) of conflicts in construction projects in Ghana and the most effective strategy for managing them. Data was collected from a survey of on-going and completed projects in the Kumasi Metropolis of the Ashanti region of Ghana. Causes of conflict were categorized into general and contract causes. Using Spearman's correlation analysis, we found that general causes of conflict by aggregation had a significant effect on construction projects. Environmental condition was the most significant contributor to general causes of conflict. Contract causes were insignificant. Collaboration and comprise among project team and stakeholders were found to be the most effective management strategies for dealing with the conflicts. This study adds to the growing consensus that contracts caused insignificant conflicts in construction projects and that the major sources of conflict were general causes.

INTRODUCTION
Conflicts are unavoidable by-products of organizational activities in a project environment (Ankrah and Langford, 2005). Kumaraswamy (1997) posits that about 75% of construction projects have been the subject of one type of conflict or another. The construction industry has over the years become an adversarial culture prone to conflict and disputes (Fenn et al., 1997; Garrett, 2002). The success of projects therefore depends to a large extent on the manner these conflicts are resolved or managed. This study aimed at uncovering the nature and root cause(s) of conflicts in construction project in Ghana and the most effective strategy for managing them.

LITERATURE
Conflict in projects in general can be viewed from three distinct perspectives; traditional, behavioral and interactionist (Verma, 1998). Traditional perspective views conflict as destructive with adverse effect on the performance of projects. This conflict is managed by reducing, suppressing, or eliminating it outright (Lee, 2011; Smith 2002). This perspective is upheld by industrial and business organizations which have strong influence on society. Unfortunately this view breeds labour unions (Verma, 1998).

The behavioural or contemporary view holds that conflict is a natural phenomenon and unavoidable in all organizations and can have positive or negative impact depending on how it is handled. Khanaki and Hassanzadeh (2010) contend that managers should manage conflict to take advantage of it to enhance innovation and creativity.

The interactionist view assumes that conflict is necessary to increase performance and should be encouraged. Managers are to keep conflict at a level that can render projects self-critical, viable, creative, and innovative (Ogunbayo, 2013; Verma, 1998).

A number of researches identified numerous causes of conflict. Waldron (2006) identified variations to scope, contract interpretation, EOT claims, site conditions, late- incomplete or substandard information as major causes of conflict. Cheug and Yui (2006) identified task interdependency, differentiations, communication obstacles, tensions,
personality traits as major causes of conflict with non-performance, payment and time as triggers. Conlin et al. (1996) identified payment and budget, performance, negligence and quality; while Rhys (1994) identified poor management, adversarial culture, poor communications, inadequate design, economic environment, unrealistic client expectations, inadequate contract drafting and poor workmanship as major sources or causes of conflict. All these point to the fact that conflicts exist in construction projects and must therefore be managed for success to be achieved.

Strategies for managing construction conflict abound. The application of the conflict management strategy is contingent on the situation (Lee, 2008). The Thomas and Kilmann (1974) conflict management model provide a useful set of strategies for managing construction conflicts. They identify; competition, avoidance, compromise, collaboration and accommodation as strategies to manage construction conflicts.

**METHODOLOGY**

Conflict was conceptualized as an event that has the tendency of taking the attention of a project implementation team away from the task at hand; or has the tendency to influence the direction, organization, and or successful execution of a project. It was operationalized by grouping causes of conflicts into general and contractual factors. Contractual factors related to the contract document, contracted terms and all issues associated with it. General factors related to all other possible causes of conflict. Primary data was collected from a sample of four hundred respondents from one hundred and eighteen on-going and completed projects in the Kumasi metropolis of the Ashanti region of Ghana. Respondents were expected to have been involved in the construction business for at least one year. The results of a Spearman’s correlation analysis with SPSS version 18.0 indicated that contractual causes of conflict were insignificant at 95% with a p-value of 0.69>0.05. General causes were significant (p<0.05). Environmental and site conditions were the most significant causes of general conflict (p<0.05) at 95%.

Among the five construction conflict management strategies proposed by Thomas and Kilmann (1974), only compromise had a significant effect on managing contractual conflicts (correlation coefficient = 0.169) at 95%. Accommodation and collaboration has a significant effect on managing general causes of conflict (correlation coefficients = 0.275 and 0.225 respectively). Creating competition among team members as a conflict management strategy had a significant but negative effect (coefficient of correlation = -0.338) at 95%.

**CONCLUSION**

This study finds that construction project contracts are not a major source of conflict. Factors relating to the environment and site of the construction project generated more conflict situations. The findings of this study adds to the growing consensus that the major causes of conflict related more to the circumstances of the construction project rather than the contracted terms.

**REFERENCES**


ABSTRACT

Overview: With the introduction of participatory and trade based modes, Islamic banks are experiencing rapid growth in Islamic countries as well as non-Islamic countries. The profit sharing approach adopted by the Islamic banks created ex-ante expectation that there will be higher returns for the bank and depositors. Higher depositor returns would lead to higher welfare creation by the morality based banking framework. It can be seen in figure 1 there is a big dispersion among Islamic banks from different countries in terms of the return to deposit as a percentage of total assets.

Fig 1 – Country Average of Deposit Return to Total Asset

Since in most countries, Islamic banks are operating vis-à-vis conventional banks, this substitutability between the deposit account of Islamic and conventional banks creates a challenge for Islamic banks to attract more depositors. Table 1 below provides a country wise share of individual investment as a total investment, this also depicts dispersion among countries regarding investment mix. Both of these descriptive point us that, Islamic banks consider country conditions and investment opportunities, which leads to different deposit returns. The question that needs addressing that, whether Islamic banks able to maximise the returns for the society efficiently. As this is the efficiency of return maximization rather than the efficiency of profitability of Islamic banks, which is ignored in the empirical studies which could indicate as a potential strategy to attract more deposits.
Research Objective: This study, at first, tends to find whether the current share of investments (such as Musharaka, Mudaraba, Ijarah and Murabaha) done by the Islamic banks are efficient in maximising the depositor returns, and what is its distribution across different countries like Malaysia and Pakistan. Secondly, it will provide the role of markup based and profit sharing based investment modes in determining the deposit returns. Lastly, it will explore, what investment mode potentially increase the efficiency of the Islamic banks.

Data and Methodology: For this objective, this study will use the bank based data of 47 full-fledged Islamic Banks from 21 countries all across the globe, for up to 14 years based on the availability of bank's annual reports. The study will use Panel Stochastic Frontier Approach proposed by (Kumbhakar, & Lovell, 2000; Battese, & Coelli, 1992) to finding how much the investments done by the Islamic banks are technically efficient in maximising return to deposit with a comparison between markup based and profit sharing based investment modes. This estimation model uses the production possibilities frontier approach to identify the technical and random factors in the conversion of inputs (investments) to output (deposit return). The index of efficiency generated from Panel SFA will be used to determine what investment if increased, could lead to higher efficiency in deposit return.

Policy Implications: Using this investigation, this study hopes to streamline a strategy customised for each country, which can improve the efficiency of banks in generate returns to depositors also their contribution in promotion of welfare.

Keywords: Musharaka, Mudaraba, Ijarah, Murabaha, Panel Stochastic Frontier Model, Islamic Banking, Efficiency.
JEL Classification: G21

References


Learning Strategy Instruction in Mobile Assisted Language Learning: EFL Students’ Perceptions and Experiences
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ABSTRACT
As mobile devices and applications have become more and more advanced and pervasive, using mobile technology to enhance English learning has attracted the attention of many EFL (English as a Foreign Language) teachers and researchers. In the field of L2 (second language) reading instruction, many researchers have begun to examine the potential and impacts of using mobile devices (e.g., tablets and smartphones) to support EFL reading instruction. In spite of the advantages of mobile learning (such as portability, ubiquitous access, situated and just-in-time learning, individualized and personalized experiences), integrating mobile devices in EFL reading classes has many challenges, including: (1) the need to train and develop students’ learning strategies in MALL (Mobile-assisted Language Learning), (2) the lack of instructional models for teachers to integrate MALL activities in the classroom, (3) the lack of suitable methods to assess students’ strategy use in mobile-assisted language learning, and (4) the lack of research results regarding language learning strategy training in MALL environment.

The purpose of the study is two-fold. First, the researchers developed an instructional model to be integrated in mobile-assisted EFL reading classes. Second, the study investigated how the learning strategy instruction influenced students’ strategy use. Students’ perceptions and experiences toward the strategy instruction were also studied. The mobile devices used in this study included tablets and smart phones. ezPDF Reader was employed as the reading App. The development of the strategy instructional model was based on CALLA (Cognitive Academic Language Learning Approach) model. In the data collection phase, 30 Freshman English students participated in this study. Pre- and Post-instruction questionnaires were administered to students before and after the MALL-LLS training session. Finally, six students were interviewed to examine their attitudes and perceptions toward the implementation of the MALL-LLS instruction.

Research findings indicate that students generally had positive attitudes toward using the reading App in the Freshman English course both before and after the training. In addition, the implementation of MALL-LLS training resulted in improved strategy use. It is therefore suggested that EFL learners need guidance and instruction in improving and expanding their knowledge about and strategies for mobile-assisted language learning so that they may become more autonomous in their approach to the learning of language. The results of this study could help instructors better integrate mobile-assisted language learning into regular EFL reading classes. They could also provide insight into ways to improving the existing mobile Apps and/or conducting related studies for mobile-assisted language learning.

Keywords: Mobile-Assisted Language Learning, EFL Reading Instruction, Learning Strategy Instruction
Attitudes Of Saudi Arabian Students Toward The Use Of Digital Libraries In Higher Education
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INTRODUCTION

Digital libraries have gained popularity around the globe as higher learning institutions continue to embrace digital resources. In Saudi Arabia, higher learning institutions are now focusing on the digital libraries to keep abreast with the latest technology (Al-Maliki, 2013; Alkoudmani & Elkalmi, 2015). The trend matches with the continuing adoption of technology among Saudi Arabians, especially students in higher education institutions. Higher learning institutions in Saudi Arabia expect students to use electronic resources due to the many benefits associated with technology. Universities and colleges in the Kingdom have invested heavily in technology. One of the areas that these institutions have capitalized on is a digital library service.

The benefits of a digital library in higher education are many. One primary benefit is that students can access an unlimited supply of literature. With unlimited access, students are in position to conduct research and expand their knowledge. Another benefit is that the digital library has eliminated the over-reliance on physical libraries. Students can conveniently access the digital libraries without physically visiting the schools’ library.

A third benefit is that a digital library allows students to access learning materials from the comfort of their homes or anywhere as long as they have personal computers, Internet connection, and the password to access the schools’ library (Alkoudmani & Elkalmi, 2015). A final benefit is that digital libraries offer universities and colleges a cheaper option of accessing an unlimited supply of e-books, e-journals, and other study materials. Instead of purchasing printed books, Saudi Arabian universities and colleges are now purchasing soft copies at significantly lower prices.
ABSTRACT

In this essay, we seek to address the emergence of Crowdfunding, a new means of financing, by a crowd, using online platforms. In this context, we intend to research, regarding the fundraisers, the online platforms and the investors, what are the advantages and risks of this new business model. We explain the different existing models: Donation-based Crowdfunding, Reward-based Crowdfunding, Equity Crowdfunding and Crowdlending. Last but not the least, we seek to analyze how these new funding mechanisms were introduced in the Portuguese legal system. Therefore, we intend to comment the Act nº 102/2015, of August 24th, 2015 and the CMVM Regulation nº 1/2016, which aims to approve the Crowdfunding legal regime in Portugal.
Leadership Through Instructional Design
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ABSTRACT

Leaders in all organizations facilitate change, guide the development and implementation of organizational goals, and are held accountable for results. Literature supports multiple types of leadership, including distributive, hierarchal, transformational, transactional, and autocratic or bureaucratic leadership (Barsh & Lavoie, 2014; Hewertson, 2015; Maxwell, 2013). Leadership is a process of influencing how others think or act and the consequences of those results.

Leaders must delegate, make decisions and guide other’s practice in those skills. Ethics of leadership define the interactions between leaders and those they influence (Aefsky, 2016).

Cohen (2005) outlined a three step process for leading organizational change. Creating a climate for change, engaging and enabling the whole organization, and implementing and sustaining change offers a framework for leaders to include all stakeholders on behalf on improving student achievement and increasing positive learning outcomes.

Leaders facilitate the evaluation of programs in order to create ownership in a process of change or potential change and validation of work. One example of a program evaluation is described below.
Opening Jump In Unbiased Extreme Value Volatility Estimator

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ABSTRACT

The study provides procedures to incorporate the impact of opening jump in the unbiased AddRS volatility estimator (Kumar & Maheswaran, 2014). The conventional AddRS estimator is a proxy of volatility only for the trading part of the day. Our empirical analysis indicates that substantial part of daily volatility exist in non-trading part of the day. To deal with issue, this paper proposes the three volatility estimators based on the AddRS estimator that incorporate the impact of opening jump in estimating daily volatility. We apply our theoretical results and construct volatility estimates for the whole day based on the AddRS estimator for 30 equities of Dow Jones Industrial Average (DJIA) and 32 indices from various markets (16 indices are from developed markets and other 16 indices are from emerging markets).

JEL Classification: C15; C58; C61.

Keywords: The AddRS Estimator; Opening Jump; Daily Volatility; Unbiased Volatility Estimator
Stewardship Theory And Trust Development: Alternative And Valuable Governance Model

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ABSTRACT

With the extension of the corporation's duties beyond the shareholders – based upon the assumption that the corporation has citizenship responsibilities within society and an array of ethical and moral obligations - the paper’s intention is to promote stewardship theory as alternative, but superior governance model. Stewardship theory emerged in the field of corporate governance as an alternative to agency theory. The basis of stewardship relation is trust; therefore the development of stewardship behavior implies trust development. Trust is defined as a function of perceived trustworthiness of a person you trust (the so called trustee) and the trustor’s propensity to trust. Trustworthiness is observed as a three-dimensional construct of perceived ability, benevolence and integrity.

Managers are responsible for initiating a relationship of trust in the organization. In this sense, the focal interests are managerial activities and behavior as they represent a foundation for trust development, and consequently, the strengthening of stewardship behavior.

In the context of stewardship theory it is very important to separate the effects of trust on the activities and the results of activities outside job description defined as organizational citizenship behavior. Aggregately, on the organizational level, organizational citizenship behaviors result in corporate citizenship behavior which is defined as the establishment and management of company’s influence on the society in the way that benefits all stakeholders. Organizational citizenship behavior and corporate citizenship behavior are consistent with managerial stewardship in substance and conceptually, and they represent a proposed model of governance according to stewardship theory assumptions. The accepted hypotheses of the empirical research and theoretical conclusions of this paper ratify the relevance of stewardship and trust in creating value and achieving satisfactory results that will contribute to the general economic and social development. Conclusions from empirical and theoretical part of the paper indicate that the normative model of management, based on trust and the central role of managers – stewards in the development of corporate citizenship behavior and organizational citizenship behavior, might be satisfactory.
Change Management And Organizational Performance In Nigeria: An Empirical Investigation

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ABSTRACT

This study was carried out to empirically test the relationship between organizational change and performance as well as proffer better strategies for managing change to enhance organizational performance. Descriptive and casual research methods were adopted for the study. For survey the research, a structured questionnaire was used to elicit responses from two hundred and sixty-one (261) employees of the focal organizations on the impact of change management on organizational performance. They were selected on the basis of their managerial levels, using stratified random sampling. A four and five-year pre- and post-financial statements of five organizations, that have implemented various change programmes such as Business Process Reengineering, Total Quality Management, Six Sigma among others were used for the casual study. Three firms were from the financial sector while the others were from the manufacturing sector. T-test statistical methods were used to test the hypotheses at 0.05 level of significance. The analysis and interpretation of the responses revealed that employees’ opinions on the impact of change on profit differ according to their managerial levels. While the results of the hypotheses testing revealed that organizational change does not result in significant increase in sales in all the firms studied (Firm A: t-statistics=-0.5821, P-Value=0.6014, Firm B: t-statistics=1.0694 P-Value=0.3633, Firm C: t-statistics=0.9155, P-Value=0.4276, Firm D: t-statistics=0.899, P-Value=0.4349). The impacts of change on firms' profitability were mixed. For firms A, C and E, there were no significant impact on profit (Firm A: t-statistics=0, 1, P-Values=1.5 and 0.208: Firm B, t-statistics=1.6802, 1.5582, P-Value=0.1682 and 0.1942 respectively: Firm E, t-statistics=0, 1.5, P-Values=1 and 0.208). For firms B and D, the results were mixed (Firm B: t-statistics=-4.6572, -1.1973, P-Values=0.0187 and 0.3177). While for firm D: t-statistics=-3.3845, -1.5811, P-Values=0.0277 and 0.189 respectively) The study recommended that organizations should develop the ability to automatically anticipate and respond to change effortlessly. This will eliminate the rush for “impression management” through the implementation of on-going change practice of the moment and the resultant disruption of organizational life.

Keywords: Change, Management, Organization, Performance

INTRODUCTION

Uncertain economic climate forces many Organisations to make changes in order to survive. Organisations need to react quickly to the revolution in technologies and competition, not only at the global level, but also at the local and national levels, if they want to stay ahead of competition (Edmonds, 2010). According to Robbins and Judge (2009), the dynamic and changing environments, which Organisations face today, required adaptation, sometimes calling for deep and rapid responses. “Change or die” is the rallying cry among today’s managers worldwide. In the same vain, Buono and Kerber (2010) posited that companies in every industry are increasingly challenged to both respond to, and anticipate continuously changing competitive, market, technological, economic and social conditions to the point where change is described as “the new norm.” Organisations of all kinds today have to deal with environments that are changing more rapidly than the Organisations themselves.

While the inevitability and benefits of effective change management are non-negotiable, the reality is that about 80% of changes implemented within Organisations fail to achieve the objectives for which they were set (Burnes, 2005).
According to Choi and Ruona (2011), despite the increase in the perceived necessity of change and attempts at implementing Organisational change initiative, it has been estimated that, at least, two thirds of Organisational change efforts do not result in their intended aims nor do they foster sustained change.

Nigeria, as a member of the international community, has suffered her share of the consequences of the economic meltdown in the forms of declining real output growth (slow economic growth), weakened financial systems (takeovers and bankruptcy), loss of jobs, loss of confidence in the financial markets, leading to inability to carry out their intermediation role in the economy, rising inflation and weak consumer demand (Soludo, 2009). These negative effects have manifested in rising inflation, continued depreciation of the Naira value in the foreign exchange market, sagging consumer demand, changes in government policies as well as increased local and global competition. The above factors have made business operation in Nigeria most challenging. To meet these challenges, Nigerian managers have embarked on several transformation programmes to guarantee the survival and prosperity of their businesses. However, the success of these transformation programmes will depend on the effective management of the entire process.

The fact that Organisations must change is no longer news. The real problem is that, in spite of the consciousness of the inevitability of change, and a virtual explosion of research and managerial practice, successful Organisational change often remains elusive (Kind and Wright, 2007). This is because most Organisations “change and die” instead of “changing to live.” (Okonji 2014) Keller and Aiken (2010) acknowledge that with much research done and information available on managing change, it stands to reason that change programmes today should be more successful than those of more than a decade ago, but the facts suggest otherwise. A review of the relevant literature showed that between 70% and 80% of changes implemented within Organisations fail to achieve the objectives for which they were set (Isern and Pung, 2006; Bokeno, 2008). According to Huy (2002), the poor outcomes of change efforts have posed to management scholars and practitioners alike, the challenge of solving the puzzle of how Organisations can achieve successful changes.

The consequences of a transformation failure include: reduced Organisational effectiveness, wasted resources, employee cynicism, dampened employee morale, loss of integrity for those leading the effort and reduced ability to confront and compete in the environment for needed resources and support (Iyayi, 2000). Organisations, failing to introduce change successfully can pay a high price; failure can lead to loss of market position, and the credibility with stakeholders as well as decreased morale among management and staff, resulting in a de-motivated workforce or, worse still, the loss of key employees (Edmonds, 2010).

The purpose of this study is to investigate change management and Organisational performance in Nigerian companies. In the light of the foregoing purpose, the researcher sought to achieve the following specific objectives:

(i) Find out if successful Organisational change will result in significant increase in sales revenue.
(ii) Examine if Organisational change will lead to significantly higher profit levels.
(iii) To ascertain the extent of agreement between employees on the ability of change programme to achieve profit objectives

Based on the stated problems and purpose, to facilitate the conduct of the study the following questions were posed:

(i) Does Organisational change result in significant increase in sales?
(ii) Will Organisational change lead to significantly higher profits?
(iii) To what do employees agree on the ability of change programme to achieve profit objectives?

To further solve the identified problems and achieve the research objectives, the following hypotheses were derived or formulated, from the research questions:

1 Organisational change does not result in significant increase in sales.
2 Organisational change will not lead to relatively higher profits.
3 There is no significant difference in the opinions of respondents across the managerial levels on the impact of change management on organizational profitability.
This study should contribute significantly towards the achievement of sustained development in Nigeria and the rest of Africa. This is because the effective management of Organisational change will not only enhance the performance of firms in general (in terms of profit and market share among other factors) but will, in addition, improve the well-being of employees (in terms, for example of job satisfaction and higher pay), and the economic prosperity of the Nigerian (in terms of payment of taxes to government for the financing of developmental projects, performance of socially responsive activities by the firms, interest payments to creditors, dividend payments to shareholders, payments to material and parts and components suppliers).

REVIEW OF RELATED LITERATURE

The exponential growth in both frequency and magnitude over the past twenty to thirty years, and the vast resources, now committed to change management programmes in companies around the globe, have created a need for today’s students of business as well as managers and aspiring managers to familiarise themselves with the phenomenon of Organisational change (Carnall, 2007). Change has become an integral part of Organisational life for both Organisational members and Organisations.

Organisational change refers to a perplexing myriad of phenomena, activities, initiatives and campaigns in Organisations that have one thing in common: movement of some sort from one set of thoughts or behaviours to another set of thoughts or behaviours (Bokeno, 2008). According to Jones (2010), Organisational change is the process by which Organisations move from their present state to some desired future state to increase their effectiveness.

For Fields (2008), the need for Organisational change was often rooted in threats or uncertainties. These threats may be due to poor firm performance or trends that suggest the Organisation is vulnerable to loss of market share, competitive advantages or critical resources. An Organisation embarks on a major change programme where the leaders of an Organisation believe and can demonstrate that current modes of operations are a threat to its survival (as a result of market pressures, government regulations, etc.), and when the leaders are willing to commit adequate resources to the programme and in anticipation of a major opportunity (Abugu 2000).

CHANGE AND ORGANISATIONAL PERFORMANCE

According to Kreitner and Kinicki (2004) organisation performance or effectiveness has been measured using four criteria. These are: Goal accomplishment (the extent to which the organisation achieves its stated goals), Resource acquisitions (the extent to which the organisation acquires the needed resources), Internal processes (the ability of the organisation to function smoothly with a minimum of internal strain) and Strategic constituencies satisfaction (the ability of the organisation to minimally satisfy the demands and expectations of key interest groups). However, Grant (2000) asserted that the pursuit of profit is the single dominant objective of business enterprises.

The findings on the impact of change on organisational performance have been mixed. Most studies have found that effective change management enhances organisational performance (Isern and Pung, 2006; Trinh and O’Connor, 2002). In contrast, some studies have found that change reduces organisational performance (Singh, House and Tucker, 1986), while others have found either no relationships (Guimaraes and Bond, 1996; Zajac and Shortell, 1989) or mixed relationships (Aregbeyen, 2011).

Types of Organisational change

Fields (2008) posited that there were three types of Organisational change: first level, second level and third level changes. First level changes are incremental in nature and seek to better aligning and maintaining the current congruence among system components. First level changes do not alter that Organisational relationship but incrementally improve it within the existing structure and task design. Second level changes are strategic in nature that questions the Organisation’s purpose and identity. These are characterised by interventions that involve reorganisation and or major alternation of one or more selected subsystems. Third level changes are Organisation wide efforts that involve altering the beliefs, values and interrelationships of all subsystems of the Organisation. For Conger
(2000) the hypercompetitive landscape requires continual reinvention in company strategies and Organisational architectures and cultures that support them. As a result, few industries today have the luxury of leisurely implementing an incremental change. The pressure is instead for significant and frequent shifts in a company’s strategy and corresponding Organisation wide change.

MODERN APPROACHES TO MANAGING ORGANISATIONAL CHANGE

Organisational development

Cummings (2004) defined organisational development (OD), as a system-wide process applying behavioural-science knowledge to planned change and development of the strategies, design components, and processes that enable organisations to be effective. It seeks to improve how organisations relate to their external environments and function internally to attain high performance and high quality life. The organisational development model includes: planned change, feedback-based collaboration, an emphasis on performance, a humanistic imperative, systems perspective and reliance on the scientific method for organisational analysis (Harvey and Brown, 1996). The traditional tools of organisational development are action research and action learning.

Business process re-engineering

Business process re-engineering is an approach to business transformation that emphasises customer-driven, process-oriented management practice, often enabled by information technology. BPR is a ‘radical re-design of business processes to achieve dramatic improvements on critical measures of performance’ (Hammer, and Champy, 1993). Al-Mashari, and Zairi (2000) posited that the goal of business process re-engineering is to re-design and change the existing business practices or process to achieve dramatic improvement in organisational performance.

Total quality management

Total quality management (TQM), is an organisation-wide method of managing people and processes to ensure the continuous delivery of quality products and services. Individuals, such as Deming, Juran, Crosby, Feigenbaum and Shikawa, played prominent roles in the emergence of total quality management movement (Mills, Dye and Mills, 2009). Powell (1995) identified the following twelve essential TQM factors: committed leadership, adoption and communication of TQM, closer customer relationships, closer Supplier relationships, benchmarking, increased training, Open organisation and Employee empowerment. Others are Zero-defects mentality, Flexible manufacturing, Process improvement and Measurement.

Balanced score card

The balanced score card is a method for developing strategic objectives through the measurement of key financial, structural and process factors, linked to Organisational performance, critical to its success. Although, the concept of the balanced score card was developed by Schneiderman of analogue device, it was made popular by Norton and Kaplan (Mills et al 2009) The balanced score card helps to create a management structure that clarifies the direction that an Organisation needs to follow, communicate that direction, align everyone’s work to support those goals and ultimately perform more efficiently and be more competitive in the market place.

The balanced score card is made up of four perspectives which constitute the core of what is to be measured. These perspectives are: financial, customer, internal and learning/ growth perspectives. The elements of the financial perspective include; revenue growth and mix, cost reduction and productivity improvement and asset utilization and investment strategy. The customer perspective is concerned with market and account share, customer retention, customer acquisition, customer satisfaction and customer profitability. (Kaplan and Norton,1996). The internal perspective is about finding effective ways of controlling the organisation and/or operations processes to produce reliable and consistent products and services. The primary objective is on finding adequate measures of those processes such as cycle times, production and/or service delivery times, and productivity and key purchases of supplies. It may also involve identifying and measuring key processes in each department and unit of the organisation; correlating performance measures with customer metrics (e.g. satisfaction), establishing benchmarks, based on customer requirements, developing a safety index to reduce accidents and production hold-ups and promoting a preventive
approach to achieving quality products and services (Mills et al., 2009).

The learning and growth perspective focuses on building and refining an organisational infrastructure for skills and knowledge development and an effective work culture. Typical measures include: improvement of knowledge levels through training and education, over-all company-relevant certification levels (i.e., degrees, certificates, professional accreditations) work place satisfaction levels and workplace climate and the generation of new ideas leading to improved productivity. (Mills et al., 2009).

Six-Sigma

The origin of the concept can be traced to Motorola where the inefficiencies of the traditional quality measurement approaches lead to the development of the concept. Based on the ideas of statistical process control, Motorola defined six-sigma as 3.4 defects per million opportunities (Naslund, 2008).

The six-sigma methodology is based on the DMAIC cycle (define, measure, analyze, improve, and control). The proponents of six-sigma argue that it is more than just a quality system; it is a vision, a philosophy, a symbol, a metric, a goal and/or a methodology (Spector, 2006).

POPULATION OF STUDY

The population consisted of employees of organisations in manufacturing and service sectors quoted on the Nigerian stock exchange that have undergone change within the past eight years in Lagos state as reported in business dailies, the stock exchange and the companies’ annual reports. However, the accessible population consisted of all employees of five organisations: that have implemented various change programmes (total quality, reengineering, six sigma, balance score card and general restructuring) in the past ten years. The five organisations were selected by ballot from a list of twenty organisations. The stratified random sampling method was employed. Since the topic of inquiry pervades the entire managerial and non-managerial levels, respondents were first stratified on the basis of managerial and non-managerial levels in their respective organisations. Thereafter, the samples were drawn from each stratum. The motive behind this approach was to ensure that all categories of employees were sufficiently represented (De Vaus, 1996). The choice of these sectors is based on the vital role they play in the socio-economic development of the nation. Ilesanmi (2011) averred that the financial sector of every economy is the nation’s “heart beat.” On the other hand, the manufacturing sector is seen as a potential engine of modernization, a creator of skill jobs and a generator of positive-spill over effects on the economy (Tybout, 2000).

DESCRIPTION OF RESEARCH INSTRUMENT

For the casual study, the performances of the focal organisations were measured, using two main indicators of growth in sales (turnover), profitability. Growth in sales was measured, using the percentage change in sales (turnover), profitability was assessed, using return on assets 1 and 2 (return on assets 1= profit before tax and interest divided by total assets, return on assets 2 = profit after interest and tax divided by total assets). The data on the pre-and post-change performance indicators were obtained from between 8-10 years’ annual reports of the focal organisations. For company A, the pre change years were from 2001-2005, while the post-change years were from 2007-2010. 2000-2004 and 2007-2010 constitute the pre- and post-change years respectively for company B. For Company C, the pre-change period was between 1999 and 2004, while the post change years were from 2006-2010. Company D’s pre-change years were between 1999 and 2005, while the post-change years were from 2007-2011. Company E’s pre-and post-change years were 1999-2003 and 2006-2010 respectively.

For the survey, the primary instrument of data collection was a questionnaire, structured on a five-point Likert-rating scale of Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree. The instrument consisted of opinions, factual (categorical) and open-ended questions. It comprised two sections with each section containing seven question items. The focus of Section A was on the biographical characteristics of the respondents and the approach adopted in implementing change by the focal organisations. Section B (performance scale) examined the extent to which the stated objectives of the change initiatives were achieved.

The data collected from the respondents through the questionnaires, were entered into the Statistical Package for Social
Sciences (SPSS) software version 14 after they had been appropriately coded. Also:

a) Descriptive statistics, involving simple percentages, pie and bar charts were used in analyzing the annual accounts and respondents’ biographical data.

b) Hypotheses, about t-test were carried out.

c) Non parametric data analysis methods involving Krusal –Wallis test of equality of means was used to test part of hypothesis number five.

From tables, 1.1a and 1.1b (see appendix), the pre-change average percentage growth in sales for company A was 45%, while that of the post change period was 2.3%. The average return on assets 1 and 2 were 9.5%, 7.5% and 2.3% and 2.5% respectively.

Tables 1.2a and 1.2b (see appendix) revealed that the pre-and post-change average percentage growth in sales for company B were 26.25% and 16.75% respectively. The return on assets 1 and 2 averaged 37.25%, 33.5% and 62.5% and 41.55 for the same period.

For company C, as depicted in tables 1.3a and 1.3b, (see appendix), the pre-change percentage growth in sales, return on assets, 1 and 2, stood at 30.25%, 33.4%, 22.8%, respectively; while the corresponding post- change figures were 13.25%, 18.2%, 13.2%.

a) Tables 1.4a and 1.4b (see appendix) showed that company D’s pre-change averages for percentage growth in sales, return on assets 1 and 2, were 26%, 13%, 9.45, % respectively. On the other hand, the average post-change figures for these measures were 9.75% 17.2%, 12.4%. The performance indicators for company E, as depicted in the tables 4.2.5a and 4.2.5b (see appendix) revealed that the pre and post change averages for percentage growth in sales, return on assets 1 and 2, were 27.5% and 37.5%, 3% and 3%, 2.4% and 1.8% respectively.

Hypothesis One: Organisational change does not result in significant increase in sales.

| Table 2.1 Paired samples (pre and post performance indicators) t-test results |
|---------------------------------|-----------------|-----------------|-----------------|
| Growth indicators               | t-statistics    | Probability value | Remarks         |
| Company A                       | -0.5821         | 0.6014           | Not significant |
| Pre and post growth rate in sales |                 |                  |                 |
| Company B                       | 1.0694          | 0.3633           | Not significant |
| Pre and post growth rate in sales |                 |                  |                 |
| Company C                       | 0.9155          | 0.4275           | Not significant |
| Pre and post growth rate in sales |                 |                  |                 |
| Company D                       | 0.899           | 0.4349           | Not significant |
| Pre and post growth rate in sales |                 |                  |                 |
| Company E                       | 0.899           | 0.4349           | Not significant |

Evidence from table 2.1 above indicated that there was no significant difference in the pre-and post-change growth indicators. For company A, the t-statistic = -0.5821, Probability Value=0.6014; For company B, t-statistics=1.0694, Probability Value=0.3633; For company C, t-statistics=0.9155, Probability Value=0.4275; For company D, t-statistics=0.899, Probability Value=0.4349; For company E, t-statistics=0.899, Probability Value=0.4349. Hypothesis one is therefore accepted. Hence, Organisational change does not lead to significant increase in sales volume.

Hypothesis Two: Organisational change will not lead to relatively higher profits.
Table 2.2: Paired samples (pre and post-performance indicators) t-test results

<table>
<thead>
<tr>
<th>Profitability indicators</th>
<th>Pair</th>
<th>t-statistics</th>
<th>Probability value</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company A</strong></td>
<td>Pre and post return on asset (1)</td>
<td>0</td>
<td>1</td>
<td>Not significant</td>
</tr>
<tr>
<td></td>
<td>Pre and post return on asset (2)</td>
<td>1.5</td>
<td>0.208</td>
<td>Not significant</td>
</tr>
<tr>
<td><strong>Company B</strong></td>
<td>Pre and post return on asset (1)</td>
<td>-4.6572</td>
<td>0.0187</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Pre and post return on asset (2)</td>
<td>-1.1973</td>
<td>0.3172</td>
<td>Not significant</td>
</tr>
<tr>
<td><strong>Company C</strong></td>
<td>Pre and post return on asset (1)</td>
<td>1.6802</td>
<td>0.1682</td>
<td>Not significant</td>
</tr>
<tr>
<td></td>
<td>Pre and post return on asset (2)</td>
<td>1.5582</td>
<td>0.1942</td>
<td>Not significant</td>
</tr>
<tr>
<td><strong>Company D</strong></td>
<td>Pre and post return on asset (1)</td>
<td>-3.3845</td>
<td>0.0277</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Pre and post return on asset (2)</td>
<td>-1.5811</td>
<td>0.189</td>
<td>Not significant</td>
</tr>
<tr>
<td><strong>Company E</strong></td>
<td>Pre and post return on asset (1)</td>
<td>0</td>
<td>1</td>
<td>Not significant</td>
</tr>
<tr>
<td></td>
<td>Pre and post return on asset (2)</td>
<td>1.5</td>
<td>0.208</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

Table 2.2 above revealed that the differences in the profit indicators for the pre-and post-change years were insignificant, except for company B’s and D’s ROA1. (company A: ROA1, t-statistics =0, Probability Value=1, ROA2, t-statistics =1.5, Probability Value=0.208, Company B: ROA1, t-statistics =-4.6572, Probability Value=0.0187, ROA2, t-statistics=-1.1973, Probability Value=0.3172, Company C: ROA1 t-statistics =1.6802, Probability Value=0.1682, ROA2, t-statistics =1.5582, Probability Value=0.1942, Company D: ROA1 t-statistics =-3.3845, Probability Value=0.0277, ROA2, t-statistics=-1.5811, Probability Value=0.189, Company E: ROA1, t-statistics=0, Probability Value=1, ROA2, t-statistics=1.5, Probability Value=0.208). This implies that there was no significance in post-interest and tax return on assets, while the pre-interest and tax return on assets was mixed. Since most of the results were insignificant, hypothesis two is accepted.

Hypothesis three: There is no significant difference in the opinions of respondents across the managerial levels on the impact of change management on organizational profitability. An analysis of variance was conducted to test the equality of means for performance outcome three (P3=Profit). The result is shown in the table below.

Table 2.3: Robust Tests of Equality of Means

<table>
<thead>
<tr>
<th>PEF3</th>
<th>Statistic(a)</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welch</td>
<td>4.022</td>
<td>5</td>
<td>16.420</td>
<td>.014</td>
</tr>
<tr>
<td>Brown-Forsythe</td>
<td>3.173</td>
<td>5</td>
<td>38.049</td>
<td>.017</td>
</tr>
</tbody>
</table>

a Asymptotically F distributed.

From the table above, f values=4.022, p=0.014 and 3.273,p=0.017 respectively indicates that there is a significant difference in the opinion of respondents. Therefore hypothesis three is rejected.

The under listed are the main findings of this study:

- There was no significant change in sales growth rate as a result of Organisational change efforts in all the focal organisations. In absolute terms, changes in sales may appear significant, but may not be so in relative terms.
- The differences in the profit indicators for the pre-and post-change years were insignificant, except for companies B’s and D’s return on asset 1(ROA1).
- There are significant differences in the opinions of respondents across the managerial levels on the impact of change management on organizational profitability.
DISCUSSIONS OF FINDINGS AND RECOMMENDATIONS

The findings of hypothesis one showed that there was positive change in sales growth due to organisational change. Since change may involve more investments, the absolute increase in sales may not be relatively significant. However, managers hide under the canopy of an absolute increase in sales to justify change efforts. This is in line with the findings of Guimaraes and Bond (1996) who in a study of 586 American manufacturing firms concluded that BPR had a less than an impressive impact on company performance.

The findings in hypothesis two revealed that the differences in profit indicators for pre- and post-change years were insignificant, except for companies B’s and D’s return on asset1. Although, increase in profitability is one of the cardinal objectives of all change efforts there has been mixed findings on the impact of change on it. Aregbeyen (2011) reported that BPR significantly improved the profitability performance of First Bank, while Guimaraes and Bond (1996) found a no improvements in profitability performance due to BPR.

The differences in opinions of employees on the ability of change programmes to achieve the advertised objectives especially the profit ones serve to further the debate on the net benefits of change programmes. Most employees expressed negative views on the ability of the programmes to produce sustained profit, the ultimate aim of all business organizations’ change management. This is in line with earlier findings where employees view most change programmes as fads that produce none of the advertised benefits (Bleakly 1993; Naslund, 2008). Negative perception of change as a fad has grave implications for support for change.

It is recommended that managers should built resiliency into their organizations so that they can effortlessly change in response to the environmental realities without pains. Instead of embarking on episodic change which are usually seen by subordinates as politically motivated with negative consequences, managers should build cultures and structures that encourage every organizational member to be a change agent.

REFERENCES


### Table 1.1a: COMPANY A (PRE-CHANGE YEARS)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SALES (TURNOVER) #’000</th>
<th>TOTAL ASSET</th>
<th>PROFIT BEFORE TAX</th>
<th>PROFIT AFTER TAX</th>
<th>%GROWTH IN SALES</th>
<th>RETURN ON ASSET (1)</th>
<th>RETURN ON ASSET (2)</th>
<th>EARNINGS PER SHARE</th>
<th>DIVIDEND PER SHARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>384,588</td>
<td>1,458,126</td>
<td>196,764</td>
<td>153,530</td>
<td>13</td>
<td>11</td>
<td>28</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>494,302</td>
<td>1,644,539</td>
<td>235,523</td>
<td>194,109</td>
<td>29</td>
<td>14</td>
<td>12</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>953,669</td>
<td>5,321,341</td>
<td>308,576</td>
<td>258,227</td>
<td>92</td>
<td>8</td>
<td>5</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>1,095,974</td>
<td>5,418,611</td>
<td>171,908</td>
<td>133,549</td>
<td>15</td>
<td>3</td>
<td>2</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>AVERAGE</td>
<td>45</td>
<td>9.5</td>
<td>7.5</td>
<td>11</td>
<td>22</td>
<td>12.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


### Table 1.1b: COMPANY A (POST-CHANGE YEARS)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SALES (TURNOVER) #’000</th>
<th>TOTAL ASSET</th>
<th>PROFIT BEFORE TAX</th>
<th>PROFIT AFTER TAX</th>
<th>%GROWTH IN SALES</th>
<th>RETURN ON ASSET (1)</th>
<th>RETURN ON ASSET (2)</th>
<th>EARNINGS PER SHARE</th>
<th>DIVIDEND PER SHARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>3,097,268</td>
<td>15,332,786</td>
<td>775,405</td>
<td>647,142</td>
<td>5</td>
<td>4</td>
<td>16</td>
<td>355</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>3,314,953</td>
<td>12,307,253</td>
<td>-119,391</td>
<td>932,832</td>
<td>7</td>
<td>-1</td>
<td>3</td>
<td>-66</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>3,645,594</td>
<td>14,402,475</td>
<td>337,122</td>
<td>258,227</td>
<td>92</td>
<td>8</td>
<td>5</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>3,267,714</td>
<td>13,082,278</td>
<td>143,692</td>
<td>273,406</td>
<td>15</td>
<td>3</td>
<td>2</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>AVERAGE</td>
<td>2.3</td>
<td>2.3</td>
<td>2.5</td>
<td>-10</td>
<td>224</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


### Table 1.2a: COMPANY B (PRE-CHANGE YEARS)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SALES (TURNOVER) #’000</th>
<th>TOTAL ASSET</th>
<th>PROFIT BEFORE TAX</th>
<th>PROFIT AFTER TAX</th>
<th>%GROWTH IN SALES</th>
<th>RETURN ON ASSET (1)</th>
<th>RETURN ON ASSET (2)</th>
<th>EARNINGS PER SHARE</th>
<th>DIVIDEND PER SHARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>11,215,046</td>
<td>4,165,417</td>
<td>1,294,780</td>
<td>853,992</td>
<td>19</td>
<td>31</td>
<td>21</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>15,203,511</td>
<td>5,093,909</td>
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### Table 1.3a: COMPANY C (PRE-CHANGE YEARS)
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Table 1.5b COMPANY E (POST-CHANGE YEARS)

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Online Learners: The Lack Of Preparedness For The Environment!
Doris D. Yates, Ph.D., California State University, East Bay, USA

ABSTRACT

This hour long workshop will focus on online learners and how prepared they are for the online learning environment or are they. Having taught in the online learning environment for the past five years, the following are a few of the pitfalls of the online learners:

**Academic Dishonesty:** Submitting work as their own when they did not participate in the preparation of the presentations.

**Course Length:** Course historically has been taught over ten weeks, however during the summer of 2016 and fall 2016, did five-week short sessions to determine the impact on the learner. Course length does not seem to affect the behavior of the online learner, or how they participate in the course.

**Drop Out Rates:** While many of the students engage in the usage of technology daily there does not seem to be transferable skills when it comes to taking online courses. There seems to be a misconception regarding the "ease" of online courses and the amount of work required.

**Lack Of Adherence To Rubrics:** Information for presentations is included in the syllabus, a checklist is available for the one (five-week course) two presentations (10-week course) and ignored while preparing group assignment(s).

**Lack Of Communication:** following discussion board posting instructions and communicating with the professor and classmates. Rather than post information in a timely manner and/or by the due date they send the discussion board information to the professor to "prove" they completed the work.

**Lack Of Dedication To Online Learning:** Students seem to start out engaged but as the term progresses they seem to become disengaged as other courses, work, travel and other nonrelated "excuses" impede engagement. Want exceptions to submit work when timelines have not been adhered to or have past. When expectations regarding assignments are not met, they want to question the assigned grade. In other words, they do not follow directions yet want to question the outcome. Question and at the requirement to read and respond to two of their classmate's comments, it is viewed as "time-consuming"!

**Misconception:** There is a misconception regarding the ease of online classes. The rationales for taking online classes are because of work schedules and other day-to-day factors in their lives but are truly not involved in the course.

**Navigating:** There is difficulty navigating the course assignments and discussion boards. There is a lack of understanding when it comes to responding to discussion boards and weekly units, as there are questions for both per week that are to be answered yet there is difficulty being able to follow the sequence of questions.

**Participation:** In a course document there is a rubric of the assignments/discussion boards and the requisite number posts per assignment/discussion board and that last minute comments are discouraged. Students are posting their work with seconds to spare, as all course work is due by 5 p.m. It seems that students are not in-tuned to what is expected of them in the online learning environment regarding their participation. To this end, I developed an online computer usage survey and found that the students:

- Infrequently check their school email, or it is tied to their personal email accounts
- Students check the various social mediums before checking-in to their online classes.

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• They check social media accounts multiple times per day, yet their classes are checked maybe once a week.

**Tethered To Technology**: Not adhering to the posted requirements regarding group discussion boards and file exchange when preparing for presentations. The Blackboard system does not send a notification to phones or other devices, so students are defiant when it comes to following the required platform for their preparation discussions and the posting the presentation assignment(s).

**Time Management**: Not adhering to posted timelines for assignments and discussion boards and not understanding the lag time between when a comment is sent, received and time to response. Not staying on top of their grades and participation is again viewed as time-consuming.

The "*ah-ha*" of teaching online is that those that indicate that they have never taken an online course (via a bio questionnaire) seem to do better than those that are more "seasoned" online learners. It also does not seem to matter whether a millennial of other generations the behaviors seems to be the same. It also does not matter whether a transfer student or not, there are challenges in completing the requisite course materials. Another "ah-ha" came in a comment from a face-to-face student when she said, "in the community college they would remind us of assignments to make sure we turned them in." This comment resonated as there have been many conversations with counselors and they agree that the community colleges hold their hands and when they get to the university they are not prepared to be the "adults" and get things done on their own without the "prodding"!

In 33 years of University teaching, recent situation is truly a scratch and shake the head moment! A counselor made contact indicating that a currently enrolled student in an online section of the course has "episodic disabilities" and needed timelines extended to midnight to allow the student to post work. The way the course discussion boards/weekly units are set up, students have a week to respond and roughly two weeks to prepare presentations, so there is no need to extend time to midnight. Experience has shown that if a midnight timeline is allowed students will post at 11:59 p.m., as it is they are posting at 4:59 when work is due at 5 p.m.

While the current generation of students may be technically savvy, there seems to be a lack of the ability to transfer those skills to the learning environment. An example, students are asked as part of their bios if they have developed a PowerPoint presentation, and many indicate that they have or that it has been a while. When those comments are read, it is not expected to read, "I learned how to add notes to PowerPoint slides." Many of the students work and have team/group activities in which they participate yet have difficulty preparing a presentation with online groups and without scheduling a face-to-face meeting.

This session will be interactive, and participants will be able to discuss and examine the pitfalls they experience as a result of the online learning environment. A draft of a questionnaire will be available for discussion regarding the behaviors of the learners, and how faculty prepares courses for delivery and participation by students.
Developing Clinical Legal Education Through Multi-Partnerships In The UK

Alan East, Coventry University, United Kingdom
Christina Thompson, Coventry University, United Kingdom

ABSTRACT

Clinical Legal Education

A Law Clinic is a learning environment where law students identify, research and apply their knowledge in a setting which replicates real life practical scenarios (Grimes 1996: 138). The term Clinical Legal Education is difficult to articulate. It is exceedingly difficult to pin down one all-encompassing definition that will meet with the approval of everyone because there are many ways in which this type of learning can take place, such as in-house advice and representation clinics, often referred to as ‘teaching law firms’, advice only/gateway clinics or placement or externship schemes (Kemp et al 2016). Law Clinics vary in terms of their makeup and tend to be bespoke creations set up to meet needs defined by individual schools (Drummond and McKeever, 2015).

The original model used at Coventry Law School, an approach favoured by leading clinical institutes, Northumbria University and York Law School, is based on academic staff with practicing certificates supervising advice given to students. This type of clinic created a resource implication (Kemp et al) and with the passing of the Legal Services Act 2007 became difficult to sustain. The author of this paper developed a new innovative way of using clinical legal education at Coventry Law School by setting up a multi-partnership with a local Law Centre and a magic circle internationally recognized law practice, Allen & Overy LLP.

Aims and Objectives:

This new clinic allows law students from Levels 2 and 3 to work within Coventry Law Centre in a bespoke clinic where students provide advice and support to members of the community on employment law issues. Allen & Overy LLP provide telephone support and guidance to the students each time they see a client.

The aim of the paper is to evaluate the new model and consider whether this innovation enhances their legal skills such as communication, teamwork, problem solving, negotiation and research. With the partnership with Allen & Overy LLP the paper will further evaluate whether working within a professional environment and speaking to solicitors enhances the students’ employment prospects.

The focus of the paper is influenced by the 2013 Legal Education Training Review (LETR), which found a gap in students’ legal skills and recommended innovative practices.

Objectives:-

1. Identify the theoretical arguments for developing the use of clinical legal education.
2. Evaluate student experiences in clinical legal education learning through mixed methods.
3. Analyze the impact of the new clinic as a teaching method to improve students’ use of legal skills.
4. Analyze the extent to which working with two partners in a clinical legal education environment enhances employability prospects.

Research Approach or Methodology

The following mixed method approach will be used:-
1. **Method One:** A self-developed Course Experience Questionnaire (CEQ), which will be created based on the literature review. It will be used to provide an overall indicator of (1) legal skills acquired from within the clinic (2) an indicator of student knowledge at the start and end of the study.

2. **Method Two Focus groups.** Participants will be invited to take part in a focus group. It is anticipated that there will be no more than 12 participants. The focus groups will be used to ascertain the reasons for the rating which are returned in relation to the survey.

The results will be discussed in this paper.

**References**


Solicitors Regulation Authority Policy Statement: Training for Tomorrow 16th October 2013

Analyzing Libya’s Energy Economy: A Translog Production And Cost Function Approach
Linus Owusu Afriyie, Xiamen University, China
Wilfred Adu-Agyei, Xiamen University, China

ABSTRACT
Libya’s energy mix has been dominated by petroleum with a year on year increase due to huge petroleum subsidy by government. To reach a conclusion on the direction of causation between energy and economic growth, this study applies the translog production and cost function to attempt investigating technical change, potential for inter-factor and inters fuel substitution possibility between capital, labor, petroleum and electricity. Ridge regression has been adopted to estimate the parameters due to the presence of multicollinearity in the data. The results shows that all input pairs are substitutes in effect; adopting competitive electricity pricing policies and removal of petroleum subsidies and price ceilings will re-direct industrial energy use to electricity as well as increasing efficient capital and labor intensiveness which imply the ability to fuel the Libyan economy as well as mitigate CO2 emissions however, the success of this will depend on government policies towards strengthening labor laws and cost intervention policies to help industries adjust to the switch. Notwithstanding, this study evidenced convergence of all input pairs with electricity having the fastest relative technological progress while labor and petroleum faster than capital which indicate the success of policies which aim at increasing renewable electricity production and strengthening labor and merger policies.

Keywords: Libya, Inter-Factor, Inter-Fuel, Renewable Energy
Why Do You Think That Wales And East Of Turkey Did Poorly in The PISA Tests?

Mukadder Baran, Hakkari University, Turkey

ABSTRACT

The purpose of this study is to identify the opinions of the teachers about The Program for International Student Assessment (PISA) exams in Hakkari and Swansea. This study covers all fields of science and mathematics, as such: physics (n = 3), chemistry (n = 3), biology (n = 3) and mathematics (n = 3). The study is to consist of two participation groups of 12 teachers in both Hakkari and Swansea. The determination of the participating groups are based on ease of accessibility. The research data collected through semi-structured qualitative interview techniques. The data obtained reviewed at the end of the survey and findings analysed using a content analysis method. In the light of the data obtained from interviews conducted with the teachers in Swansea and Turkey compared, analysed. As a result of this study, it was determined that the reasons for the poor performance of PISA exams were that the irrelevant curriculum, the family structure, the socioeconomic background and the fact that the students were not familiar with the PISA test. Therefore, it is considered that the curriculum should be rearranged, the practical areas of education should be increased, the learning environment should be enriched with the contexts in which the student lives, and the pupil, the teacher and, if necessary, parents should be informed about the PISA exam content.

Keywords: PISA, Science Teachers, Mathematics Teachers, Education.
The Implications of Different Levels of Image Analysis for Country Branding

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ABSTRACT

With the spike in the global commerce and the purchase of products made across different countries, the Country of Origin (COO) has become a heuristic measure of quality for consumers. The effect of COO has been studied extensively within the field of marketing over the past few decades since Nagashima’s (1970) study on the comparative attitudes of American and Japanese consumers towards foreign products. COO research has led to the study of comparative country images, which in turn has been utilized in building theory and offering managerial and policy prescriptions on the branding and marketing of countries (e.g., Pappu, Quester and Cooksey, 2007).

Theoretical conceptualization of country image includes the dual functions of halo and summary proposed by Han (1989), the different facets of country image (Parameswaran and Pisharodi, 1994), and the identification of the cognitive, affective and conative component of customers’ attitudes formed as a result of the country images held by them (Laroche et al., 2005). Attempts at finer understanding of country image have included the proposition that there are macro and micro aspects to country image: while the macro country image is the summation of the all descriptive, inferential and informational beliefs one has about a particular country (Martin and Eroglu, 1993), the micro country image references the image of products produced in a particular country.

The present research seeks to supplement the literature on country image by investigating the nature of influences of macro micro aspects of country image on consumers’ perceptions of countries, as well as to understand the nature of possible relationships between the macro and micro country images.

A survey methodology was employed, utilizing a sample of Malaysian consumers, with 590 useable questionnaires utilized for analyses. The United States, China and Malaysia were chosen as the countries to be studied – Malaysia being the respondents’ home country, and United States and China representing a developed and a rapidly industrializing country, respectively for COO comparisons. A structured questionnaire adapted from previous studies was utilized. The survey was pretested, with the instrument being subjected to standard tests of reliability and validity.

Findings revealed that respondents’ evaluation of three subject countries were significantly different on both the macro and micro image. The image of the United States was more favorable than that of China and Malaysia on both the aspects of country image. A comparison between images of Malaysia (the home country) and China revealed that the home country was rated more favorably than China. A comparison of the country macro and micro image of the three countries showed that the micro image of the United States was more favorable than the micro image, whereas for China and Malaysia it was the reverse.

The findings have implications for the positioning of countries and their products in the global marketplace. Due to changing political and economic environments, both within and between countries, the country macro image is subject to fluctuation of favorability globally as well as in specific countries. However, the country micro image, if cultivated well, can serve to insulate an exporting country from the effects of negative macro image. For developed and industrialized countries, the government and business organizations such as chambers of commerce and industry can seek to build strong country micro image around the world; however, for developing countries seeking global markets, it may be necessary to build a strong macro image before, or in addition to, its micro image. With markets becoming increasingly global, the implications are potentially important not only to global businesses strongly associated with their country of origin, but also to the trade policy makers of the country.
References


Integrated Inventory Models With Imperfect Quality Items Under Carbon Emissions Cap And Lead Time Constraints

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ABSTRACT

In this paper, we develop a green supply chain integrated vendor-buyer inventory model with imperfect quality under carbon emissions cap and lead time constraints. It is assumed that the process quality is considered to be imperfect. To increase competitiveness on green supply chain, we adopt the capital investments strategies to engage process quality improvement. Moreover, environmental impact is incorporated in determining the optimal inventory policies by taking into account the fixed and variable carbon emission costs. Hence, the optimal ordering, production and shipment policies for integrated inventory model with quality improvement and environment impact are presented. In addition, an efficient algorithm is presented to determine the optimal order quantity for the buyer, and optimal process quality, the optimal shipment size and the number of shipments for the vendor that minimizes the total expected cost of this inventory model. Finally, a numerical example is provided to illustrate the theoretical results. Sensitivity analysis of the optimal solution with respect to the parameters of the model is carried out. Some managerial implications are also provided.

Keywords: Integrated inventory model, Imperfect quality, Lead time, Carbon emissions

1. INTRODUCTION

In practice, it can often be observed that the product quality is not always perfect. There are several studies that investigate the effect of imperfect quality on the inventory policy. Some of the earliest ones are presented in [1-2]. Recently, Salameh and Jaber [3] develop an EOQ model where the shipment consists of a percentage of defective items, which are sold at discounted price once the shipment is completely screened. Based on [3], Papachristos and Konstantaras [4] derive the sufficient condition to ensure no shortages and the optimal quantity when the imperfect items are sold at discounted price at the end of the cycle. Maddah and Jaber [5] rectify a flaw in [3]. Wahab and Jaber [6] show that the holding costs for the perfect and imperfect items must be different in [3]. In addition, even in inventory models do consider imperfect production process as above literature, the process quality is not assumed to be a control parameter. It is process quality can be improved by making an investment in the production process in terms of buying new equipment, improving machine maintenance and repair, worker training, etc. Porteus [1] introduced different options for investing in setup cost reduction and quality improvement. Following [1], other authors, such as [7-8], studied the economic benefits of reducing setup cost and improving process quality by simultaneously investing in new technology. Affisco, et al. [9] investigated the investments in setup cost reduction and quality improvement for a joint supplier-customer system with defects produced at a known constant rate. Lin and Hou [10] considered an inventory system with random yield in which both the setup cost and yield variability can be reduced through capital investment. Hou [11] further considered an EPQ model with setup cost and process quality as functions of capital expenditure and showed that the total annual cost function is convex.

On the other hand, sustainability issues in supply chain management are becoming more and more important. Mainly, companies are motivated to green their operations by regulatory requirements and increasing awareness of customers on climate change. Aside from manufacturing, inventory holding, freight transportation, logistics, and warehousing operations are the main supply chain activities that generate emission in many industries. However, many of the...
available inventory models, such as the economic order quantity (EOQ), were based on the false assumptions that fossil fuel is abundant and that greenhouse gas (GHG) emissions from manufacturing and logistics operations have no implicit effects as in [12]. Recently, various researchers have relaxed these assumptions to study how to consider carbon emissions in production and distribution planning problems. Fichtinger et al. [13] presented an integrated simulation model to assess systematically the impact of inventory and warehouse management on GHG emissions resulting from material handling processes and warehouse operations. Gurtu et al. [14] analyzed the impact of changes in fuel prices and the imposition of a carbon tax on emissions from transport on shipment lot sized and supply chain costs. Abis et al. [15] considered a single-item lot sizing problem with a periodic carbon emission constraint. Other related studies can be found in [16-20].

Therefore, green supply chain management has become a key approach for companies to be environmentally sustainable as reported in [21]. Companies of all sizes are enhancing their supply chain by considering the environmental impact of their decisions and actions, so that they can increase their competitiveness by engaging on environmental performance. As there is increasing trend to develop environmentally sustainable supply chains, companies expect to implement green supply chain and capital investment strategies to reduce the environmental impacts and improve the process quality for a coordinated two-level supply chain as in [22-23]. Consequently, in this study, we extend the previous literature by considering the integrated vendor-buyer inventory models with imperfect production process and environmental impact. We assume that the process quality can be improved through capital investments. In addition, we also consider the operations decisions in ordering, production, and transportation involving carbon emission costs. Therefore, the integrated inventory models with process quality improvement and carbon emissions are presented to determine the optimal production-shipment policies. An efficient algorithm is presented to determine the optimal order quantity for the buyer, and optimal defect rate, the optimal shipment size and the number of shipments for the vendor that minimizes the total expected cost of the integrated vendor-buyer inventory model. Finally, numerical examples are provided to illustrate the theoretical results.

2. NOTATION AND ASSUMPTIONS

The following notation and assumptions are used throughout this paper.

Notation:

\[ D \] average demand per unit time of the buyer
\[ P \] production rate of the vendor
\[ S_b \] buyer’s ordering cost per order
\[ S_v \] vendor’s setup cost per setup
\[ F_b \] fixed transportation cost per buyer’s cycle
\[ F_v \] fixed transportation cost for delivery of defective items per vendor’s cycle
\[ C_v \] variable transportation cost for delivery of defective items per vendor’s cycle
\[ h_b \] buyer’s holding cost per unit per unit time
\[ h_v \] vendor’s holding cost per unit per unit time
\[ x \] buyer’s screening rate
\[ d \] buyer’s unit screening cost
\[ w \] vendor’s unit warranty cost for defective items
\[ E_b \] the fixed emission costs in the forward supply chain
\[ E_v \] the fixed emission costs in the reverse supply chain
\[ L_b \] the variable emission costs per item in the forward supply chain
\[ L_v \] the variable emission costs per item in the reverse supply chain
\[ Q_p \] production lot quantity per production run
\[ Q \] the size of the shipment in a batch from the vendor to the buyer (a decision variable)
\[ n \] the number of shipments in a batch from the vendor to the buyer (a decision variable)
\[ T \] time interval between successive deliveries
\[ T_1 \] period during which the vendor produces
\[ T_2 \] period during which the vendor supplies from inventory
\[ \phi_y \] vendor’s capital investment required to achieve defect rate \( y \), \( 0 < y < y_0 \)
Assumptions:

1. A single buyer orders items of a single product from a single vendor.
2. The demand for the item is constant.
3. The production rate is uniform and finite.
4. The buyer places an order of $nQ$ (non-defective) items to the vendor. The vendor produces these items and, on average, transfers these items to the buyer in $n$ equal sized shipments, where $n$ is a positive integer.
5. The vendor’s rate of production of non-defective items is greater than the demand rate i.e. $P(1-y) > D$.
6. The screening rate $x$ is fixed and is greater than the demand rate i.e., $x > D$.
7. The vendor incurs a warranty cost for each defective item produced.

3. MATHEMATICAL MODEL

3.1 Buyer’s annual expected cost

The middle portion in Figure 1 depicts the behavior of the buyer’s inventory level. The annual expected total cost for the buyer including the holding cost, ordering cost, transportation cost, and screening cost as follows:
Holding cost:

From Figure 1, the buyer’s holding cost per year is,

\[ HC_b(n, Q) = \left[ \frac{Q(1-y)}{2} + \frac{DQy}{x(1-y)} \right] h_b \]  

(1)

Order, transportation, and screening costs:

The buyer places an order of size \( Q \) for non-defective items to the vendor. It will occur a fixed setup cost of \( S_b \) per vendor’s cycle. i.e., \( S_b/n \) is the order cost per buyer’s cycle, \( F_b \) is the transportation cost per buyer’s cycle. \( Qd \) is the screening cost per buyer’s cycle.

Hence, the annual expected total cost for the buyer is given by

\[ ETC_b(n, Q) = \frac{S_b D}{n(1-y)Q} + \frac{F_b D}{(1-y)Q} + \frac{DQy}{x(1-y)} \frac{Q(1-y)}{2} h_b \]  

(2)

3.2 Vendor’s annual expected cost

There are three major costs for the vendor: holding cost, setup cost, and transportation cost.

Holding cost:

The accumulation and depletion processes of vendor’s inventory for each production cycle are shown in Figure 1. The vendor’s holding cost per production cycle is equal to the unit holding cost times the value of accumulated inventory minus depleted inventory; therefore, the vendor’s holding cost per year is given by

\[ H_v(Q, y, n) = \left[ \left[ nQ \left( \frac{Q}{P} + (n-1)T \right) \right] - \left[ \frac{n^2 Q^2}{2P} \right] \right] - TQ + 2Q + \ldots + (n-1)Q \right] h_v / nT \]

\[ = \left[ nQ \left( \frac{Q}{P} + (n-1) \frac{(1-y)Q}{D} \right) - \frac{n^2 Q^2}{2P} \right] - \frac{(1-y)Q(n(n-1)Q)}{2D} \left[ \frac{(1-y)Q}{D} \right] \ h_v \frac{(1-y)Q}{D} \]

\[ = h_v \frac{Q}{2} \left[ 1 + (n-2) \left( 1 - \frac{D}{(1-y)P} \right) \right] \]  

(3)

Setup, transportation and warranty costs:

For each production run, the setup cost per year is \( S_v/nT \). Since quantities for defective items are random, a fixed cost and a variable cost are considered, and the vendor receives \( n \) deliveries of defective items during vendor’s cycle. As a result, the transportation cost per year is \( n(F_v + C_v Q)/nT \). Furthermore, the warranty cost for defectives items incurred by the vendor has \( wDy/1-y \).

The vendor’s annual expected total cost is obtained as the sum of the setup cost, holding cost, transportation, and warranty cost.

\[ ETC_v(Q, y, n) = \frac{S_v D}{n(1-y)Q} + h_v \frac{Q}{2} \left[ 1 + (n-2) \left( 1 - \frac{D}{(1-y)P} \right) \right] + \frac{DQy}{x(1-y)Q} + \frac{wDy}{1-y} \]  

(4)
The total cost in (4) does not include any investment on the part of the vendor to improve the process quality. However, as mentioned earlier, process quality is an important tool in the hands of the decision maker since its control is needed to lower associated costs incurred and the production of smaller batch sizes of better quality products. Therefore, it is quite appropriate for the vendor to make an investment to try and reduce the number of defective items produced.

Assuming a logarithmic investment function of the form 

\[
\phi(y) = \delta \ln \left(\frac{y}{y_0}\right)
\]

is used, where \(1 / d\) is the fraction of the reduction in percentage of defective items per dollar increase in investment. Hence, the expected annual total cost of the vendor can be obtained as

\[
ETC_v(Q, y, n) = \frac{S_D}{n(1-y)Q} + \frac{Q}{2} \left[ 1 + (n-2) \left( 1 - \frac{D}{(1-y)P} \right) \right] + \frac{D(F_c + C_y Q)}{(1-y)Q} + \frac{wDy}{1-y} + \frac{i\delta \ln \left(\frac{y_0}{y}\right)}{y}
\]

where \(i\) is the fractional opportunity cost.

### 3.3 Integrated expected cost with quality improvement

The expected annual total cost of the integrated system is the sum of the vendor’s and the buyer’s expected annual total costs which is given by

\[
ETC(Q, y, n) = ETC_v(Q, n) + ETC_b(Q, y, n)
\]

\[
= \frac{D(S_o + S_y + nF_c + nC_y Q)}{n(1-y)Q} + h_i \left[ \frac{Q(1-y)}{2} + \frac{DQy}{x(1-y)} \right] + \frac{Q}{2} \left[ 1 + (n-2) \left( 1 - \frac{D}{(1-y)P} \right) \right] + \frac{D}{1-y} \left( d + wy \right) + \frac{i\delta \ln \left(\frac{y_0}{y}\right)}{y}
\]

### 4. ENVIRONMENTAL CONSIDERATION WITH CARBON EMISSIONS

Many leading companies, such as Hewlett Packard, Walmart, Tesco, Samsung, and UPS, have focused on the opportunities of green supply chain management and initiated the process of reducing burden of their supply chain on the environment. In particular, they design and operate supply chains to reduce their carbon emissions since CO2 is the dominant release due to fuel combustion as in \([24-25]\). In this study, we focus on reducing CO2 emission in transporting inventory. We categorize the CO2 emission cost into fixed and variable. The fixed cost depends on several factors: distance between the vendor and buyer (e.g., in miles), fuel efficiency (e.g., in miles per gallon), and CO2 emission per gallon (e.g., in pounds per gallon). From this information, one would be able to determine the emission for the forward as well as for the reverse supply chains. Then, multiplying them with the emission cost per pound of CO2, the fixed emission costs can be determined. The variable emission cost depends on actual weight of the shipment, which would be proportional to the shipment size. In the forward supply chain, shipment size \(Q\) is shipped from the vendor to the buyer and the shipping cost is paid by the buyer. In the reverse supply chain, defective items \(yQ\) are shipped back to the vendor, who is responsible for the shipping cost. Let \(E_b\) and \(E_v\) be the fixed emission costs in the forward and reverse supply chains, respectively. Let \(L_b\) and \(L_v\) be the variable emission costs per item in the forward and reverse supply chains, respectively.

### 4.1 Integrated expected total cost with quality improvement and carbon emissions

Considering environment costs for the supply chain, the annual expected total cost for the buyer is given as follows:

\[
UETC_b(Q, y, n) = \frac{S_D}{n(1-y)Q} + \frac{F_c D}{(1-y)Q} + \frac{D}{1-y} + h_i \left[ \frac{Q(1-y)}{2} + \frac{DQy}{x(1-y)} \right] + \frac{yQ}{Q(1-y)} + \frac{L_b + L_v QD}{(1-y)Q}
\]

The annual expected total cost for the vendor is given as follows:
The annual expected total cost for the integrated green supply chain is the sum of the annual expected total cost for the buyer and vendor, and given by

\[
UTC_g(Q,y,n) = UTC_b(Q) + UTC_v(Q,y,n)
\]

\[
= \frac{D(S_b + S_v + nF_b + nC_v)Q}{n(1-y)Q} + \frac{D(E_b + E_v + L_bQ + L_vQ)Q}{(1-y)Q} + h_b \left[ \frac{Q(1-y)}{2} \right] + \frac{DQ_v}{x(1-y)}
\]

\[
+ h_v \left[ \frac{Q(1-y)}{2} \right] + \frac{DQ_v}{x(1-y)}
\]

It can be verified that for given values of \(n\), the annual expected total cost for the green supply chain, \(UTC_g(Q,y,n)\), is a convex function on \(Q\) and \(y\). In the following section, we develop a solution procedure to derive the optimal values of \(Q\), \(y\), and \(n\) such that the joint expected annual total cost \(UTC_g\) is minimized.

The expected annual total cost \(UTC_g\) is convex in \(n\), since it is easy to see that

\[
\frac{\partial UTC_g}{\partial n^2} = \frac{2DQ}{n(1-y)Q} > 0 \quad \forall n \geq 1
\]

For fixed values of \(n\), \(UTC\) can be shown to be convex in \(Q\) and \(y\), since

\[
\frac{\partial UTC_g}{\partial Q^2} = \frac{2D(S_v + S_v + nF_b + nC_v)}{n(1-y)Q^2} > 0
\]

\[
\frac{\partial UTC_g}{\partial y^2} = \frac{2D(\Delta + 2nDQ_v + E_v + L_vQ)}{nQ(1-y)^2} + \frac{DQ_v}{xP(1-y)^3} + \frac{2D(w+d)}{(1-y)^2y^2} > 0
\]

where \(\Delta = S_b + S_v + nF_b + nF_v\).

Equating to zero the first derivatives of \(UTC\) with respect to \(Q\) and \(y\), we have
\[ \frac{\partial UTC}{\partial Q} = \frac{\partial Q}{\partial Q} \left[ \frac{\partial C}{\partial Q} + \frac{\partial D}{\partial Q} \right] + \frac{\partial L}{\partial Q} \]

\[ \frac{\partial UTC}{\partial y} = \frac{\partial y}{\partial y} \left[ \frac{\partial C}{\partial y} + \frac{\partial D}{\partial y} \right] + \frac{\partial L}{\partial y} \]

On simplification, Eq. (13) yields the following:

\[ Q_\ell = \frac{2\alpha DP(\Delta + nE_\ell + E_i)}{nh[xP(1-y)^2 + 2DPy] + nh[(xP(1-y) + x(n-2)(1-y)P - D)]} \]

4.2 Algorithm

It is obvious from (13)–(14) that the control parameters are not independent of each other. First, the algorithm is initiated by setting \( y = y_0 \) where \( y_0 \) is the original percentage of defective items produced. Next, an initial value of \( Q \) in (15) is calculated by setting \( y = y_0 \). This is then compute \( y \) from (14) using the initial value of \( Q \). This process is followed till a suitably stable solution is reached. It is to be noted here that if the updated value of \( y \) is found to be greater than the initial value \( y_0 \), then the updated value is rejected. This follows intuitively since making an investment to improve process quality cannot end up making the production process even more imperfect than it originally was. Following the same argument, the value of \( y \) cannot be set less than zero as well. The solution procedure can therefore be stated as follows:

(1). Step 1: Set \( UTC_{n-1}^* = \infty \) and \( \ell = 0.001, n = 1 \).
(2). Step 2. Set \( y = y_0 \) and compute \( Q_0 = Q_\ell(y_0) \) from (15).
(3). Step 3. Compute \( y \) from (14) using \( Q_0 \). If \( y \geq y_0 \), set \( y = y_0 \).
(4). Step 4. Compute \( Q \) from (15) using \( y \). If \( |Q - Q_0| \leq \epsilon \), compute \( UTC_{n}(Q, y, n) \) and go to Step 5. Else set \( Q_0 = Q \) and go to Step 3.
(5). Step 5. If \( UTC_{n}^* \geq UTC_{n+1} \), set \( UTC_{n+1} = UTC_{n}^*, Q^* = Q, y^* = y, n = n+1 \) and go to Step 2. Else \( n^* = n-1 \) and stop. The corresponding values of the control parameters for \( n^* = n-1 \) give the optimal solution.

5. NUMERICAL EXAMPLE

To illustrate the proposal model, we consider the following data: \( D = 1000, P = 3200, S_h = 50, S_i = 400, F_b = 25, F_v = 20, C_1 = 1, h_b = 10, h_i = 4, x = 2152, d = 0.25, w = 20, E_0 = 4, L_h = 0.5, L_i = 100, L = 10, y_0 = 0.22, \alpha = 5000, i = 0.2 \).

It is seen that for fixed values of \( Q \) and \( n \), the expected annual total cost function \( UTC \) is convex in \( y \). An illustration is provided for \( y_0 = 0.22 \). It is obvious from Table 1 that with the increase in the warranty cost \( w \) to be paid by the vendor, there is an increase in the optimal total cost incurred by the supply chain. The optimal value of the percentage of defective items also reduces with an increase in warranty cost. This is intuitively correct since if the vendor has to pay a higher warranty cost for producing defective items, it would be beneficial for him to reduce the number of defective items produced. Similarly, when an increase in variable emission costs \( (L_h \ and L_i) \) will result in an increase on the expected total cost and a corresponding decrease in the percentage of defective items produced in the reverse supply chain. It imply that the inclusion of the emission costs increase the expected annual total cost for the supply chain. Similarly, with a decrease in \( d \) there is a decrease in the expected total cost incurred and a corresponding decrease in the percentage of defective items produced. This makes sense from a practical point of view since a decrease in \( d \) implies that there is a greater reduction in the production of defective items per dollar increase in investment. So, the production process quality is improved to a greater extent while the amount of investment required for this improvement is reduced, thereby reducing the optimal total cost.
TABLE 1. EFFECT OF PARAMETERS OF \( W, L_b, L_v, \) AND \( d \)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Values</th>
<th>( Q^* )</th>
<th>( n^* )</th>
<th>( y^* )</th>
<th>( UTC^* )</th>
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<td>( w_v )</td>
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<td>3</td>
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<tr>
<td></td>
<td>30</td>
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<td>3</td>
<td>0.022</td>
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6. CONCLUSIONS

In this paper, environmental impact is incorporated in determining the optimal production–shipment policy by taking into account the fixed and variable carbon emission costs. In addition, the problem of optimal investment of the vendor in reducing the defect rate is analyzed for an integrated single-vendor single-buyer coordinated supply chain model. It is assumed that each shipment has a percentage of defective items and that, on receiving the items from the vendor, the buyer inspects these items in a non-negligible inspection period. It is further assumed that the vendor makes an investment in improving the production process quality. The expected annual total cost, the optimal shipment size, the optimal number of shipments, and optimal process quality are derived for this integrated inventory model that takes into account the environmental impact and investment in quality improvement into its decisions. A numerical example is presented to show the effects of environmental impact and quality improvement on the optimal production–shipment policy. It is useful particularly for JIT inventory systems where the vendor and the buyer form a strategic alliance for profit sharing. There are several ways to extend this study. For example, future research could focus on the mix of equal and unequal shipment sizes in determining the optimal policy. In addition, uncertainties in a two-level coordinated supply chain such as demand uncertainty, lead time uncertainty, order-processing time, etc. can be further considered.

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Trade Off Versus Pecking Order Theories Of Capital Structure On The JSE
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David Mcclelland, University of the Witwatersrand, South Africa

ABSTRACT

This paper tests the trade off against the pecking order models for firms listed on the Johannesburg Stock Exchange. We find that the pecking order model has more statistical power than partial adjustment models in rejecting random financing behavior in simulated data sets. Additionally, the Censored Tobit Regressions appear to perform better than the GMM model at rejecting target adjustment behavior on randomly generated data sets. We add to the empirical literature on capital structure dynamics by identifying firms that off (on) target and applying existing and alternative trade off models. Tests on real data show that partial adjustment models confirm (reject) evidence of targeting behavior for off (on) target firms. However, when false financing gaps are simulated, the GMM and Censored Tobit Regressions fail to reject targeting behaviour at a rate of 74.8 and 45.8 percent, respectively. We conclude that partial adjustment regressions are not suitable for examining capital structure speeds of adjustment.
Karl Marx On The 21st-Century Trade Unionism: A Discourse On Their Past, Present And Future
Thulani Zengele, University of South Africa, Pretoria, South Africa

ABSTRACT

Trade unionism has a very long and rich history, as its roots are traceable to the 1850's. Most importantly, trade unionism and the proletariat have a symbiotic relationship. In his work, The Communist Manifesto of 1848, Marx argues that of all the classes that stand face to face with the bourgeoisie today, the proletariat alone is a revolutionary class. Marx declared that the future task of trade unions was to reach out to the poor and the oppressed; the lowest paid, and push forward political and social movements that would aid in the emancipation of the working class as a whole. Given the material challenges faced by the South African Democratic Teachers Union (SADTU) perhaps I should put the following question on the table, is Marx still relevant on critiquing trade unionism in the 21st century? Notwithstanding the fact that trade unions have been operating in South Africa since the 1980s, I maintain that much of what is flawed within trade unionism today is explicable in Marxist terms. Drawing upon Marx's works and other related studies on teacher unionism in South Africa, I critique SADTU's role in the liberation of the proletariats (teachers) from bourgeois (capitalist) exploitation.
Development of Students’ Logical Thinking And Software
Vladimir Nodelman, Holon Institute of Technology, Israel

ABSTRACT

Background

The traditional opinion that the study of mathematics develops the skills of students’ logical thinking (SLT) is generally accepted. Nevertheless, the test results show that this is not entirely true. The problem of students’ inability to prove, and the absence of their awareness of the need in proof is well known in mathematics education. In this regard, with the goal of developing SLT, it is proposed to study the elements of logic in an explicit form. Unfortunately, this way is ineffectual. On the other hand, it is known that the effectiveness of the process of development of SLT depends on the way of organizing a special developmental activity. At the same time, there is no concrete approach in pedagogical theory to the solution of the question of how to organize such learning process.

Software development is possible only on condition of unambiguous understanding of the scope of its application. This circumstance determined our research of a unified way of developing SLT - the subject of implementation in the corresponding software.

Methods

The analysis of logical structure of mathematical concepts and correspondent students’ activities of their assimilation allowed to:

1. Discover and classify different types of mathematical objects and students’ activities, which let, in addition to mastering the content, to implicitly develop the necessary intellectual skills in the construction of deductive reasoning, long before meeting the explicit necessity of proof at advanced stages of studies.
2. Create an optimal system of these types, which is sufficient to guaranty the knowledge assimilation, and consists of minimal number of types. The search for optimal system was caused by requirement of its implementation in educational software.

Results

In result of the study:

1. Was discovered the fundamental role of the mental actions
2. • of recognition, and
   • of drawing conclusions from the fact of belonging or not belonging to the concept (reverse to recognition) in the process of mastering the concept as well as in the development of STL, in formation of students’ abilities and needs in proof.
3. Was proved the importance and shown the function and place of counterexamples in these studies.
4. Was created an accurate and optimal typology of tasks.
5. Was provided a general algorithm of construction of such systems of types.

Shown general ideas of building relevant software, realized in the author’s noncommercial computer program VisuMatica and Microsoft Excel® VBA application.

6. Experimental results show the effectiveness of the proposed approach.
The presentation is illustrated by examples of the application of VisuMatica in mathematics courses of various levels from middle school to the academy.

**Keywords:** Logical Thinking, Concept, Tasks’ Types, Counterexample, Software
Arabic Children’s Literature Portrayal Of People With Disabilities: A Mirror Reality Of Distortions Or Restorations?
Negmeldin Alsheikh, United Arab Emirates University, United Arab Emirates
Hala Elhoweris, United Arab Emirates

ABSTRACT
This study explored Arabic children’s literature portrayal of individuals with disabilities. The study analyzed 200 different children literature genres including picture books, realistic fiction, information books, and fantasy. Two hundred children’s literature books were reviewed. Findings of this study indicated that people with disabilities were portrayed negatively in Arabic children’s books.

Keywords: Attitudes, Images, Arabic Children’s Literature, Individuals with Disabilities, UAE
Nursing Students' Perceptions Towards Working in Gerontological Nursing (GN) Settings
Mei Hua Kerry Hsu, Macao Polytechnic Institute, Macao

ABSTRACT

Purpose: This study aims to explore and gather views and perceptions from Macao nursing students towards working in gerontological nursing (GN) settings after graduation.

Method: This study adopted qualitative method by using semi-structure and open-ended questions for data collection to explore views and perceptions to work in gerontological nursing (GN) setting after graduation among nursing students in Macao.

Results: 30 nursing students were recruited into this study. Most participants were female (80%) with mean age 21.6 (SD=1.75). Most nursing students answered “don’t mind and would be happy for it” while 5 nursing students (16.6%) replied they don’t want to work at GN settings. Summary from their views and thought related to work in GN: 1. Good health status and physical conditions are needed for working at GN; 2. Salary and working environment would be concerned; 3. GN professional training and career promotion should be included for the professional development.

Conclusion: As ageing society, health care professionals are needed for the caring older population. This study concluded the views and perceptions from nursing students in Macao. Moreover, the findings provided information to nursing educators and administrators for the future plan in the GN education and practice.

Keywords: Nursing Student; Gerontological Nursing; Qualitative Research Method.
What Makes The Difference? Course Completers And Non-Completers
Tal Soffer, Tel Aviv University, Israel
Anat Cohen, Tel Aviv University, Israel

Introduction
In recent years, higher education institutions have been increasingly developing and offering online courses as part of their academic curriculum (Lee, 2016; Toven-Lindsey, Rhoads, & Lozano, 2015), providing access to a wide range of audiences and improving teaching and learning processes (Macfadyen & Dawson, 2010; Roby, Ashe, Singh, & Clark, 2013). However, along with the growing number of online courses there is an increasing concern regarding the persistence of students in such courses, as well as with the high dropout rates of students from these courses compared to face-to-face courses (Clay, Rowland & Packard, 2009; Cohen, 2015; Otter et al., 2013). The dropout rate of online courses stands at about 25-40%, while the dropout rate from academic courses, which are held on campus, is about 10-20% (Cheng, Kulkarni, & Klemmer, 2013; Levy, 2007; Nistor & Neubauer, 2010; Park & Choi, 2009). Moreover, previous studies indicated that lack of persistence which is reflected in low engagement and poor self-regulation are important factors leading to attrition among students in online courses and inadequate academic achievements (Angelino, Williams, & Natvig, 2007; Otter et al., 2013; You, 2016). Therefore, it is essential to understand the ways in which students behave in an online courses and how it influence their learning and keeps their motivation and participation in the online course assignments. In this context, the present study examined students' behavior characteristics in four online courses from different disciplines and with a similar pedagogical model and their impact on academic achievements.

The main goals of this study were to examine the differences in students' behavior between those who have completed and those who have not completed the online course, and to explore the variables that may predict success in online courses. Students' behavior was explored by analyzing the learning management system (LMS) log files using learning analytics methods. These methods enable us to find out about the learners' behavior and understand its impact on learning persistence and online course completion.

Background
Student' Behavior in Online Courses

Previous research showed that students who had been actively engaged in their academic work showed a high level learning outcomes. In other words, a significant relationship between active participation in online courses and academic performance was found (Griffiths & Moallem, 2016; Hew, 2016; Macfadyen & Dawson, 2010; Romero, López, Luna, & Ventura, 2013). When exploring students' behavior in online courses it is usually measured by students' activities in regard to three distinct strands: engagement with course learning materials, interpersonal interaction among instructors and students, and performance in tasks and assignments. In this section, we briefly describe the work conducted in each strand:

Engagement with course learning materials - Online courses may offer an effective and enjoyable learning environment if they are designed properly, in a way that emphasizes interaction, clear structure, and strong content (Driscoll et al., 2012). Online courses can take advantage of being able to offer course content through a wide range of up-to-date and challenging web resources (e.g., text, audio, video lectures, presentation slides, 3D simulations and visualizations, multiuser games). Some researchers claim that students perceive the ease of access to varied, high quality, and up-to-date learning materials as benefiting their learning in an online course (Palmer & Holt, 2010; Soffer, Kahan, & Livne, 2016). Moreover, the course content is a significant driver in students' perception of the quality of the learning experience (Peltier, Schibrowsky, & Drago, 2007; Wu, 2016), as in recent years video is perceived as a rich and powerful medium (Chen & Sun, 2012; Ozan & Ozarslan, 2016; Zhang, Zhou, Briggs, & Nunamaker, 2006).
Thus, a rich learning environment contributes to the effectiveness of online learning (Crawford-Ferre & Wiest, 2012) and enables more time to be dedicated to learning materials compared to classroom-based learning (Robertson, Grant, & Jackson, 2005), as well as enabling students to learn at their own pace (Lim, 2016). In addition, online learning provides more autonomy and control and allows for flexibility in terms of time and location (Palloff & Pratt, 2001; Rodriguez, Rooms, & Montanez, 2008). Organizing the learning materials into learning units seems to help students manage their learning, allowing them to focus on new material. Furthermore, online learning provides a clear, organized, and consistent structure which was found to be related to higher levels of student satisfaction (Paechter, Maier, & Macher, 2010; Shea, Swan, Fredericksen, & Pickett, 2002).

Interpersonal interaction - Communication is an important component in online courses, especially given the absence of physical meetings. Through interpersonal interaction and information sharing, online courses enable collaborative learning and contribute to significant knowledge acquisition (Agudo-Peregrina, Iglesias-Pradas, Conde-González, & Hernández-García, 2014; Bell, 2011; Cormier, 2008; Siemens, 2014; Tee & Karney, 2010). The instructor usually initiates the forums and allows learners to join the discussions and interact on a variety of issues related to the subject (Chaturvedi, Goldwasser, & Daumé III, 2014), seek help from peers, and discuss assignments; although not necessarily (Akyol & Garrison, 2008). The learners are exposed to ideas, opinions, and comments from colleagues. They contribute from their personal information as well as acquire knowledge created in the forums (Cacciamani, Cesareni, Martini, Ferrini, & Fujita, 2012). In addition, instructor-student communication contains feedback regarding students' activities and performance, and can be used to answer questions regarding subject matter. When no immediate feedback is available from the instructor, interpersonal interactions among students become essential for fostering a sense of connectedness and the feeling of being a part of an online learning community (Wallace, 2004). This interaction has a significant and positive impact on student satisfaction (Arbaugh, 2005; Marks, Sibley, & Sher, 2009; Toven-Lindsey et al., 2015), while the absence of proper communication might lead to a sense of isolation and a lack of sense of community (Song et al., 2004).

Performance in online assignments - Assessment of student knowledge and understanding of subject matter is used to promote learning, as well as to ensure that students meet the intended learning outcomes. In online courses, assessment of learning processes becomes crucial especially in light of the fact that it serves as a means for increasing students' involvement and engagement with the course materials (Planar & Moya, 2016). Assessment tools assist the instructor in tracking and assessing students' knowledge in order to provide feedback. This feedback enables the students further guided engagement and the opportunity to revise the assignments (Bolliger & Martinelle, 2004; Cramp, 2011). Notably, feedback on assignments is important and must be given in a timely manner in order to keep the learners involved and motivated (Hattie & Timperley, 2007; Robertson et al., 2005). When designing the course assignments, it is essential to incorporate deadlines, which are valuable to students. Deadlines help students avoid procrastination, encourage them to spend time on assignments, support them in self-regulation, and provide them with a context for regular contact with their instructor and peers (Graham, Cagiltay, Lim, Craner, & Duffy, 2001; Northrup, 2002).

Assessing Student behavior through Learning Analytics

Various methodologies for assessing student activity in these courses are developing. Some are based on online assignments, quizzes, and tests (Schiming, 2012); and some are based on learning analytics, which is the analysis of students' learning activity data which accumulates in real time in the web-log files of the LMS in which the fully online courses are offered (Blikstein, 2011; Broadbent & Poon, 2015; Goda et al., 2015; Johnson et al., 2012; McElroy & Lubich, 2013; Romero-Zaldivar, 2012). Hence, in recent years we have witnessed the growing use of learning analytics as a popular method to analyze and assess students' behavior and achievements in online courses (Soffer et al., 2016; You, 2016). One of the reasons for this is the opportunity to analyze the actual activities of the learners in the learning environment, as opposed to self-reported data which stems from questionnaires. Thus, the online learning environments which use LMSs enable the trace of students' activities with regard to self-regulated learning behavior at any stage of a course's progression for the evaluation of learning processes and learner behavior through formative as well as summative assessment. The collective data could assist in monitoring the students' behavior, participation, and achievements during the online course, as well as identifying differences among students in order to detect and even predict dropout from the course (Cohen, 2015; Lim, 2016).
The Study Aims and Questions

Since student behavior in online courses is a strong predictor of student success and achievement of learning outcomes, the aims of this study are to explore the differences among students in regard to their behavior in academic online courses and to predict variables which have an effect on completion or non-completion of a course. Thus, students' activities in the online course will be measured in regard to learning materials, interpersonal interaction, and learning outcomes (ongoing assessment of students' assignment performance, and final exam).

In order to achieve these research aims, two main questions were asked:

1. Are there significant differences between students who completed and did not complete the course, in engagement with learning materials, interpersonal interaction, and assignments?
2. What are the students' online activities which predict completion versus non-completion of the course?

Method

Research Field

The present study examined four online courses (N=646) which were offered during the academic year 2015/2016. These courses are part of a special program called "The Complementary Studies Program". The program is intended for undergraduate students at the university and offers them the opportunity to study subjects that fascinate them. It is mandatory for all undergraduate students on campus and requires them to take three courses in fields that are polar opposite from their degree program. Thus, the courses are characterized by a wide range of participants from various disciplines. These four courses were selected since they were developed based on the same pedagogical model and unified structure. In addition, all four courses were semester-long courses, two credit hours each, and had a large number of students (> 150).

Since instructors' course preparation is significantly and positively related to the students' viewing activities (Jaggars & Xu, 2016; Ma et al., 2015), a consistent instructional course model was designed and implemented as part of the online course development for each of the four courses, consisting of four main elements:

• Learning units, which included twelve learning units that comprised the core of the online course materials. Each learning unit covered a different topic and consisted of: a video lecture of the instructor, a summary of the lecture, reading/viewing materials (e.g., articles, original literary texts, YouTube links), and assignments.
• Communication channels, which included instructor-to-student discussion forums and student-to-student discussion forums.
• Additional materials which were related to the course subject.
• General information about the course subject, its instructor, and guidelines regarding learning in the course.

The online courses were delivered on the Moodle LMS, and were asynchronous. The first two courses (referred to in this research as course A and course B) were studied in the humanities faculty, the third course (referred to in this research as course C) was studied in the art school, and the fourth course (referred to in this research as course D) was studied in the medicine faculty.

Participants

The study included data from the online activity of students (N=646) who participated in the four online courses during the academic year 2015/2016. Table 1 presents the frequency of students who participated in the online courses and their completion percentage: completed the course or not. A student did not complete the course if he/she did not have an average passing score for the ongoing assignments, and final exam, or did not attend the final exam. The majority of students (74% on average) passed their course. In addition, as can be seen, while students did not finish courses A, B, and C mainly because they did not attend the final exam, the majority of students who did not finish course D failed the final exam. In order to compare the online activities of those students who completed the course compared to those
students who did not complete the course, we merged students who failed the exam with students who did not attend the final exam, which represented students who did not finish the course.

Table 1. Frequencies (%) of students who completed the course, and did not complete the course for each of the courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Completers (%)</th>
<th>Non-completers (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course A</td>
<td>178(85)</td>
<td>32(15)</td>
<td>210</td>
</tr>
<tr>
<td>Course B</td>
<td>64(74)</td>
<td>23(26)</td>
<td>87</td>
</tr>
<tr>
<td>Course C</td>
<td>74(67)</td>
<td>36(33)</td>
<td>110</td>
</tr>
<tr>
<td>Course D</td>
<td>170(71)</td>
<td>69(29)</td>
<td>239</td>
</tr>
</tbody>
</table>

Procedure

The study was conducted using learning analytics and statistical methods. The data was collected from two sources: a) the LMS which included log files with student activities and online assignment scores; and b) the exam grades and the final score in the course, which were provided manually by the instructors. Data mining was applied on a log data set, with over 188,510 records, where the LMS automatically documented the students' activity during the courses. After the courses ended, the data was retrieved and processed using SQL queries. Following that, functions were written in order to compute a set of variables which described each student activity in the courses, in regard to course homepage, learning units, video lectures, assignment submissions, supplementary materials, and forums. Using SPSS-23, Anova analysis was applied to analyze the differences between completers and non-completers in regard to behavior in the courses. In addition, two regression models (logistic regression and hierarchical linear regression) were used in order to find the predictor variables for completion.

Measures: The present study included 13 variables that represented the students' activity (video activity in days; videos viewed (%); minutes of video viewed (%); writing in forums; reading the forum posts; course homepage entries; learning unit entries; average unit page entries; supplementary material entries; assignments submitted (%); total entries) and their course grades (assignments, final exam, and final course grade).

Results

Differences between Students who Completed and did not Complete the Course in regard to their Online Engagement

In order to examine the differences between students who completed the courses and students who did not complete the courses in regard to their online activities, eleven ANOVA analyses were conducted (one for each of the dependent variables, separately), with completion status (yes/no) and course subject as independent variables. Bonferroni adjustments to correct for 11 comparisons ($p<.004$) were used. Results are presented in Table 2. As can be seen, students who completed their courses were highly engaged with the videos. They had more days of video activity, viewed a higher percentage of the videos, and had a higher percentage of video minutes viewed. In addition, they were highly engaged with other activities in their course. They entered their course homepage more, entered the learning units more, entered unit pages more times on average, and entered the supplementary materials more than students who did not complete their courses. Furthermore, they read the forum posts more (thus, they were more passively involved in forums). These differences were irrespective of course subject.

In regard to the rest of the activities, students who completed their course had more total entries and submitted more assignments than students who did not complete their course. However, these differences were found to depend on course subject (the interactions are presented in Figures 1 and 2, respectively). Specifically, Bonferroni post-hoc comparisons indicated that this was the case in all courses ($p < 0.001$) except for course B ($p = 0.11, p = 0.20$, respectively).

Finally, regardless of whether or not students completed their course, differences were found between course subjects in the percentage of videos that were viewed, the percentage of video minutes that were viewed, students' passive involvement in forums, homepage entries, and supplementary material entries. Specifically, Bonferroni post-hoc
comparisons indicated that students in course A viewed a lower percentage of videos than students in courses B and C ($p=0.001$, $p=0.003$, respectively) ($M=30.57$, $SD=32.92$, $M=46.06$, $SD=33.79$, $M=46.41$, $SD=41.66$, respectively). Similarly, students in course A also viewed a lower percentage of video minutes than students in courses B and C ($p=0.004$, $p=0.01$, respectively) ($M=51.44$, $SD=67.60$, $M=84.99$, $SD=96.14$, $M=85.89$, $SD=107.29$, respectively). In addition, students in course C were more passively involved in forums than students in courses A, B, and D ($p<0.001$) ($M=22.60$, $SD=21.95$, $M=10.72$, $SD=12.79$, $M=9.23$, $SD=9.37$, $M=7.45$, $SD=10.93$, respectively). Students in course B entered the homepage more times than students in course A ($p=0.001$) ($M=101.52$, $SD=65.75$, $SD=6.03$, respectively). Finally, students in course D entered the supplementary materials more times than students in courses B and C ($p<0.001$) ($M=9.18$, $SD=6.65$, $M=1.39$, $SD=1.11$, $M=3.73$, $SD=0.92$, respectively), and students in course A entered the supplementary materials more times ($M=6.75$, $SD=0.88$) than students in course B ($p=0.001$).

Table 2. Means, standard deviations and F statistics of the activity parameters, according to completion (yes/no) and course subject

<table>
<thead>
<tr>
<th>Activity Parameter</th>
<th>Completion</th>
<th>Non-completion</th>
<th>$F_{(df)}^{1}$</th>
<th>$F_{(df)}^{2}$</th>
<th>$F_{(df)}^{3}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video activity in days</td>
<td>7.42</td>
<td>7.04</td>
<td>2.99</td>
<td>3.12</td>
<td>55.21(1,638)**</td>
</tr>
<tr>
<td>Video views (%)</td>
<td>42.81</td>
<td>37.98</td>
<td>20.40</td>
<td>24.10</td>
<td>58.60(1,638)**</td>
</tr>
<tr>
<td>Minutes of video viewed (%)</td>
<td>73.95</td>
<td>87.46</td>
<td>39.00</td>
<td>78.18</td>
<td>22.15(1,638)**</td>
</tr>
<tr>
<td>Writing in forums</td>
<td>0.18</td>
<td>0.83</td>
<td>0.04</td>
<td>0.35</td>
<td>4.57(1,637)**</td>
</tr>
<tr>
<td>Reading the forum posts</td>
<td>12.67</td>
<td>15.63</td>
<td>7.24</td>
<td>10.82</td>
<td>23.25(1,637)**</td>
</tr>
<tr>
<td>Course homepage entries</td>
<td>102.56</td>
<td>66.60</td>
<td>56.14</td>
<td>49.55</td>
<td>65.58(1,637)**</td>
</tr>
<tr>
<td>Learning unit entries</td>
<td>34.60</td>
<td>48.55</td>
<td>11.79</td>
<td>13.94</td>
<td>23.24(1,637)**</td>
</tr>
<tr>
<td>Average unit page entries</td>
<td>1.26</td>
<td>1.43</td>
<td>0.42</td>
<td>0.71</td>
<td>39.20(1,637)**</td>
</tr>
<tr>
<td>Supplementary material entries</td>
<td>8.76</td>
<td>10.16</td>
<td>4.32</td>
<td>7.59</td>
<td>19.17(1,637)**</td>
</tr>
<tr>
<td>Total entries</td>
<td>306.44</td>
<td>210.28</td>
<td>142.02</td>
<td>115.47</td>
<td>75.31(1,637)**</td>
</tr>
<tr>
<td>Assignments submitted (%)</td>
<td>94.81</td>
<td>17.69</td>
<td>62.68</td>
<td>40.81</td>
<td>223.20(1,638)**</td>
</tr>
</tbody>
</table>

*Note: $F_{(df)}^{1}$ = Main effect of completion (yes/no); $F_{(df)}^{2}$ = Main effect of course subject; $F_{(df)}^{3}$ = An interaction effect of completion by course subject.

Figure 1. Completions and non-completions by course subject interaction and total entries
Predicting Completion versus Non-completion of the Course, based on Students' Online Activity

Logistic regression analysis was conducted in order to predict completion of the course based on online activity. Course subject was entered in the first block. Since the percentage of non-completion was the lowest in course A, this course was selected as the reference category for the calculated dummy variable for course subject. Results indicated that both the first block, which included course subjects (dummy coded), and the second block, which included the activity variables, were significant, $\chi^2(3)=18.15, p<0.001$; $\chi^2(11)=191.28, p<0.001$, respectively. The final model which included both blocks was also significant, $\chi^2(14)=209.43, p<0.001$, and is presented in Table 3. As can be seen, course subject predicted completion, such that the chance to complete course A was higher than the chance to complete course B by 4.34, higher than the chance to complete course C by 4.31, and higher than the chance to complete course D by 3.01. Beyond course subject, the only other significant predictor of completion was percentage of assignments submitted, such that with each increase of 1 submitted assignment, the chance to complete the course increased by 1.03.

Table 3. Logistic regression for predicting completion versus non-completion of the course, based on students' online activity

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>Wald</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course subject (A versus B)</td>
<td>-1.15</td>
<td>0.51</td>
<td>8.24*</td>
<td>0.23</td>
</tr>
<tr>
<td>Course subject (A versus C)</td>
<td>-1.46</td>
<td>0.46</td>
<td>10.13**</td>
<td>0.23</td>
</tr>
<tr>
<td>Course subject (A versus D)</td>
<td>-1.10</td>
<td>0.41</td>
<td>7.32**</td>
<td>0.33</td>
</tr>
<tr>
<td>Video activity in days</td>
<td>0.05</td>
<td>0.05</td>
<td>1.16</td>
<td>1.05</td>
</tr>
<tr>
<td>Video views (%)</td>
<td>0.01</td>
<td>0.01</td>
<td>0.97</td>
<td>1.01</td>
</tr>
<tr>
<td>Minutes of video viewed (%)</td>
<td>-0.27</td>
<td>0.20</td>
<td>1.67</td>
<td>0.76</td>
</tr>
<tr>
<td>Writing in forums</td>
<td>0.33</td>
<td>0.33</td>
<td>0.97</td>
<td>1.39</td>
</tr>
<tr>
<td>Reading the forum posts</td>
<td>0.004</td>
<td>0.01</td>
<td>0.08</td>
<td>1.00</td>
</tr>
<tr>
<td>Course homepage entries</td>
<td>-0.01</td>
<td>0.01</td>
<td>2.69</td>
<td>0.99</td>
</tr>
<tr>
<td>Learning unit entries</td>
<td>0.003</td>
<td>0.01</td>
<td>0.03</td>
<td>1.00</td>
</tr>
<tr>
<td>Average unit page entries</td>
<td>-0.36</td>
<td>0.29</td>
<td>1.51</td>
<td>0.70</td>
</tr>
<tr>
<td>Supplementary material entries</td>
<td>-0.02</td>
<td>0.02</td>
<td>1.19</td>
<td>0.98</td>
</tr>
<tr>
<td>Total entries</td>
<td>0.01</td>
<td>0.005</td>
<td>3.42</td>
<td>1.01</td>
</tr>
<tr>
<td>Assignments submitted (%)</td>
<td>0.03</td>
<td>0.005</td>
<td>44.67***</td>
<td>1.03</td>
</tr>
</tbody>
</table>

*p<0.05 **p<0.01 ***p<0.001
Discussion

Students' engagement with the online courses and identification of their behavior characteristics are attracting increasing attention in the online learning environment (Coates, 2007; Sun & Rueda, 2012). Numerous studies have reported a significant relationship between active participation in online courses and academic performance (Campbell, Finnegan, & Collins, 2006; You, 2016). This active participation can be traced because students' learning behaviors are automatically recorded in the log files of the LMS, which has become common in most educational institutions. Thus, LMSs provide new opportunities for exploring students' learning participation progress and performance (Campbell, 2007).

The present study aimed to examine the learners' behavior characteristics in the online courses using learning analytics, and their impact on academic outcomes, trying to distinguish between course completers and non-completers. The findings indicated that there were significant differences between students who complete and do not complete their online course in most variables in the three distinct behavior strands: engagement with course learning materials; interpersonal interaction among instructors and students (reading the posts in the forums); and performance in tasks and assignments. In all of the strands, the completer's activities were more than twice as high, except for writing posts in the forums which was very low and not found to be significant. These results are in line with previous studies which support the assumption that high engagement with various course activities and time spent in study affects learning outcome and other outcome related behaviors (Wu, 2016). Specifically, the findings of this research supply a comprehensive understanding of the type of behavior reflected in each student's online activity. With regard to course materials, in this research as well as in previous research (Goda et al., 2015), students who completed their course were highly engaged with the videos (Ozan & Ozarslan, 2016), learning unit resources, and supplementary materials. In addition, they were highly, socially engaged with interpersonal interaction (Agudo-Peregrina et al., 2014) and consistently submitted assignments (Lim, 2016). This corresponds to other study findings which demonstrated that students' late submission of assignments and frequency of course logins predicted their course achievement (You, 2016), while students' completion of learning assignments has a positive influence on their interaction in regard to learning (Ma et al., 2015). Furthermore, significant differences were found between course subjects relative to students' behavior, regardless of whether or not they completed their course. Differences were found only in engagement with videos, supplementary materials, and reading posts in the forums. Possible reasons could stem from the difference in the characteristics of the content in each course, the relevance of the course materials, and the characteristics of each lecturer (Yukselturk & Bulut, 2007).

With regard to students' learning activities in the online course which predicts completion of the course, the findings of this study indicated that only the course subject and submission of the ongoing assignments were significant predictors of course completion. With regard to the submission of assignments it is not surprising since they are part of the final grade, as for course subject it could be related to the differences in course characteristics, especially the clarity and relevance of course content.

Understanding the differences between learners' behavior characteristics as well as the variables which predict completion of the course can assist in improving teaching and learning in online courses and reduce dropout; for example, empowering aspects of communication in the course, as mentioned in previous studies (Cohen, 2015; Kožuh et al., 2015), producing dedicated and helpful materials, and integrating suitable assignments along the course. As mentioned in previous studies, the ability to understand the students' online learning activities and evaluate the quality of online teaching and learning is of great importance and assistance to the instructors in designing the online courses, as well as supporting their students (Robinson & Hullinger, 2008).

Limitation and Further Research

Several possible limitations should be noted in the present study. First, despite the differences that were found between completers and non-completers in learning behavior, conclusions regarding causality should be derived carefully and based on further research. The differences that were found can be explained by other things such as the differences between students in various characteristics. For example, students who completed their course may have had greater motivation and better technological orientation, which could have assisted them in their success and completion of their online course. In addition, differences in the instructors' characteristics may have biased results (e.g., personality,
technological skills, teaching strategy). These potential confounders require further investigation. Second, future research should examine a larger sample of courses from diverse disciplines and a heterogeneous student population. Third, the interpersonal communication (active writing in forums) in the online courses in the present study was relatively low and thus may have attenuated significant effect on learning completion and success. Hence, future studies should explore other courses which are characterized with higher active communication.

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Framework For Online Communities Of Practice For Engaging Hotel And Tourism Educators
Joey Wu, The Hong Kong Polytechnics University, Hong Kong

ABSTRACT

The aim of this study is to propose a framework for online communities of practice to help engage educators considering the characteristics of hotel and tourism learning based on existing literature. The results reveal that participation of the community can be encouraged by 1) a participant structure including a mix of expert and novice educators, global members, and hotel and tourism practitioners; 2) up-to-date case studies with a focus and clearly communicated expectations, and face-to-face events; and 3) a platform featuring diverse tools, a recognition system, and member-connecting and guiding tools. The findings of the study will help organizers make better decisions for encouraging members' participation when they develop their online CoPs for hotel and tourism educators.

Keywords: online communities of practice, online learning communities, teacher professional development, hotel and tourism education, hotel and tourism learning

ACKNOWLEDGEMENTS

This research was undertaken as part of the PhD in E-research and Technology Enhanced Learning in the Department of Educational Research at Lancaster University. I am pleased to acknowledge the contribution of tutors and peers in supporting the development of this study and its report as an assignment paper.
Mother-Daughter Relationship
And Daughter’s Body Image

Ofra Walter, Tel Hai Academic College, Israel
Vered Sheenar Golan, Tel Hai Academic College, Israel

ABSTRACT

The adolescent years are characterized by emotional upheaval and hormonal and physiological changes that tend to generate tension and conflict between girls and their parents.

This research study is based on an analysis of the mother-adolescent daughter relationship within 46 mother-daughter dyads. This qualitative research assessed the effect of the daughter's body image (independent variable) and her view of her relationship with her mother (independent variable) on her sense of wellbeing (dependent variable). The study used six tools to evaluate the mother and daughter dyads: a demographic questionnaire; the Body Mass Index (BMI); the Modified Gray's Questionnaire (Body Image); the Leisure Time Exercise Questionnaire (LTEQ); the Mental Health Inventory (MHI) for the measurement of subjective sense of wellbeing; and The Relationship with Mother Questionnaire. Our findings show the centrality of the mother-daughter relationship to the daughter's body image and wellbeing, as well as the importance of the adolescent girl's positive body image to her sense of wellbeing.

Keywords: Body Image; Subjective Wellbeing; Adolescent; Mother-Daughter Relationship
Primacy Views Of Trilingual And Bilingual College Students On Reading And Language Learning
Negmeldin Alsheikh, United Arab Emirates University, UAE

ABSTRACT
This study exclusively focused on bilingual and trilingual College students’ views on reading experiences and language learning. The study used interviews as a qualitative means to glean the views of trilingual college students (n=3) and bilinguals college students (n=10). The study is based on a phenomenological perspective to incorporate a focus on the lived-experience, openness to the participants’ experiences, a primacy of their precise experience descriptions, attempts to bracket premonition, and a search for invariant indispensable meaning in their descriptions of their bilingualism and multilingualism. In a very important sense, this study attempted to get beyond the immediacy of an experienced world in order to articulate the pre-reflective level of lived-world of a bilingual or a trilingual reader. The preliminary results of this study revealed that both bilinguals and trilingual viewed reading as an establish tool for gleaning meaning via communication. On the other hand, trilingual viewed language from a larger intersubjective scope where the shared common understandings through ongoing symbolic interaction with the others. The trilingual also assigned more spatial perspective for reading and learning languages than the bilinguals.
Perceived Impact Of Academic Staff Professional Competencies On Their Task Performances For Quality Instructional Delivery In Universities In South East, Nigeria

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C. C. Ukala, University of Port Harcourt, Nigeria
A. I. Nwabueze, University of Nigeria Nsukka, Nigeria

ABSTRACT

This study investigated the perceived impact of academic staff professional competencies on their task performances for quality instructional delivery in Universities in South East, Nigeria. Four research questions and four hypotheses guided the study. This study adopted a descriptive survey design. The population comprised the 4160 academic staff of five federal universities in the South Eastern State of Nigeria. A sample size of 500 academic staff was drawn using stratified random sampling technique representing 12% of the population. The instrument used was questionnaire tagged ‘PIASPCPTPQ’ developed by the researchers. The questionnaire was validated and test-retest method adopted in testing the reliability, which yielded an index of 0.83. Mean scores and standard deviation were used in answering the research questions while z-test was used to test the hypotheses at 0.05 alpha significant level. The findings revealed that, the academic staff professional competencies needed for quality instructional task performances in universities include: having specialised knowledge of courses to teach, adopting proper use of ICT devices in teaching/research to enhance quality instructional delivery, making proper use of instructional materials during teaching to facilitate quality instruction, and engaging in innovative activities related to education to enhance knowledge creativity among students. Recommendations are as follows: that academic staff should have the knowledge of transmitting culture into the students with the real value needed for societal development as well as relevant technical know-how to enhance self-growth among them. University administrative heads should support academic staff with grants to participate in international conferences, and provide them with new technology devices to enhance their participation in virtual learning programmes.

Introduction

Higher education serves as a qualitative process of bringing about a relatively permanent change in human behaviour for individual growth and societal development. Achieving quality education in line with the above goals depends largely on the level of instructional delivery going on in university institutions. Usually, an academic staff can be seen as one who has undergone a formal training programme and has specialized knowledge of taking one out of darkness in order to see light. Academic staff of universities help learners (students) apply and inquire for new knowledge, search for relevant skills as well as participate in research and community services. They facilitate quality instructions in classrooms, develop new ideas and transfer these ideas into the students, deliver lectures to colleagues and students, participate in research developments to proffer better ways of solving individual and academic problems, explore innovative and creative technological programmes, as well as encourage team building among staff and students. All these when applied, leads to knowledge creation and transfer among staff and students, which help them to improve on relevant skills, attitude and values that can enable them function properly in the society.
Teaching staff of universities give instructions using new technological devices in teaching geared at knowledge creation and building. Academic staff of universities therefore, need some level of professional competencies to perform their prerequisite tasks for quality instructional delivery. They are expected to plan and deliver qualitative lessons, improvise quality instructional materials, and deliver positive instructions in the school system (Ayeni, 2010). Planning of lesson is actually, the systematic process of articulating and organizing subject contents through research and development to promote quality instructional enhancements. Improvisation of instructional material is all about developing and utilizing locally available materials in instructional delivery when the sophisticated materials are not readily available. Teaching to enhance students’ performance is the process of finding out whether the students have gotten what they are taught at the end of every lesson. The ability of a teaching staff to carry out all these functions indicates how competent he is in delivering quality instructions in the school system (Ukala, Madumere-Obike & Nwabueze, 2015).

Competency however, can be equally seen as behaviours that provide good reputation among individuals, which can enable positive attitude among staff as well as the evaluation and development of such behaviours in individual staff. Deakin (2008) states that, academic staff professional competencies can be seen as the abilities, qualities, strengths and skills required for the success of an educator in delivering quality instruction. Academic staff professional competence is the broad professional knowledge, attitude, and skills required of the staff in order to work in an educational institution or teaching profession and transmit what is worthwhile into the learners (Epstein & Hundert, 2002). Disciplinary knowledge and the application of concepts, processes and skills are required in a test of teacher professional competence in an education institution. Teacher Professional Competence can be seen therefore, as the ability and capability to perform the duties of one's profession generally and as well perform a particular professional task, with skill of an acceptable quality. Eze and Somma (2005) are of the opinion that, professional competence of a teacher and task performance equip them for proper and quality instructional delivery as well as the attainment of educational goals and students’ productivity. This relationship helps academic staff maintain strong commitment to reaching their set goals and persevere with resilience in the face of difficult situations.

Academic staff professional competencies encompass the following features: having tacit and explicit knowledge, cognitive skills, pedagogical content knowledge, practical skills of teaching, teacher involvement in knowledge creation and transfer exercises (Rychen & Salganik, 2003). Tacit and explicit knowledge are required of a teacher to perform his academic duties as expected of him in a school system (Baumert, Kunter, Blum, Brunner, Voss, Jordan & Tsai, 2010). Pedagogical content knowledge is seen as the generic, cross-curricular knowledge needed to create and optimize teaching and learning situations (Ukala, Madumere-Obike & Nwabueze, 2015). Practical skills imply the ability of a teacher to carry out all the laboratory practices in an efficient manner. Knowledge creation is the capability to create, recognize, disseminate widely, and embody knowledge in the students. This requires that, an institution develops effective knowledge harnessing, reuse, and learning from prior knowledge. Teacher knowledge transfer exercise is the practical process of transferring knowledge, skills and ideas from an academic staff to the learner. Like knowledge management, knowledge transfer seeks to organize, create, capture or distribute knowledge and ensure its availability for future users. It is considered to be more than just a communication process (koster & Dengerink, 2008).

A competent academic staff imparts knowledge into the students, helps the learners acquire skills and some technical know-how, transmits culture and serves as means of getting learners to absorb needed attitudes, motivates his learners and makes them willing to learn as well as develop interest in education. He explores, illustrates and asks questions, uses teaching aids as well as manages students’ disruptive behaviour and holds discussions with learners. Professionally competent teaching staff develop qualities such as curiosity, creativity and positivity in academic programmes. Only when the teacher is capable of understanding and identifying with the child, that it can be said that teaching is indeed, a success. When this is accomplished, the student becomes more engaged and utilizes whatever that had been taught, and the staff task performance improves. Professional competencies and technical tasks of the teacher are very important for the development of teaching subjects’ curriculum contents and instructional delivery in the school system.

Instructional delivery is the process of transferring knowledge into the students through quality teaching and research (Ayeni & Afolabi, 2012). Quality instructional delivery however, is the ability to possess teaching skills, development of research techniques and scholarship projects. It is very necessary for quality instruction, research and
development in university education system. This implies the need for professionally competent teaching staff to have the skills or competencies needed in a classroom setting (Ayeni & Afolabi, 2012). Quality instructional delivery occurs when the need for instructional enhancement has been accomplished through teaching and research (Madumere-Obike, Ukala & Nwabueze, 2013). The competencies that academic staff need include: teaching staff having specialised skills to facilitate knowledge and acquire the skills of handling the ICT devices in teaching; as this will help students acquire transversal competencies (Madumere-Obike, Ukala & Nwabueze, 2013). Madumere-Obike and Nwabueze (2012) also, state that, there is need for staff to continually update their knowledge and acquire relevant skills needed to enhance positive instructional task performance.

Task Performance is a working process which occurs when an assigned person or group of persons effectuates a task's plan. It also, refers to a manner in which teaching staff realize the work that was projected for effective performance in a given direction (Madumere-Obike, Okeke & Nwabueze, 2013). Teachers’ task performance could be seen as the performance of teachers in their respective task or teaching assignments. Professionally competent academic staff perform their respective tasks by creating classroom environments that are very conducive for quality teaching and learning and as well encourage teamwork (Oragwu & Nwabueze, 2015).

Statement of the Problem

University education offered in higher institutions in Nigeria is designed to prepare individuals for useful living and societal development. Some academic staff find it very difficult to improve their teaching competencies through workshops, conferences, research and development. Their low participation in research and development affect their task performances negatively and as well instructional delivery in classrooms. It does not support their growth in knowledge creation and knowledge building. These flaws could lead poor performance of students and the growth of higher institutions in Nigeria. This study therefore, investigates the perceived impact of academic staff professional competencies on their task performances for quality instructional delivery in Universities in South East, Nigeria. Specifically, the study focuses on the academic staff professional competencies needed for quality instructional task performances, practical skills needed, staff participation in research developments, and strategies of enhancing academic staff professional competencies for quality instructional task performances.

Aim and Objectives of the Study

The aim of this study is to investigate the perceived impact of academic staff professional competencies on their task performances for quality instructional delivery in Universities in South East, Nigeria. The specific objectives are to:

1. Ascertain the academic staff professional competencies needed for quality instructional task performances in universities in South East, Nigeria;
2. Verify ways academic staff professional practical skills can enhance their task performances for quality instructional delivery in universities in South East, Nigeria;
3. Find out ways academic staff participation in research developments can improve their task performances for quality instructional delivery in universities; and
4. Ascertain the strategies of enhancing academic staff professional competencies for quality instructional task performances in universities in South East, Nigeria

Research Questions

1. What are the academic staff professional competencies needed for quality instructional task performances in universities in South East, Nigeria?
2. In what ways can academic staff professional practical skills enhance their task performances for quality instructional delivery in universities in South East, Nigeria?
3. What are the ways academic staff participation in research developments can improve their task performances for quality instructional delivery in universities in South East?
4. What are the strategies of enhancing academic staff professional competencies for quality instructional task performances in universities in South East, Nigeria?
Hypotheses

These hypotheses were tested at 0.05 alpha significant levels:

1. There is no significant difference between the mean scores of senior and junior academic staff of universities on the academic staff professional competencies needed for quality instructional task performances in universities in South East, Nigeria.
2. There is no significant difference between the mean scores of male and female academic staff of universities on the ways academic staff professional practical skills can enhance their task performances for quality instructional delivery in universities.
3. There is no significant difference between the mean scores of senior and junior academic staff of universities on the ways academic staff participation in research developments can improve their task performances for quality instructional delivery in universities in South East, Nigeria.
4. There is no significant difference between the mean scores of male and female academic staff of universities on the strategies of enhancing academic staff professional competencies for quality instructional task performances in universities.

Methodology

This study adopted a descriptive survey design. The population comprised the 4160 academic staff of five federal universities in the South Eastern State of Nigeria. There are 2,360 female and 1800 male academic staff in the universities; 1,540 senior lecturers and 2620 junior lecturers. A sample size of 500 academic staff was drawn using stratified random sampling technique representing 12% of the population. This included 300 female and 200 male academic staff; 150 senior and 350 junior staff. The instrument used was questionnaire tagged ‘Perceived Impact of Academic Staff Professional Competencies on their Task Performance Questionnaire (PIASPCTPQ)’ developed by the researchers. The questionnaire was constructed based on the variables, which was validated by two senior lecturers. Test-retest method was used to determine the reliability of the instrument on a two time administration on 10 academic staff outside the sample, which was calculated using Pearson’s Product Moment Correlation, and this yielded an index of 0.83. Mean scores and standard deviation were used to answer the research questions while z-test was used to test the hypotheses at 0.05 alpha significant level.

Data Analysis and Results

Research Question One: What are the academic staff professional competencies needed for quality instructional task performances in universities in South East, Nigeria?
Table 1: Mean scores of senior and junior academic staff on the academic staff professional competencies needed for quality instructional task performances in universities

<table>
<thead>
<tr>
<th>S/N</th>
<th>Academic staff professional competencies needed for quality instructional task performances in universities include:</th>
<th>Senior (150)</th>
<th>Junior (350)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>St.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>1</td>
<td>Improvisation of instructional material for quality instructional delivery</td>
<td>3.02</td>
<td>0.57</td>
<td>2.88</td>
</tr>
<tr>
<td>2</td>
<td>Having specialised knowledge of courses to teach</td>
<td>3.09</td>
<td>0.57</td>
<td>3.04</td>
</tr>
<tr>
<td>3</td>
<td>Possessing the necessary pedagogical skills to teach the students</td>
<td>3.12</td>
<td>0.56</td>
<td>3.16</td>
</tr>
<tr>
<td>4</td>
<td>Making effective use of ICT devices in teaching/research enhances quality instructional delivery</td>
<td>2.95</td>
<td>0.58</td>
<td>3.27</td>
</tr>
<tr>
<td>5</td>
<td>Making proper use of instructional materials during teaching facilitates quality instruction</td>
<td>3.07</td>
<td>0.57</td>
<td>3.03</td>
</tr>
<tr>
<td>6</td>
<td>Lecturers engaging in research and innovative activities related to education enhances knowledge creativity among students</td>
<td>3.10</td>
<td>0.57</td>
<td>3.04</td>
</tr>
<tr>
<td>7</td>
<td>Application of practical skills in teaching promotes students’ understanding of the course content</td>
<td>3.02</td>
<td>0.57</td>
<td>3.18</td>
</tr>
<tr>
<td>8</td>
<td>Lecturers involving in knowledge sharing and diversification enhances competitiveness among students</td>
<td>3.15</td>
<td>0.56</td>
<td>3.20</td>
</tr>
<tr>
<td>9</td>
<td>Taking active participation in knowledge transfer exercises builds up the students for future development</td>
<td>3.19</td>
<td>0.55</td>
<td>3.17</td>
</tr>
<tr>
<td>10</td>
<td>Having knowledge of transmitting culture into the students equips them with the real value needed for societal development</td>
<td>3.11</td>
<td>0.56</td>
<td>3.05</td>
</tr>
<tr>
<td>11</td>
<td>Helping the learners acquire skills and relevant technical know-how enhances self growth among them</td>
<td>3.21</td>
<td>0.55</td>
<td>3.25</td>
</tr>
<tr>
<td></td>
<td><strong>Aggregate Mean/St.D.</strong></td>
<td><strong>3.09</strong></td>
<td><strong>0.57</strong></td>
<td><strong>3.12</strong></td>
</tr>
</tbody>
</table>

Data presented in Table 1 show the mean scores and standard deviation of senior and junior academic staff on the academic staff professional competencies needed for quality instructional task performances in universities in South East, Nigeria. The respondents agreed on the items in the table with mean scores greater than the mean criterion of 2.50 and standard deviation indicating their level of agreement on the questionnaire items. The aggregate mean scores of 3.09 for senior staff and 3.12 for junior staff showed that, the academic staff professional competencies needed for quality instructional task performances in universities include: improvisation of instructional material to enhance quality instructional delivery, having specialised knowledge of courses to teach, possessing the necessary pedagogical skills to teach the students, making effective use of ICT devices in teaching/research to enhance quality instructional delivery, making proper use of instructional materials during teaching to facilitate quality instruction, and engaging in research and innovative activities related to education to enhance knowledge creativity among students. Also included are: the application of practical skills in teaching to promote students’ understanding of the course content, lecturers involving in knowledge sharing and diversification to enhance competitiveness among students, taking active participation in knowledge transfer exercises to build up the students for future development, having knowledge of transmitting culture into the students to equip them with the real value needed for societal development, and helping the learners acquire skills and relevant technical know-how to enhance self growth among them.

**Research Question Two:** In what ways can academic staff professional practical skills enhance their task performances for quality instructional delivery in universities in South East, Nigeria?
Table 2: Mean scores of male and female academic staff on the ways academic staff professional practical skills enhance their task performances for quality instructional delivery in universities

<table>
<thead>
<tr>
<th>S/N</th>
<th>Ways academic staff professional practical skills enhance their task performance for quality instructional delivery</th>
<th>Male (200)</th>
<th></th>
<th>Female (300)</th>
<th></th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>St.D.</td>
<td>Mean</td>
<td>St.D.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Possession of practical skills among academic staff makes the course contents to be clearer during instruction</td>
<td>3.28</td>
<td>0.48</td>
<td>3.15</td>
<td>0.40</td>
<td>Agreed</td>
</tr>
<tr>
<td>13</td>
<td>It helps them to improvise locally-made instructional materials when sophisticated ones are not available in the school environment</td>
<td>3.07</td>
<td>0.49</td>
<td>3.01</td>
<td>0.41</td>
<td>Agreed</td>
</tr>
<tr>
<td>14</td>
<td>Helps them to be creative in their areas of specialization</td>
<td>2.96</td>
<td>0.50</td>
<td>3.02</td>
<td>0.40</td>
<td>Agreed</td>
</tr>
<tr>
<td>15</td>
<td>Increases their participation in research/innovative projects</td>
<td>3.11</td>
<td>0.49</td>
<td>3.06</td>
<td>0.40</td>
<td>Agreed</td>
</tr>
<tr>
<td>16</td>
<td>Helps them make classrooms very interactive during lectures</td>
<td>3.18</td>
<td>0.48</td>
<td>3.13</td>
<td>0.40</td>
<td>Agreed</td>
</tr>
<tr>
<td>17</td>
<td>Helps them to be versatile in their course areas</td>
<td>3.21</td>
<td>0.48</td>
<td>3.24</td>
<td>0.39</td>
<td>Agreed</td>
</tr>
<tr>
<td>18</td>
<td>Helps them in creating a safe and stimulating classroom climate</td>
<td>3.04</td>
<td>0.49</td>
<td>3.01</td>
<td>0.41</td>
<td>Agreed</td>
</tr>
<tr>
<td>19</td>
<td>Equips them with efficient knowledge of preparing lessons</td>
<td>3.19</td>
<td>0.48</td>
<td>3.15</td>
<td>0.40</td>
<td>Agreed</td>
</tr>
<tr>
<td>20</td>
<td>Assists them in fostering critical thinking on the course content development</td>
<td>3.26</td>
<td>0.48</td>
<td>3.20</td>
<td>0.39</td>
<td>Agreed</td>
</tr>
</tbody>
</table>

Aggregate Mean Scores/St.D. | 3.14      | 0.49  | 3.11           | 0.40  | Agreed   |

Data presented in Table 2 show the mean scores and standard deviation of male and female academic staff on the ways academic staff professional practical skills enhance their task performances for quality instructional delivery in universities in South East, Nigeria. The respondents agreed on the items in the table with mean scores greater than the mean criterion of 2.50 and standard deviation indicating their level of agreement on the questionnaire items. The aggregate mean scores of 3.14 for male staff and 3.11 for female staff showed that, the ways academic staff professional practical skills enhance their task performance for quality instructional delivery in universities include: possession of practical skills among academic staff makes the course contents clearer during instruction, helps them to improvise locally-made instructional materials when sophisticated ones are not available in the school environment, helps them to be creative in their areas of specialization, increases their participation in research/innovative projects, helps them make classrooms very interactive during lectures, helps them to be versatile in their course areas, helps them in creating a safe and stimulating classroom climate, equips them with efficient knowledge of preparing lessons, and assists them in fostering critical thinking on the course content development.

Research Question Three: What are the ways academic staff participation in research developments can improve their task performances for quality instructional delivery in universities in South East, Nigeria?
### Table 3: Mean scores of senior and junior academic staff on the ways academic staff participation in research development improve their task performances for quality instructional delivery in universities

<table>
<thead>
<tr>
<th>S/N</th>
<th>Ways academic staff participation in research development improve their task performances for quality instructional delivery include:</th>
<th>Senior (150)</th>
<th></th>
<th>Junior (350)</th>
<th></th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Academic staff involvement in staff development programmes helps them acquire new knowledge of carrying out quality instructional tasks</td>
<td>3.36</td>
<td>0.54</td>
<td>3.30</td>
<td>0.36</td>
<td>Agreed</td>
</tr>
<tr>
<td>22</td>
<td>Their participation in conferences help them acquire relevant skills needed for quality instructional delivery</td>
<td>3.39</td>
<td>0.54</td>
<td>3.32</td>
<td>0.36</td>
<td>Agreed</td>
</tr>
<tr>
<td>23</td>
<td>Getting involved in virtual learning groups helps them acquire new skills of handling students in classroom instructions</td>
<td>3.24</td>
<td>0.55</td>
<td>3.33</td>
<td>0.36</td>
<td>Agreed</td>
</tr>
<tr>
<td>24</td>
<td>Getting involved in social networking services helps them develop and share new ideas for skill development</td>
<td>3.27</td>
<td>0.55</td>
<td>3.29</td>
<td>0.36</td>
<td>Agreed</td>
</tr>
<tr>
<td>25</td>
<td>Participating in workshops for knowledge building enhances their task performance for quality instructional delivery</td>
<td>3.35</td>
<td>0.54</td>
<td>3.25</td>
<td>0.37</td>
<td>Agreed</td>
</tr>
<tr>
<td>26</td>
<td>Engaging in seminars/innovative projects helps them acquire the needed competencies for enhanced task performances</td>
<td>3.28</td>
<td>0.55</td>
<td>3.21</td>
<td>0.37</td>
<td>Agreed</td>
</tr>
<tr>
<td>27</td>
<td>Embarking on sabbatical leaves in industries help them acquire new knowledge/skills for students’ productivity</td>
<td>3.39</td>
<td>0.54</td>
<td>3.13</td>
<td>0.38</td>
<td>Agreed</td>
</tr>
<tr>
<td></td>
<td><strong>Aggregate Mean Scores/St.D.</strong></td>
<td>3.33</td>
<td>0.54</td>
<td>3.26</td>
<td>0.37</td>
<td>Agreed</td>
</tr>
</tbody>
</table>

Data presented in Table 3 show the mean scores and standard deviation of senior and junior academic staff on the ways academic staff participation in research development improve their task performances for quality instructional delivery in universities in South East, Nigeria. The respondents agreed on the items in the table with mean scores greater than the mean criterion of 2.50 and standard deviation indicating their level of agreement on the questionnaire items. The aggregate mean scores of 3.09 for senior staff and 3.12 for junior staff showed that, the ways academic staff participation in research development improve their task performances for quality instructional delivery in universities include: academic staff involvement in staff development programmes helps them acquire new knowledge of carrying out quality instructional tasks, their participation in conferences helps them acquire relevant skills needed for quality instructional delivery, getting involved in virtual learning groups helps them acquire new skills of handling students in classroom instructions, getting involved in social networking services helps them develop and share new ideas for skill development, participating in workshops for knowledge building enhances their task performance for quality instructional delivery, engaging in seminars/innovative projects helps them acquire the needed competencies for enhanced task performances, and embarking on sabbatical leaves in industries help them acquire new knowledge/skills for students’ productivity.

**Research Question Four:** What are the strategies of enhancing academic staff professional competencies for quality instructional task performances in universities in South East, Nigeria?
Table 4: Mean scores of male and female academic staff on the strategies of enhancing academic staff professional competencies for quality instructional task performances in universities

<table>
<thead>
<tr>
<th>S/N</th>
<th>Strategies of enhancing academic staff professional competencies for quality instructional task performances in universities</th>
<th>Male (200)</th>
<th>Female (300)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>St.D.</td>
<td>Mean</td>
</tr>
<tr>
<td>28</td>
<td>Supporting academic staff with grants to participate in international conferences</td>
<td>3.44</td>
<td>0.47</td>
<td>3.46</td>
</tr>
<tr>
<td>29</td>
<td>Providing staff with new technology devices to enhance their participation in virtual learning programmes</td>
<td>3.38</td>
<td>0.47</td>
<td>3.26</td>
</tr>
<tr>
<td>30</td>
<td>Providing staff with new technology devices to network with academic staff of other universities on knowledge creation/sharing</td>
<td>3.36</td>
<td>0.47</td>
<td>3.28</td>
</tr>
<tr>
<td>31</td>
<td>Circulating information on staff development programmes to every academic staff on time</td>
<td>3.45</td>
<td>0.46</td>
<td>3.44</td>
</tr>
<tr>
<td>32</td>
<td>Creating room for staff to participate in workshops encourages them aspire to a higher level of task performance</td>
<td>3.42</td>
<td>0.47</td>
<td>3.45</td>
</tr>
<tr>
<td>33</td>
<td>Regularly engaging staff in seminars/innovative projects helps them to be ready for knowledge building</td>
<td>3.33</td>
<td>0.48</td>
<td>3.25</td>
</tr>
<tr>
<td></td>
<td>Aggregate Mean Scores/St.D.</td>
<td>3.40</td>
<td>0.47</td>
<td>3.36</td>
</tr>
</tbody>
</table>

Data presented in Table 4 show the mean scores and standard deviation of male and female academic staff on the strategies of enhancing academic staff professional competencies for quality instructional task performances in universities in South East, Nigeria. The respondents agreed on the items in the table with mean scores greater than the mean criterion of 2.50 and standard deviation indicating their level of agreement on the questionnaire items. The aggregate mean scores of 3.40 for male staff and 3.36 for female staff showed that, the strategies of enhancing academic staff professional competencies for quality instructional task performances in universities include: supporting academic staff with grants to participate in international conferences, providing staff with new technology devices to enhance their participation in virtual learning programmes, providing staff with new technology devices to network with academic staff of other universities on knowledge creation/sharing, circulating information on staff development programmes to every academic staff on time, creating room for staff to participate in workshops encourages them aspire to a higher level of task performance, and engaging staff in seminars/innovative projects regularly to help them be ready for knowledge building.

Test of Hypotheses

Hypothesis One: There is no significant difference between the mean scores of senior and junior academic staff of universities on the academic staff professional competencies needed for quality instructional task performances in universities in South East, Nigeria.

Table 5: Summary of z-test on the difference between the mean scores of senior and junior academic staff of universities on the academic staff professional competencies needed for quality instructional task performances in universities

<table>
<thead>
<tr>
<th>Category of Staff</th>
<th>N</th>
<th>Mean</th>
<th>St.D.</th>
<th>df</th>
<th>z-calculated value</th>
<th>Critical value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior</td>
<td>150</td>
<td>3.09</td>
<td>0.57</td>
<td>498</td>
<td>-0.586</td>
<td>±1.960</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Junior</td>
<td>350</td>
<td>3.12</td>
<td>0.37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data presented in Table 5 show the Summary of z-test on the difference between the mean scores of senior and junior academic staff of universities on the academic staff professional competencies needed for quality instructional task performances in universities in South East, Nigeria. The results obtained from the mean scores and standard deviation of academic staff showed that, they accepted the null hypothesis indicating that no significant difference exists between the mean scores of senior and junior academic staff of universities on the academic staff professional competencies needed for quality instructional task performances in universities in South East, Nigeria. This is because, the z-calculated value of -0.586 is lower than the critical value of ±1.960.
Hypothesis Two: There is no significant difference between the mean scores of male and female academic staff of universities on the ways academic staff professional practical skills can enhance their task performances for quality instructional delivery in universities in South East, Nigeria.

Table 6: Summary of z-test on the difference between the mean scores of male and female academic staff of universities on the ways academic staff professional practical skills can enhance their task performances for quality instructional delivery in universities

<table>
<thead>
<tr>
<th>Gender of Staff</th>
<th>N</th>
<th>Mean</th>
<th>St.D.</th>
<th>df</th>
<th>z-calculated value</th>
<th>Critical value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>200</td>
<td>3.14</td>
<td>0.49</td>
<td>498</td>
<td>0.714</td>
<td>±1.960</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Female</td>
<td>300</td>
<td>3.11</td>
<td>0.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data presented in Table 6 show the summary of z-test on the difference between the mean scores of male and female academic staff of universities on the ways academic staff professional practical skills can enhance their task performances for quality instructional delivery in universities in South East, Nigeria. The results obtained from the mean scores and standard deviation of academic staff showed that, they accepted the null hypothesis indicating that, there is no significant difference between the mean scores of male and female academic staff of universities on the ways academic staff professional practical skills can enhance their task performances for quality instructional delivery in universities in South East, Nigeria. This is because, the z-calculated value of 0.714 is lower than the critical value of ±1.960.

Hypothesis Three: There is no significant difference between the mean scores of senior and junior academic staff of universities on the ways academic staff participation in research developments can improve their task performances for quality instructional delivery universities in South East, Nigeria.

Table 7: Summary of z-test on the difference between the mean scores of senior and junior academic staff of universities on the ways academic staff participation in research developments can improve their task performances for quality instructional delivery universities

<table>
<thead>
<tr>
<th>Category of Staff</th>
<th>N</th>
<th>Mean</th>
<th>St.D.</th>
<th>df</th>
<th>z-calculated value</th>
<th>Critical value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior</td>
<td>150</td>
<td>3.33</td>
<td>0.54</td>
<td>498</td>
<td>1.651</td>
<td>±1.960</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Junior</td>
<td>350</td>
<td>3.26</td>
<td>0.37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data presented in Table 7 show the summary of z-test on the difference between the mean scores of senior and junior academic staff of universities on the ways academic staff participation in research developments can improve their task performances for quality instructional delivery universities in South East, Nigeria. The results obtained from the mean scores and standard deviation of academic staff showed that, they accepted the null hypothesis indicating that, there is no significant difference between the mean scores of senior and junior academic staff of universities on the ways academic staff participation in research developments can improve their task performances for quality instructional delivery universities in South East, Nigeria. This is because, the z-calculated value of 1.651 is lower than the critical value of ±1.960.

Hypothesis Four: There is no significant difference between the mean scores of male and female academic staff of universities on the strategies of enhancing academic staff professional competencies for quality instructional task performances in universities in South East, Nigeria.

Table 8: Summary of z-test on the difference between the mean scores of male and female academic staff of universities on the strategies of enhancing academic staff professional competencies for quality instructional task performances in universities

<table>
<thead>
<tr>
<th>Gender of Staff</th>
<th>N</th>
<th>Mean</th>
<th>St.D.</th>
<th>df</th>
<th>z-calculated value</th>
<th>Critical value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>200</td>
<td>3.40</td>
<td>0.47</td>
<td>498</td>
<td>0.994</td>
<td>±1.960</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Female</td>
<td>300</td>
<td>3.36</td>
<td>0.39</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data presented in Table 8 show the summary of z-test on the difference between the mean scores of male and female academic staff of universities on the strategies of enhancing academic staff professional competencies for quality instructional task performances in universities in South East, Nigeria.
quality instructional task performances in universities in South East, Nigeria. The results obtained from the mean scores and standard deviation of academic staff showed that, they accepted the null hypothesis indicating that, there is no significant difference between the mean scores of male and female academic staff of universities on the strategies of enhancing academic staff professional competencies for quality instructional task performances in universities in South East, Nigeria. This is because, the z-calculated value of 0.994 is lower than the critical value of ±1.960.

**Discussion of Findings**

The result of research question one revealed that, the academic staff professional competencies needed for quality instructional task performances in universities include: improvisation of instructional material to enhance quality instructional delivery, having specialised knowledge of courses to teach, possessing the necessary pedagogical skills to teach the students, making effective use of ICT devices in teaching/research to enhance quality instructional delivery, making proper use of instructional materials during teaching to facilitate quality instruction, and engaging in research and innovative activities related to education to enhance knowledge creativity among students. Also included are the application of practical skills in teaching to promote students’ understanding of the course content, lecturers involving in knowledge sharing and diversification to enhance competitiveness among students, taking active participation in knowledge transfer exercises to build up the students for future development, having knowledge of transmitting culture into the students to equip them with the real value needed for societal development, and helping the learners acquire skills and relevant technical know-how to enhance self growth among them. The test of hypothesis one showed that, there is no significant difference between the mean scores of senior and junior academic staff of universities on the academic staff professional competencies needed for quality instructional task performances in universities in South East, Nigeria. In line with the finding, Rychen and Salganik (2003) were of the opinion that, academic staff professional competencies encompass having tacit and explicit knowledge, cognitive skills, pedagogical content knowledge, practical skills of teaching, teacher involvement in knowledge creation and transfer exercises. Content knowledge is all about having a deep understanding of the course contents and concepts. Pedagogical content knowledge (PCK) is very necessary to make subject contents accessible to students as well as transfer the necessary skills for future development.

The result of research question two revealed that, the ways academic staff professional practical skills enhance their task performance for quality instructional delivery in universities include: possession of practical skills among academic staff makes the course contents clearer during instruction, helps them to improvise locally-made instructional materials when sophisticated ones are not available in the school environment, helps them to be creative in their areas of specialization, increases their participation in research/innovative projects, helps them make classrooms very interactive during lectures, helps them to be versatile in their course areas, helps them in creating a safe and stimulating classroom climate, equips them with efficient knowledge of preparing lessons, and assists them in fostering critical thinking on the course content development. The test of hypothesis two showed that, there is no significant difference between the mean scores of male and female academic staff of universities on the ways academic staff professional practical skills can enhance their task performances for quality instructional delivery in universities in South East, Nigeria. Practical skills of an academic staff imply the ability of a teaching staff to carry out all the laboratory practices in an efficient manner and communicate the findings to the students in an efficient manner. A competent academic staff imparts knowledge, helps the learners acquire skills and some technical know-how, transmits culture and serves as means of getting learners to absorb needed attitudes, motivates his learners and makes them willing to learn as well as develop interest in education. In line with the finding, Ayeni and Afolabi (2012) stated that, professionally competent teaching staff with practical skills develops qualities such as curiosity, originality, initiative, cooperation, perseverance, open-mindedness, self-criticism, responsibility, self-confidence and independence.

The result of research question three revealed that, the ways academic staff participation in research development improve their task performances for quality instructional delivery in universities include: academic staff involvement in staff development programmes helps them acquire new knowledge of carrying out quality instructional tasks, their participation in conferences helps them acquire relevant skills needed for quality instructional delivery, getting involved in virtual learning groups helps them acquire new skills of handling students in classroom instructions, getting involved in social networking services helps them develop and share new ideas for skill development, participating in workshops for knowledge building enhances their task performance for quality...
instructional delivery, engaging in seminars/innovative projects helps them acquire the needed competencies for enhanced task performances, and embarking on sabbatical leaves in industries help them acquire new knowledge/skills for students’ productivity. The test of hypothesis three showed that, there is no significant difference between the mean scores of senior and junior academic staff of universities on the ways academic staff participation in research developments can improve their task performances for quality instructional delivery universities in South East, Nigeria. In line with the finding, Madumere-Obike, Ukala and Nwabueze (2013) stated that, the influence of research in the development of quality instruction includes: the promotion of new knowledge among lecturers/students, support lecturers for knowledge creation, innovative and creative developments in the universities. This equally provides them with the opportunities for networking/collaboration among institutions and industry, increase lecturers and students’ participation to foster sustainable development, store knowledge capabilities for socioeconomic development, create reputation/international networks and help lecturers/students improve on academic innovations for national development.

The result of research question four revealed that, the strategies of enhancing academic staff professional competencies for quality instructional task performances in universities include: supporting academic staff with grants to participate in international conferences, providing staff with new technology devices to enhance their participation in virtual learning programmes, providing staff with new technology devices to network with academic staff of other universities on knowledge creation/sharing, circulating information on staff development programmes to every academic staff on time, creating room for staff to participate in workshops encourages them aspire to a higher level of task performance, and engaging staff in seminars/innovative projects regularly to help them be ready for knowledge building. The test of hypothesis four showed that, there is no significant difference between the mean scores of male and female academic staff of universities on the strategies of enhancing academic staff professional competencies for quality instructional task performances in universities in South East, Nigeria. Madumere-Obike and Nwabueze (2012) stated that, knowledge, skills and commitment of teaching staff as well as the quality of school leadership are the most important factors in achieving high quality educational outcomes in tertiary institutions. The competencies that academic staff of universities need for quality instructional delivery include: making proper use of ICT devices in teaching and research, as well as helping students acquire transversal competencies.

Conclusion

This study had shown that, academic staff that are professionally competent to facilitate quality instruction and transmit knowledge into the students enhance the growth and development of the educational institution. However, academic staff with practical and pedagogical content skills perform their duties as expected. They make the course contents clearer during instruction and assist the students to be creative in their areas of specialization.

Recommendations

The researchers recommended that:

1. Academic staff should continual update their knowledge by involving themselves in staff professional programmes to be professionally competent in the delivery of instructions.
2. Academic staff should regularly participate in conference programmes as well as workshops to acquire new techniques of performing their tasks to enhance quality instructional delivery in the school system. This would also, help them to possess the necessary pedagogical skills to deliver quality instruction.
3. Academic staff should be involved in social networking among staff to learn and acquire the skills of improvising locally-made instructional material where the sophisticated ones are not available to deliver quality instruction.
4. Academic staff should embark on ICT training to possess the knowledge of using ICT devices in teaching and research to enhance their task performances for quality delivery of instruction.
5. Academic staff should be involved in knowledge sharing and diversification of knowledge to ensure instructional competitiveness and build up the students for future development.
6. Academic staff should have the knowledge of transmitting culture into the students to equip them with the real value needed for societal development as well as relevant technical know-how to enhance self-growth among them.
7. University administrative heads should support academic staff with grants to participate in international conferences, and provide them with new technology devices to enhance their participation in virtual learning programmes.
8. University administrative heads should create room for teaching staff to participate in staff professional development programmes to encourage them aspire to a higher level of task performance.
9. They should equally engage staff in innovative projects on regularly basis to help them be ready for knowledge building.

References


Using Dramatized Presentations To Teach Responsible Conduct In Research
Kuei-Chiu Chen, Weill Cornell Medicine-Qatar, Qatar

ABSTRACT

As the participation of undergraduate students in scientific research is increasing, colleges and universities have developed curriculum to teach students the scientific method, lab bench techniques and presentation skills. However, few institutions cover the importance of acceptable conduct in research in an informative and entertaining way. This presentation describes a drama-based teaching method to introduce a few topics that are important in scientific research yet not generally known by students at the undergraduate level. Targeting first year premedical students but open to campus community, the drama follows fictional junior researchers (played by students) who encountered some of the most common dilemmas in research situations in four separate scenes, including research protocol modification, image data alteration, plagiarism, and authorship determination. A moderator-led discussion on the accepted practice was presented after each scene and an overall summary was presented as conclusion. In post-presentation surveys students reported significant improvement in their knowledge on issues addressed by the drama. Faculty and staff who watched the performance reported the value of teaching using the drama format (personal communication). As actors are volunteers from the campus community, this teaching method adds a personal touch to the stories and may be easily adopted by faculty who aim to teach research conduct as a complement to teaching research methods to the undergraduate audience.
Peer Tutoring: Reflective Knowledge Building and Beyond
Helen Lavender, The Chinese University of Hong Kong, China
Ashley Hazell, The University of Hong Kong, China

ABSTRACT
Peer tutoring schemes have long since been recognized as a valuable support system within tertiary education. While some research has focused on the metacognitive gains for peer tutors (Cho & Cho, 2011; Cho & McArthur, 2011; Nicol, Thomson & Breslin, 2011), little has been written about other benefits this type of interaction provides. This paper reports on preliminary research conducted at two Hong Kong universities where peer tutoring schemes are in place. Narrative enquiry into the peer tutors’ experience, and response to their roles showed affective and socio-emotional skills development, which were seen to be beneficial to the tutors as learners and as part of life-long and life-wide skills development. The paper will also explore how peer tutoring schemes not only sit within the literature of social constructivism (Jonassen, 1994) but also link to wider fields of study into workplace and soft skills development.

REFERENCES
One Currency For GCC: Myth Or Reality?
Ramprakash Bhartesh Kasi, Royal University for Women, Kingdom of Bahrain

ABSTRACT

In May 1981, the Cooperation Council for the Arab States of the Gulf or GCC as it is popularly known today was established. The GCC was formed with six states - United Arab Emirates, State of Bahrain, Kingdom of Saudi Arabia, Sultanate of Oman, State of Qatar, and State of Kuwait; that participated in the Foreign Ministers’ meeting held in Riyadh on 4 February 1981. The formation of the GCC is usually understood as a response to the tense geopolitical developments of the late seventies in the west Asia region.

The idea of a single currency and creation of a monetary union has long been an overriding objective of the regional economic integration initiatives among the GCC members1, resonating in its charter and economic agreements. At the Muscat summit held on 22nd December 2001, the GCC members agreed on establishing a monetary union and the launch of a single currency pegged to the US dollar by January 20102.

A number of setbacks have since then constrained the monetary union process from progressing starting with the decision of the Sultanate of Oman to opt out of the monetary union in 2006, Kuwait switching its exchange rate arrangement from the US dollar to a basket of currencies during 2007 and most importantly the decision of the United Arab Emirates (UAE) to opt out of the GCC monetary union in 2009. In 2010, the four member states of the GCC, the Kingdom of Bahrain, Saudi Arabia, Qatar, and Kuwait; reiterated their commitment to the launch of a monetary union and a single currency area by ratifying the monetary union agreement which resulted in establishing the Gulf Monetary Council (GMCO), which is seen as a pre-cursor to the establishment of a Central Bank3.

Even after six years there seems to be not much progress in the proposed monetary union and the single currency area. New realities, like Brexit, fall in crude oil prices, rising deficits among the member states; are further raising questions as to the feasibility of GCC monetary integration.

The purpose of this paper is to develop an understanding of the nature of challenges that is stalling the single currency project and explore whether there is still hopes for its materialization.

5 Gulf Monetary Council, (n.d). “Monetary Union Agreement”. Available at: http://en.gmco.int/about/aggreement

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The Relationship Between Personality, Emotional Intelligence And Adaptability To Change
Derek E. Crews, Texas Woman’s University, USA

ABSTRACT
The extant research on organizational change consistently asserts that 70-75 percent of organizational change initiatives fail. Much attention has been given in the research to organizational change theories, models and processes, from the 1950’s to the present. However, less attention has been given to the human elements of change, for example why individuals resist change, why some individuals are more adaptable, and the relationships between personality (and other individual differences) and change style preferences. This paper presents the findings of extant research on the relationship between individual differences and adaptability. The individual differences that are explored are: the Big Five personality traits, emotional intelligence, dogmatism, sensation seeking, risk taking, and innovation. Various psychometric instruments are explored, in terms of validity and reliability as predictors of change style preferences. The results of this paper are expected to have implications for change agents in regard to understanding the human element of change, and moving a change initiative forward by overcoming resistance to change. The results will also be applicable to increasing the ability of a team to be adaptive and innovative, and thus improving organizational competitiveness and performance.
Culture, Protective Policy And Indian Daughters: Interrogating Beti Bachao, Beti Padhao (Save Daughters, Educate Daughters) Programme Of Government Of India
Ravi Ranjan, University of Delhi, India

ABSTRACT

After initial disappointments at Rio Olympics 2016, two of India's daughters emerged as savior by winning silver and bronze the only two medals for a country of 1.3 billion. India is one of the few countries that introduced adult franchise including women from day one after her independence in 1947, and had a women prime minister long back in mid 1960s. However, the socio-cultural practices in India are still pre-dominantly biased against the female child mostly due to the patriarchal social structure. Indian culture, tradition and family beliefs are not judicious towards disadvantaged daughters and girls are treated as liability leading to female feticide, resulting in skewed sex ratio and almost a million of girl fetuses have been killed. This can be easily explained from demographic trend, particularly by analyzing the Child Sex Ratio (CSR) which has been decreasing since 1961 and reached to all time low of 918 in 2011 from 976 in 1961. Throughout India one can notice this persistent and remarkable decline in CSR that is widespread and had reached to rural and tribal areas of the country. The Government of India has considered 'this as an alarming indicator for women disempowerment that reflects both, pre-birth discrimination manifested through gender biased sex selection, and post-birth discrimination against girls'.

Despite recording an impressive economic growth, the Indian economic growth dividends have unfortunately not been translated into improved and balanced sex ratio in general and CSR in particular. The issue of declining CSR is a major indicator of women disempowerment as it begins before birth, manifests in gender biased sex selection & elimination and continues in various forms of discrimination towards girl child after birth in fulfilling her health, nutrition and educational needs. There is an apprehension that strong socio-cultural and religious biases, preferences for sons in almost all Indian communities have also shaped societal attitudes towards girls. Despite many policy initiatives in past including the right of children to free and compulsory education (RTE) Act 2009, 86th constitutional amendment by inserting Article 21A in fundamental rights chapter of Indian constitution, the cultural and social perception towards girl child and their equal status as boys has not materialized, hence the deepening down of egalitarian values and democratic initiatives became a half-hearted attempt. Dismayed by the sharp decline, the Government of India has introduced Beti Bachao, Beti Padhao (BBBP) programme to address the issue of decline in CSR in 100 gender critical districts.

Institutionally based on coordinated and convergent efforts to ensure survival, protection and education of the girl child, the overall goal of the Beti Bachao, Beti Padhao (BBBP) scheme is to celebrate the girl child and enable her education for empowerment. With an emphasis to prevent gender biased sex selective elimination, to ensure survival and protection of the girl child and to ensure education of the girl child, the Beti Bachao Beti Padhao (BBBP) initiative has two major components. i) Mass Communication Campaign and ii) Multi-sectoral action in 100 selected districts.

2 Ibid pp 1-11
3 Ibid pp 1-11
with adverse CSR, covering all States and UTs. However, from home to school different value systems works with cultural nuances, as a result boys and girls are feeling radically different in social terms. Several studies show that education is widely seen as a means to upward mobility.

We can observe gender disparity as far as the educational patterns are concerned throughout India with remarkable regional variations. The divergence of regional pattern of gender disparity shows that gender discrimination is a complex and multi-layered phenomenon and the interaction between these layers may assume unexpressed forms and unfortunately Indian state’s legal measures are lacking in terms of motivational and social support in saving Indian daughters. Considering these facts and socio-cultural context of contemporary India, this paper seeks to understand the correlation in saving the girl child and educating her (protection-empowerment debate). How this programme will help in reducing the gap in sex ratio in general particular and CSR in particular. Can CSR be improved only with girls’ education or some other initiatives are also needed. How girls’ education is helping in empowering and protecting women and daughters? What are the methodological inconsistencies in this policy? These are some of the questions that constitute the analytical enquiry of this programme launched by government of India in January 2015.

These are complex reasons for declining child sex ratio. In addition to policy campaign and different government programme, there is a need to focus on the contemporary meanings and practices of gender and family which are being variously structured by wider social process in different urban and rural locations. Through this programme we may look into the relationship of the modern Indian state and daughterhood and how education can be seen as the channel of cultural change at both community and state level as the BBBP campaign expects that education and saving girl child will improve the relationship among male-female society. Improving CSR is a challenging task that needs promotion of value of girl child in Indian society. The cultural complexities of child differentiation based on sex biases can be checked through such protective policies and empowering of Indian daughters may be ensured by educational measures and progressive pedagogy. The outcome of this policy is envisaged to ensure girls are born, loved and nurtured without discrimination, educated and raised to become informed and empowered citizens of India with equal rights and dignity.

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4 Ibid pp 1-11
Akiba As A Tourism Marketing Case Study: An Analysis Of Innovation In The Akihabara Area
Kazuhito Yamada, Hosei University Graduate School, Japan

ABSTRACT
This paper examines the Akihabara area of Tokyo through ethnography and fieldwork and discusses how the area of Akihabara was converted into the information space Akiba, through information giving birth to space. This particular study argues regarding the meaning of tourism (tourism as tourism marketing) in such a shift to becoming Akiba (an information space) by using a regional analytical model created from prior research.

The paper explores the mechanisms supporting Akiba tourism (tourism marketing in Akihabara), using the case studies of the places commonly known as Luida’s Bar (situated in front of Yodobashi Camera’s Multimedia Akiba in Akihabara), the AKB48 Café, and electronics component shops. This assemblage of cases in the Akihabara area forms part of Akiba, the diminutive form of Akihabara, which has become an information space. Akiba tourism can be thought of as being responsible for out-of-the-ordinary performances that are characteristic of the tourism in the deeper levels of the unstable Akiba information space, that create a balance (or rather, integrate the boundaries of the real world and the fictional) for the area and for tourists. Akiba tourism has caused a shift from the area being regarded as Akihabara, a city of technological hardware innovation, to Akiba, a city of software innovation (or information space). Innovation in the Akihabara area caused the transformation in industries therein, and it is this mechanism for shifting markets that is the essence of tourism marketing in Akihabara.

Keywords: Akihabara, Otaku, Tourism Marketing, Information Space, Story

INTRODUCTION

Background of the Theme and the Objective of This Paper
Akihabara (the area) and Akiba (the information space) are what is known in Japanese as kotodama or words imbued with spiritual power. This is depicted in the phrase“秋葉原の情報空間＝アキバ（情報空間）” (roughly, the information space of Akihabara = Akiba [information space]). I have been involved with the symbol Akiba since June 2004; further, I have spent more than a decade since then in ethnography and fieldwork there. During that time, Akihabara has become more diverse, changing year by year, and its industries have also changed. I have analyzed and examined prior research in a variety of academic fields to understand this phenomenon; moreover, I have noticed that prior research on Akihabara has largely been limited to the fields of economics, business management (marketing), urban engineering, or architecture. In other words, studies till date have provided superficial overviews (i.e., they have examined only those aspects that can be observed or seen overtly). This paper aims to provide research that considers Akihabara’s information space from a tourism (or tourism marketing) perspective and at a deeper level (those aspects that are typically undetected). Moreover, this paper examines the ambiguous Akiba phenomenon: one is the real-world space and the other is a fictional space. Further, it attempts to clarify the identity of the information space. This is the essence of tourism marketing in Akihabara.

Figure 1 presents a regional analytical model. The meaning of the information space in Akihabara (Akiba’s market switching mechanism: an analysis of information spillover). This analytical model is a model of information distribution for regional revitalization created from a place.
The Clute Institute

Prior Research

The Akihabara area has been researched within various scholarly fields. As was noted above, however, most of this research has focused on economics, business management (specifically marketing), urban engineering, or architecture. The research of Kato (née Ono) [1] is interdisciplinary and incorporates Jane Jacobs’ theories of urban development as well as ideas in the field of marketing. Yet, this is a study that is limited to Akiba’s facade. By contrast, though this is not a paper, Morikawa’s (2008) work from an architectural perspective created the concept of how the hobby structure of otaku (Japanese slang for geeks or enthusiasts) can modify a place (including buildings). This research hinted at the inner, or psychological, layers of otaku specifically, though it was mostly superficial, focusing on otaku clothing, building colors and design, and other related aspects. Further, Morikawa (2008) and Masabuchi (2012), have conducted multiple studies on locality and culture, and these are also cursory. Yamashita [2] discusses place (especially the function of place) from the viewpoint of business management (marketing); however, this too remains sketchy. Miyake (2010) examines locality as land. As can be observed in these examples, researchers have focused on locality in a cursory manner.

It is in these circumstances that the new methodology of contact zones as related to locality appeared in the field of tourism studies, due to the research by Sunaga (2012) [3]. This study focused on alternative tourism within tourism studies, and it analyzed the locality of forests (chaotic spaces) as contact zones (Sunaga, 2012, p.19), “in contexts incorporated as sets of diverse meanings and personalities from the everyday world of those living in a region that accept ecotourism as part of alternative tourism, through a micro-analysis of social and cultural practices.” This study also emphasized surface-level phenomena (mainly economics and government administration), although it aimed to scrutinize deeper aspects of tourism studies, mainly culture, by considering the manner of examining context.

Further, the study by Suzuki (2013) considered locality (of the Akihabara area) after the advent of the web society. Suzuki states, “The web enters into real-world space, and as the web buries what is happening in the real world through information, multiple points of information enter and exit the place previously thought of as real-world space and form...
a complex reality. This phenomenon of having several openings through which information can enter and exit this real-world space is termed “the porosity of reality” (Suzuki, 2013, p. 12). Suzuki explains this definition using the case of Luida’s Bar in Akihabara’s Yodobashi Akiba. In addition, Suzuki declares that cases such as Luida’s Bar have “the power to alter places into information spaces” (Suzuki, 2013, p. 35). Herein, we shall primarily consider Suzuki’s definition and concept (see Figure 2: A conceptual summary of information space) using Figure 1: The meaning of the information space in Akihabara.

In the above paragraphs, we have reviewed prior research related to the Akihabara area and locality and have observed that there has been almost no research done from the viewpoint of tourism related to the Akihabara area (in the field of tourism marketing).

Thus, this paper reflects on the deeper levels of the Akihabara information space from the viewpoint of tourism and examines its ambiguous relationship with the surface (in other words, this ambiguity stems from a single Akihabara information space having two meanings, real-world space and fictional space).

**Research Method**

The conceptual diagram of the regional (city-planning) analysis used in this paper is shown in Figure 1. The meaning of the information space in Akihabara assumes the importance of the complementarity (via the complementarity principle) of the surface level and deeper levels. Using the conceptual diagram of Figure 2 (A conceptual summary of information space) for our discussion, Section II discusses this topic using ethnography, fieldwork, and a survey of the literature. Section III presents a discussion on the meaning of tourism for the Akihabara information space from the standpoint of tourism marketing. Further, a systems approach to tourism marketing is important by taking into consideration various thought processes from the perspective of marketing management, and it is defined as a “switching mechanism from a place of creation or production to a destination accepted by consumers, a market that brings consumers” (Lumsdon, 2004, p. 11).

**DISCUSSION**

Figure 2 (A conceptual summary of information space) shows a conceptual diagram for Luida’s Bar provided by Suzuki (2013). This figure explains the relationship between locality and information space in Akihabara, with a focus on deeper levels: culture (individual motivations) and order (the sacred).
Suzuki states that “Information space changes reality.” Based on that idea, what follows is an explanation of Akiba (an information space with the power to modify a place) within the place of the Akihabara area. In particular, the study focuses on Luida’s Bar (Figure 2: A conceptual summary of information space) as analyzed by Suzuki (2013).

Luida’s Bar is known to all those who love the game Dragon Quest IV (there are many who indicate that it is actually Dragon Quest III). It is highly unlikely that a person who loves to play that game would encounter another player of the game by chance and communicate. The place in Akihabara commonly known as Luida’s Bar was spontaneously created by gamers as a place for Dragon Quest IV players to gather and have such passing communication (Suzuki, 2013, p. 29). Considering the nature of the Akihabara area, it is easy to imagine it as a place for Dragon Quest IV players to gather. However, because Dragon Quest IV was released in the heat of summer, these gamers initially gathered in a “StreetPass Communication” spot created in the air-conditioned gaming section on the sixth floor of the Yodobashi Akiba store. So many gamers congregated there that Yodobashi Akiba opened up Luida’s Bar in a section in front of the store (Photo 1, bottom left; Photo 2; and Photo 3).

From this case, we can observe various characteristics of communication that have created an information space. First, communication that creates the meaning of information space is not limited to conversations in a real-world space. This would never have happened without advances in information and communications technologies and is qualitatively different from the meaning of spaces that have heretofore existed. This also implies that people sharing the meaning of that space are limited to those participating in that communication. If Yodobashi Akiba had not placed a sign for Luida’s Bar (Photo 3), those who do not play Dragon Quest IV or are not aware of StreetPass Communication
happening there would see nothing out of the ordinary in that place. Based on this fact, we can find two characteristics of an information space created by communication. The first is that sometimes space and communication are independent of each other. In other words, communication about Luida’s Bar can happen outside the space where it exists. This is the external information spillover noted in Figure 1. The second is that communication occurs in advance regarding the meaning of an information space. Luida’s Bar becomes a meaningful space only after players begin to communicate there (Suzuki, 2013, pp. 34–35). Until now, economics has explained the surface level shown in Figure 1 by using the word “atmosphere,” as discussed by Alfred Marshall. However, research into the phenomenon of place (or area) should include the perspective of tourism studies, i.e., a systems approach, which can deal with the deeper levels shown in Figure 1.

Tourists in Akiba each have sacred things, stories, freedom and dream. This is what Akiba tourism is. In Akihabara, AKB48 fans can visit the AKB48 Café and engage in Akiba consumption, where the information space augments both the real world and the fictional (see Photo 4 and Figure 1). Fans of electronic components can visit Akihabara and spend time amongst a plethora of components stores, in what might be considered a type of pilgrimage. In doing so, these fans are engaging in Akiba consumption, where the information space augments both the surface and the deeper levels (see Photo 5 and Figure 1). This is similar to Luida’s Bar. Without visiting Akihabara, one cannot obtain a meaningful position in the world of gaming. These cases are nothing more than pilgrimages of tourists to the holy land of the Akiba information space. By enabling the pilgrimages of otaku and professionals, the Akiba information space has become a place that adapts.

CONCLUSION

The cases of Luida’s Bar, AKB48 Café, and electronics component shops, often visited by consumers (i.e., otaku) in Akihabara, can be understood as tourism behavior wherein consumers seek the sacred things, stories, freedom or dream within the Akiba information space. The otaku consumers who visit these places can be analyzed as being part of a switching mechanism from a place of creation or production to a destination accepted by consumers, a market that brings consumers within a tourism system (taking a systems approach). This market conversion mechanism is the essence of tourism marketing.

Akihabara is an urban area that creates something new and exceptional. Akiba tourism acts out the exceptional, which is a characteristic of tourism at the deeper levels of the unstable Akiba information space as a social system. Akiba tourism balances this (see Figure 1) for both the area and tourists (otaku and professionals). The assemblage of places (i.e., destinations) in Akihabara that are like holy ground to tourists (as places of creation or production) for various forms of content has become the Akiba information space. Akiba tourism acts out the exceptional that is characteristic of tourism, in the deeper, behind-the-scenes levels of the unstable Akiba information space and can be analyzed as balancing markets for both the area and tourists (otaku and professionals).
Analyzed historically and over the long-term, this tourism can be seen as being the driving force in converting Akihabara, seen locally as an area of technological hardware innovation, into the Akiba information space, an area of software innovation. This innovation in Akihabara caused a transformation in industries in the Akihabara area, and it is this mechanism that is the essence of tourism marketing there.

ENDNOTES

1. Kato (Ono), Y., “Akihabara Chiiki ni okeru Sangyou Shuuseki no Tokuchou to Shuuseki Jizoku no Mechanism ni Kansuru Kenkyuu” [Research on Analytical Models for Urban Innovation: Regional Value Creation or production and the Development of Sustainable Cities], International Development and Regional Planning Unit, Department of Urban Engineering, University of Tokyo Graduate School of Engineering (University of Tokyo Graduate School doctoral thesis). This paper is the only doctoral thesis on the Akihabara area.


3. Sunaga, K., Ecotourism no Minzokushi: Kita Thai Sanchimin Karen no Seikatsu Sekai [The Ethnographic Magazine of Ecotourism: The Life and World of the Karen Hill Tribe of Northern Thailand], Shumpusha, 2012 (Rikkyo University Graduate School of Tourism Studies doctoral thesis in tourism studies). This paper won the Tourism Writing Award at the 6th Japanese Tourism Research Conference in 2012.

4. This is a photo of the back cover of a research text on Japanese culture by Professor Elena Katasonova (Russian Academy of Sciences, Oriental Studies Institute, Japanese Culture Research Center) which discusses “Luida’s Bar” in front of the Yodobashi Akiba store in Akihabara. With research regarding “why was Morning Musume [a popular all-girl singing group in Japan] created in Japan?” Professor Katasonova (PhD in sociology) is Russia’s leading researcher on Japanese culture, and the advisor (as a teacher accepted into the Russian Academy of Sciences) to the author while studying abroad in August, 2012. The photo is the back cover of a research text published in 2012. It is no coincidence that leading researchers in Japanese culture in other countries, in addition to researchers in Japan, have used the example of “Luida’s Bar,” leading one to think that this establishment does have the power to change a place into an information space.

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Miyake, R., *Akihabara ha Ina* [Akihabara Today], Geijutsu Shimbusha, 2010
Lumsdon, L. (translated by Katsuhiko Okumoto), *Kankou no Marketing* [Tourism Marketing], Taga Shuppan, 2004
Workplace Health: The Approach Of
Culture-Based Intervention Strategy
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ABSTRACT

This study developed a three-dimension construct to measure the culture of workplace health within organizations. The supportive culture refers to the real resource investment of the organization, such as the manager’s support of health practices and work-family balance policies, that can create a high-quality organizational climate and improve workplace health. The development culture refers to the emphasis of employees’ learning and growth, such as learning opportunities, career development, education and training, professional practices and work autonomy. The justice culture refers to the treatment or situations in which individuals have equal opportunities, such as pay equity, reward equity, and information equity. We collected 2,437 participants from 9 enterprises in Taiwan for testing the construct of workplace health culture and scrutinized its criteria-related validity and discriminant validity. Firstly, the results of exploratory factor analysis and confirmatory factor analysis supported the three-factor model, justice culture, supportive culture, and development culture. Secondly, the results indicated that the three-factor workplace health culture had significant relationships with 8 criteria we examined, including job satisfaction, affective organizational commitment, work engagement, work-family balance, fatigue, presenteeism, health symptoms, and general health. Finally, we argued that companies with good workplace health practices would obtain higher scores in the measure of workplace health culture than other without. In sum, the results suggested that high occupational health performance companies had comparative high average scores in justice culture, supportive culture, and development culture. Discussion on theoretical and practical implications are also provided.

Keywords: Workplace Health, Justice Culture, Supportive Culture, Developmental Culture
Research Metrics
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Aliza Rotenstein, Sy Syms School of Business, Yeshiva University, USA

ABSTRACT
Faculty in colleges and universities are typically assessed in three areas: teaching, service and research. These apply to evaluations for tenure as well as promotion. Generally, schools have minimum requirements in each of these areas, both qualitatively and quantitatively. In addition, accrediting associations such as the AACSB, often have requirements in these areas for faculty to maintain academic qualifications. The details of the requirements are not specified by AACSB but rather are left up to the college. As compared to assessments for tenure or promotion, which are a snapshot review of a faculty member’s performance at a particular moment in time, these assessments must be done continuously over time. We consider the assessment of research. It is not enough to require x number of journal publications of a certain level as is often done for tenure evaluations. One must consider over what time frame to judge the publications. At the one extreme, one can have a specific requirement for each year, or at the other extreme, take the average of all publications to date over an entire career. Neither of these would seem to be appropriate. Considering the amount of time it takes to get papers accepted and published in superior journals, is it fair to be judged for not having research results in a single year? On the other hand, judging performance by averaging all publications over an entire career gives equal weight to publications in the distant past with those of current vintage. It seem reasonable that what a person has been doing recently should be given heavier weight than work of the past.

A typical intermediate method of evaluation is to require a certain minimum level over the period of the most recent x number of years. For example, one school requires at least two publications in what they consider a level b journal over the previous five years. This gives some greater latitude than having a yearly requirement, but at the same time does not give equal weight to what happened twenty years ago and last year. However, it does give equal weight to whatever was done in the last five years, and does not give any consideration to what was accomplished previously. It seems somewhat arbitrary to give full weight to an article published five years ago and not consider at all one from six years ago. There might even be some incentive to hold off from publishing a second article, if one already has the required two, since it “will not be counted”.

Since the point of the assessment is in large part to forecast the future likelihood of continued research based on past results, we would suggest using a forecasting technique that would mitigate some of the issues mentioned. The idea of requiring two publications in five years essentially involves keeping a five-year moving average. The moving average must maintain a value of at least 2/5=0.4 to be considered satisfactory. This moving average will give equal weight to the most recent five years and no benefit to anything that happened previously. This problem can be somewhat eased by using a weighted moving average, where the more recent years have greater weight. However, the issue of having previous work be discarded will still exist. A more reasonable way to forecast might be to use exponential smoothing. This will have the effect of considering all work in a portfolio, but give the greater weight to the more recent work.

The authors intend to test this hypothesis and provide examples demonstrating the possible benefits or drawbacks of the suggested technique.
An Observation of Prime Numbers

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Kareemah Snow, Harris Stowe State University, USA
Tamez Amerson, Harris Stowe State University, USA

ABSTRACT

This article presents a computer application written in the C# programming language that calculates prime numbers. The prime numbers were observed with the aim of potentially discerning patterns within the generated number line. In this paper, a prime number is defined as a natural positive integer greater than 1 whose only divisors are 1 and the number itself. Composite numbers are defined in this paper as the remaining natural positive numbers on the number line that are NOT prime numbers. We found support for various theorems and conjectures defined in the literature. For example, the study findings support the theorem that there is an infinite number of prime numbers, as well as the theorem that the gap between two consecutive primes (prime gap) is randomly distributed. This study also offers support for the Twin Prime conjecture that there is an infinite number of twin primes. Finally, we present observations and comments on the quantity of composite numbers included in the prime gap. More specifically, we found the first and the only prime gap within the first 1,000 positive integers on the number line that holds a non-prime (composite) quantity of composite numbers. As this diverse prime gap, has not been previously named, we denote it as the HSSU diversity gap.

Introduction

Why is this study of prime numbers important? First; Prime numbers are the building blocks of all whole numbers, which can therefore be written in terms of prime numbers (Templeton 2013; Curtis and Tularam 2011). Second; Prime numbers are interesting and exciting as they introduce students to the fascinating field of pure mathematics (Curtis and Tularam 2011). Third; Asynchronous (public-key) encryption used to keep information on the Web safe and secure from potential misuse is based on prime numbers (Ciampa 2015; Kaliski 2003).

Extant research on prime numbers is vast and many books have been written on the subject. Although the topic of prime numbers has been extensively studied over the years, new and interesting facts are still being discovered. As previous work on prime numbers was primarily conducted by mathematicians, in this paper, we present the results of a short literature review on this topic. We also introduce a computer application for determining if a number is prime, along with prime number observations conducted by undergraduate students in a small Midwestern university.

As a part of this study, various theorems and conjectures on prime numbers were reviewed.

Theorem 1: There is an infinite number of prime numbers.

The first theorem examined as a part of the literature review states that there is an infinite number of primes (Curtis and Tularam 2011; Lagunas and Perelli 2003; Zagier 1977). Curtis and Tularam (2011 p. 265) argue that that there are an infinite number of primes, stating that “Euclid’s proof of infinite primes is accepted throughout modern mathematics”. Languasco and Perelli (2003) also support the theorem of infinite primes, adding that the distance between consecutive primes may be a determinant of future prime numbers. This gap between two consecutive prime numbers is defined as the prime gap and is important in determining the existence of future prime numbers. The second theorem examined in this study states that the prime gaps between consecutive primes are random by nature (Raji 2005; Curtis and Tularam 2011).
Theorem 2: The prime gap between the consecutive prime numbers is random in length.

Raji (2005) found an arbitrarily large gap between the indefinite number of prime numbers. Nearly three decades prior, Zagier (1977) concluded that the prime gap is randomly distributed. Curtis and Tularam (2011) also viewed the prime gap as a random gap between two consecutive prime numbers. Soundararajan (2007) observed random gaps between the primes and noted that, as the prime numbers increased in size, so did the gap between them. The author also found that a small gap existed even between large primes, supporting the conjecture of an infinite number of twin primes.

Conjecture 1: There is an infinite number of twin primes.

Zagier (1977) described twin primes as two consecutive prime numbers with a prime gap of two \((g = p_2 - p_1)\), separated by only one composite number. For example, in the sequence 3, 4, 5, the prime numbers 3 and 5 are separated by the number 4, which is a composite number. He also identified a method for predicting the number of twin primes within arrays. In fact, his work could be considered an extension of the Riemann study of the distribution of prime numbers (Stein, 2011). Goldston, Pintz, and Yildrum (2011) expanded on Goldbach’s Twin Prime Conjecture, theoretically affirming the existence of infinite number of twin primes. The present research is based on this observation, allowing a fact-finding technique to be developed for testing the theorems and the conjecture identified above.

Methodology:

The students helped to create a C# (c-sharp) application that generates sequences of prime numbers in various user-defined positive integer ranges. The application relies on brute force calculations to identify every prime number within a specified range, as shown in Figure 1 below, which depicts the graphical user interface (GUI) of the “Prime Number Generator” application.

![Figure 1. Prime Number Generator](image)

The application’s source code, reproduced in Table 1, was presented in the Systems Programming I course and was modified by the students. Information security was discussed and the application was made more secure by including and implementing Exception Handling and Data Validation techniques. The “isPrime” method uses brute force to calculate the prime numbers within a given specified range. The application outputs the prime numbers to a text file (PrimeNumbers.txt) for further processing.
Table 1. Source Code for Prime Number Generator

using System;
using System.Drawing;
using System.Windows.Forms;
using System.IO; // Add a reference to the System.IO namespace.

namespace Prime_Numbers
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void calculateButton_Click(object sender, EventArgs e)
        {
            try
            {
                long p, upperRange;

                long.TryParse(textBoxLowRange.Text, out p); // &&
                long.TryParse(textBoxUpperRange.Text, out upperRange);
                if (upperRange > p)
                {
                    StreamWriter outputfile;
                    outputfile = File.AppendText("PrimeNumbers.txt");
                    outputfile.WriteLine("Prime Numbers", FontStyle.Bold);

                    while (p <= upperRange) // (4) Loop condition
                    {
                        if (isPrime(p))
                        {
                            outputfile.Write(p + ",", FontStyle.Bold);
                        }
                        else
                        {
                            outputfile.Write(" . ", FontStyle.Bold);
                        }
                        p++; // (3) Incrementing the control variable
                    }

                    outputfile.Close();
                    MessageBox.Show("Data sent to the text file successfully", "Prime Numbers", MessageBoxButtons.OK,
                    MessageBoxIcon.Information);
                }
                else
                {
                    MessageBox.Show("The range should be from the Low range to" + "the upper range. For example, 5 through 15");
                }
            }
        }
    }
}
catch (Exception ex)
{
    MessageBox.Show(ex.Message + ex.StackTrace, "Data Error",
                        MessageBoxButtons.OK, MessageBoxIcon.Error);
}

private void exitButton_Click(object sender, EventArgs e)
{
    Application.Exit(); // Exits the application
}

private bool isPrime(long p) // Determines if the number is a Prime Number
{
    for (long x = 2; x <= p - 1; x++)
    {
        if (p % x == 0)
            return false; // The number is NOT a Prime Number
    }
    return true; // The number is a Prime Number
}

The resulting prime numbers were transferred to an Excel file for formatting, allowing possible patterns within the number line to be discerned. To further the evaluations and to better engage students in the project, the first 650 numbers on the number line were printed out and displayed on the wall of the third floor of the Dr. Henery Givens, Jr. Administration Building between the Anheuser-Busch School of Business and the College of Arts and Science Department of Mathematics and Natural Sciences. Students were invited to observe the prime numbers on the number line and submit their observations.

Results:

The observations of prime numbers are presented in Figure 2. The primes reviewed were from the ranges (0–100), (100–1,100), (1,000–1,100), (1,000–10,100), (100,000–100,100), (1,000,000–1,000,100), (10,000,000–10,000,100), (100,000,000–100,000,100), (1,000,000,000–1,000,000,100), and (10,000,000,000–10,000,000,100). Figure 2 depicts a decline in the quantity of prime numbers as the range extends from 0–100 to 100,000-100,100. Figure 2 also shows that the quantity of prime numbers remained relatively stable at ≈ 6 primes for every 100 integers starting at the range 100,000 – 100,100 on the number line. This stability supports Theorem 1 that there is an infinite number of prime numbers.
Between each two consecutive prime numbers lies the prime gap \((g = p_2 - p_1)\). Using the observation fact finding technique, the first 1,000 positive natural numbers were observed in terms of the prime gap. Table 2 presents the prime numbers observed in the first 1,000 positive natural numbers, revealing that the prime gaps appear to be randomly distributed, but increase in size as the primes increase in size. The first prime gap occurred between the primes 3 and 5 \((g = p_2 - p_1)\) which contains the composite number 4. The prime gap of 2 occurred 35 times within the first 1,000 positive natural numbers. The gap that occurred the most often was 6, which contained five composite numbers.

**Table 2**

<table>
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<tr>
<th>Prime Gap</th>
<th>2</th>
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<th>6</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>18</th>
<th>20</th>
</tr>
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<tbody>
<tr>
<td>Number Observed</td>
<td>35</td>
<td>39</td>
<td>43</td>
<td>16</td>
<td>7</td>
<td>7</td>
<td>1</td>
<td>1</td>
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</tbody>
</table>

Further observations were made using the numbers generated by the Prime Number Generator. These are presented in Table 3, which provides a listing of both prime and composite numbers. The prime numbers are highlighted in Gold, differentiate them from composite numbers. The two consecutive primes with the prime gap of 2 containing only one composite number are considered Twin Primes.

Observing the Twin Primes in Table 3, it is evident that the largest one observed in this study occurred between 1,000,000,007 and 1000,000,009. The smallest Twin Prime occurred in the 3–5 range. Other Twin Primes appeared at locations 5–7, 11–13, 17–19, 29–31, and 41–43. These observations do not prove the conjecture that there is an infinite number of twin primes. However, observing twin primes occurring at other locations 1,000,037–1,000,039*, 100,000,037–100,000,039*, and 1,000,000,007–1,000,000,009, yields support to the conjecture that there is an infinite number of twin primes.
Table 3
Prime Numbers Observations 1 - 50

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</table>

* The primes were observed but not presented in the above table are due to space requirements.

Table 4 depicts the observations of the prime gaps. We found that, within the first 1,000 positive integers on the number line, all the prime gaps contained a prime quantity of composite numbers that filled each gap. With one exception, the prime gap 10 had a diverse number of composite numbers. The first such gap appeared between primes 139 and 149 and occurred 16 times within the first 1,000 positive integers on the number line. Since our limited literature review did not reveal a specific name for this prime gap, we denoted it as the “HSSU Diversity Gap”.

* The primes were observed but not presented in the above table are due to space requirements.
Table 4
Prime Gap Observations

<table>
<thead>
<tr>
<th>Prime Numbers</th>
<th>Number of Composites Between Primes</th>
<th>Prime Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>139</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>149</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>151</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>157</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>163</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>167</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>173</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>179</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>181</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>191</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>193</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>197</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>199</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>211</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>223</td>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>

Conclusion:

In conclusion, findings yielded by the present study support each theorem and conjecture reviewed. They also contribute to the body of knowledge about prime numbers by defining and naming the “HSSU Diversity Gap”. Most importantly, by engaging students in the research process, this work contributes to the quest for a brighter tomorrow for the students.

Lessons Learned:

Tamez Amerson

Prime Numbers are relatable not only to the things we discussed in this paper, but to life period. Prime Numbers are much more than any number divisible by 1 and itself, they are the backbones of math. Prime Numbers essentially make the world go around.

Kareemah Snow

This study demonstrated that the HSSU diversity gap exists and is anomalous, in that it is the only composite number of composites between primes. This revelation is attributed to how the C# application was written. Interestingly, the distribution of prime numbers levels out beyond 100,000.

This study also revealed that the HSSU diversity gap might occur finitely. Future studies aiming to identify possible patterns related to the digits (number of digits and values of places) of primes would be interesting.
Reference:


Equal Rights For The Infirmed Child: The Need To Create Culturally Acceptable Hospital Play Specialists And Childcare Specialists Japan

Yumi Matsuyama, Shigakkan University, Japan
Michelle Henault Morrone, Nagoya University of Arts and Sciences, Japan
Yoshimi Tanase, Aichi Children’s Health and Medical Center, Japan

ABSTRACT

The message from the 1990 EPA (Education for All) Conference in Jomtien emphasizes that an education that creates a strong developmental foundation for each child is critical in an increasingly global society, one in which the individual understands the importance of the three pillars of sustainable development. Taking cues from the OECD’s “Starting Strong 1/22,” and UNESCO’s “EFA Global Monitoring Report, in 2015, the United Nations proposed “Transforming our world: the 2030 Agenda for Sustainable Development.” This Agenda proposes that equal opportunities for all young children must be emphasized, and, in particular, those vulnerable because of illness or difficult circumstances.

This study investigates what practices are in place for Japanese young children in hospital due to terminal illnesses, temporary visits, or psychologically-related stays due to PTSD from abuse or other reasons. In Japan there are four main professions that provide ECE and care for such children: 1) Medical Childcare Expert (Iryo-Senmon Hoikushi), 2) Childcare Support Worker (Kodomo-Ryoyo Shienshi), 3) HPS (Hospital Play Specialist) and 4) CLS (Child Life Specialist). The first two types were developed in Japan and the last two are adapted from practices used currently used in England and the US. The professions are utilized differently, creating some issues of adaptability or cross-utilization. This research describes the practices of each profession and clarifies some of the obstacles each faces. In particular, we address the situation of adopting and adapting a method from one culture into another.

Additionally, we suggest some possibilities for the creation of a more optimal environment for children with medical or psychological needs. As proposed in the Declaration of the Rights of the Child, the young, even those infirmed, have a right to voice an opinion, to refuse medical treatment, and to express emotions without feeling barriers. Toward this end, professionals need comprehensive training in order to communicate with the child in his or her particular situation.
Management Of Students’ Activities For Improved Academic Performance At The Period Of Nigeria Economic Recession At Undergraduate Level In Universities In South-East, Nigeria

C. U. Madumere-Obike, University of Port Harcourt,
C. C. Ukala, University of Port Harcourt,
A. I. Nwabueze, University of Nigeria Nsukka, Nigeria

ABSTRACT

This paper investigated the management of students’ activities for improved academic performances at the period of Nigeria economic recession at undergraduate level in Universities in South-East. Two research questions and two hypotheses guided the study. The study adopted a descriptive survey design and the population comprised all the 450 administrative staff (Deans, H.O.Ds and Directors of institute) of ten federal and state universities in South-East, Nigeria. A sample size of 125 administrative staff was drawn from three federal and two state universities using stratified random sampling technique, representing 27.8% of the population. The instrument used was questionnaire titled “Management of Students’ Activities Questionnaire (MSAQ) developed by the researchers, which was validated by experts. Cronbach alpha was used to determine the reliability of the instrument, which yielded an index of 0.91. Mean scores and standard deviation were used to answer the research questions, while z-test was used to test the hypotheses at 0.05 alpha significant level. The findings revealed among others that, the ways educational instructions can be managed to improve the academic performances of undergraduates at the period of Nigeria economic recession include: making adequate provision of instructional materials in the school by educational administrators, provision of recent laboratory equipment/apparatus in the laboratories, furnishing the libraries with current books, making the classroom blocks conducive for learning, provision of the technological devices needed for learning, maintaining the available technological devices regularly, and creating instructional enhancement through proper coordination of lectures/research activities. Based on the findings, recommendations were made.

Introduction

Students’ academic activities in universities are those activities that improve their performances in education such as: learning, research and technological activities. These activities equip the students with new knowledge, performing skills, innovative skills, problem solving, creative ideas, and ability to study cooperatively as members of a team. This implies that, learning through research and technology programmes is very important in enhancing capacity building of students in university institutions.

Learning according to Uche and Nwabueze (2013) is a self or personal development acquired through the act of teaching, research and community service. It includes the development of one’s mind and accumulation of concepts, knowledge, ideas, skills and attitudes necessary for solving situational problems through active participation in educational activities. Nzeneri in Uche and Nwabueze (2013) conceptualizes learning as a designed process to liberate man from constraints, ignorance and exploitation. The liberation used here refers to the acquisition of experience, information, knowledge and skills, which may subsequently be used for solving problems, making decisions and creating new knowledge. Hence, learning is complex, transformational, natural and life-long, and measurable. However, good learning is derived from good teaching as there are factors that are associated with good teaching,
which include: effective communication, provision of variety of methods and techniques, combination of theory with practice, conducive environment, respect, connection of knowledge, and the use of new technologies. Madumere-Obike, Ukala and Nwabueze (2013) are of the opinion that, effective teaching promotes quality learning and expands educational access in education system. Therefore, learning is a self or personal development acquired through the act of teaching, which creates in an individual the knowledge and skills needed for quality job delivery. It includes the development of one’s mind and accumulation of concepts, knowledge, ideas, skills and attitudes necessary for solving situational problems through active participation in educational activities.

Research is a thorough, scholarly and scientific investigation or inquiry to bring about development in the society, through knowledge creation and productions (Madumere-Obike, Ukala & Nwabueze, 2013). However, Osagie (2012) states that, research is extremely critical and important in building universities as well as serves as engine of development in the fast developing world. The investment in research and development (R&D) in universities promotes creativity and innovative skills, technological advancements in a global setting. Research is seen as the search and application of knowledge for the development of new and improved products, services and industrial process of capital development, which has emerged to occupy the main centre stage in the activities of universities. However, research and development have become the most important and effective means of boosting sustainable economic development, which is geared towards reinforcing competitiveness in an era of economic recession in Nigeria.

In creating knowledge and development, good researches have to be undertaken by both the universities and research centres, because it is a basic tool for human development and scientific advancement in higher technology. University institutions have continued to strengthen their scientific research projects in order to create sustainable development of a knowledge-based economy (Madumere-Obike, Ukala & Nwabueze, 2013). However, the advancement of an economy through research and development is directly linked to the performance of staff and students in higher institutions of learning, because it is the only source for generating and advancing the frontier of knowledge, skills, training and expertise for manpower development. It is the most important factor, which facilitates and accelerates economic development and improved living conditions in society (Hill, 2006). A research intensive university is a centre of learning because research permeates all of its operations and the basis of reputation, which is the foundation for development. Learning requires research, discovery and critical inquiry to identify and transmit best practices in the institutions of higher learning at this period of economic recession in the country.

Technology advancement in institutions of higher learning promotes knowledge and skills to build the society. New knowledge and technological skills empower graduates for employment after school, and equip them with ideas to participate in building the nation at the period of economic recession. To respond to the emerging economic and social needs of the nation, the following technological skills are needed in graduates of our various higher educational institutions: skills of analysis and problem solving, skills of information processing and computing, and skills of understanding the role of science and technology in our society (Uche & Nwabueze, 2013). These skills give students the opportunity for maximum flexibility and adaptability in their future employment and other aspects of life.

In an education system, there is need to provide and maintain the technological facilities and devices needed for technology advancement and research development in our society. According to Nwabueze (2011), the technology facilities/devices needed for improved research, teaching and learning include: desktop computers, laptop computers, Internet-connected desktop/laptop computers, CD-ROM database, institutional virtual library (digital library), institutional website, institutional functional e-mail address, departmental computer laboratory, examination scoring machine, multimedia classrooms (audio visual centre), computer screen reading software, projectors for teaching /learning, and magnetic white boards. Nwabueze and Ukaigwe (2015) state that, the technology devices needed for all round university education include: general computer, Ipad, android, CD ROMs, Internet access, DVD ROMs, flash drives, scanners, web camera, camcorders, television set, video machine, MP 3-9, photocopiers, printers and projectors. These devices are needed in the school system for teaching, learning, examination, continuous assessment, research, students’ admission/graduation records, personnel management records, administrative record keeping, financial management and facility management records. Ubani (2014) maintains that, there must be adequate technology facilities in a university setting to enhance productivity in their daily activities. Also, the upgrading of these facilities will regularly keep them adequate for proper use.
Statement of the Problem

In the university system, there have been very low provision and poor maintenance of teaching/learning materials, research facilities and technology devices needed for academic improvement of staff and students. This may be as a result of low budgetary allocations to education sector and poor funding. At this period of economic recession in Nigeria, provision and maintenance of these devices become very low. This may be as a result of very high cost of materials in the market and very low a allocation of funds to educational sector at this period of economic recession in the country. This therefore, calls for assistance from donor agencies and stakeholders in the provision and maintenance of research facilities and technological devices in the school system to improve the academic performance of undergraduates for global competitiveness.

Aim and Objectives of the study

The aim of this study is to investigate the management of students’ activities for improved academic performances at the period of Nigeria economic recession at undergraduate level in Universities in South-East. The specific objectives are:

1. Find out ways of managing research activities among undergraduates to improve their academic performances at the period of Nigeria economic recession in Universities in South-East; and
2. Determine ways of managing educational instructions to improve the academic performances of undergraduates at the period of Nigeria economic recession in Universities in South-East.

Research Questions

The following research questions guided the study:

1. How can undergraduate research activities be managed to improve their academic performances at the period of Nigeria economic recession in Universities in South-East?
2. In what ways can educational instructions be managed to improve the academic performances of undergraduates at the period of Nigeria economic recession in Universities in South-East?

Hypotheses

The following hypotheses were tested at 0.05 alpha significant level:

1. There is no significant difference between the mean scores of male and female administrative staff in their opinion on the ways undergraduate research activities can be managed to improve their academic performances at the period of Nigeria economic recession in Universities in South-East.
2. There is no significant difference between the mean scores of male and female administrative staff in their opinion on the ways educational instructions can be managed to improve the academic performances of undergraduates at the period of Nigeria economic recession in Universities in South-East.

Methodology

The study adopted a descriptive survey design and the population comprised all the 450 administrative staff (Deans, H.O.Ds and Directors of institute) of ten federal and state universities in South-East, Nigeria. A sample size of 125 administrative staff was drawn from three federal and two state universities namely: Michael Okpara University, University of Nigeria Nsukka, Federal University of Technology Owerri, Abia State University, and Enugu State University of Technology using stratified random sampling technique, representing 27.8% of the population. This implies that, 25 administrative staff were drawn from each of the selected universities; male administrative staff were 80 in number, while the female administrative staff were 45 in number. The instrument used was questionnaire titled “Management of Students’ Activities Questionnaire (MSAQ) developed by the researchers, which was validated by experts. Cronbach alpha was used to determine the reliability of the instrument, which yielded an index of 0.91. Mean scores and standard deviation were used to answer the research questions, while z-test was used to test the hypotheses at 0.05 alpha significant level.
Data Analysis and Results

Research Question One: How can undergraduate research activities be managed to improve their academic performances at the period of Nigeria economic recession in Universities in South-East?

Table 1: Mean scores of administrators in federal and state universities on the ways undergraduate research activities can be managed to improve their academic performances at the period of Nigeria economic recession

<table>
<thead>
<tr>
<th>S/N</th>
<th>Ways undergraduate research activities can be managed to improve their academic performances at the period of Nigeria economic recession include:</th>
<th>Federal (75)</th>
<th>State (50)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Involving donor agencies in the provision of research facilities in university institution</td>
<td>3.24</td>
<td>3.20</td>
<td>Agree</td>
</tr>
<tr>
<td>2</td>
<td>Donor agencies assisting in maintaining the available research facilities through fund donations</td>
<td>3.26</td>
<td>3.18</td>
<td>Agree</td>
</tr>
<tr>
<td>3</td>
<td>Students coming to school with some of the facilities they can afford</td>
<td>3.01</td>
<td>3.09</td>
<td>Agree</td>
</tr>
<tr>
<td>4</td>
<td>Students involving their parents in the provision/maintenance of research facilities</td>
<td>3.18</td>
<td>3.16</td>
<td>Agree</td>
</tr>
<tr>
<td>5</td>
<td>Universities involving alumni members in the provision modern research facilities</td>
<td>3.36</td>
<td>3.38</td>
<td>Agree</td>
</tr>
<tr>
<td>6</td>
<td>Universities partnering with industries for the provision of research facilities which can be of benefit to the industry</td>
<td>3.28</td>
<td>3.32</td>
<td>Agree</td>
</tr>
<tr>
<td>7</td>
<td>Universities using the fund generated revenues from academic projects in the provision of modern research facilities at this period of economic recession</td>
<td>3.23</td>
<td>3.05</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td>Aggregate Mean Score</td>
<td>3.22</td>
<td>3.20</td>
<td>Agree</td>
</tr>
</tbody>
</table>

Data in Table 1 present the mean scores and standard deviation of administrators in federal and state universities on the ways undergraduate research activities can be managed to improve their academic performances at the period of Nigeria economic recession. Their responses indicate that, they agreed on all the items in the table with mean scores greater than the mean criterion of 2.50. The aggregate mean score of 3.22 and 3.20 indicate that, ways undergraduate research activities can be managed to improve their academic performances at the period of Nigeria economic recession include: involving donor agencies in the provision of research facilities in university institution, donor agencies assisting in the maintenance of available research facilities through fund donations, students coming to school with some of the facilities they can afford, students involving their parents in the provision/maintenance of research facilities, universities involving alumni members in the provision modern research facilities, universities partnering with industries for the provision of research facilities which can be of benefit to the industry, and universities using the fund generated revenues from academic projects in the provision of modern research facilities at this period of economic recession.

Research Question Two: In what ways can educational instructions be managed to improve the academic performances of undergraduates at the period of Nigeria economic recession in Universities in South-East?
Table 2: Mean scores of male and female administrators in universities on the ways educational instructions can be managed to improve the academic performances of undergraduates at the period of Nigeria economic recession

<table>
<thead>
<tr>
<th>S/N</th>
<th>ways educational instructions can be managed to improve the academic performances of undergraduates at the period of Nigeria economic recession include:</th>
<th>Male (80)</th>
<th>Female (45)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>S.D</td>
<td>Mean</td>
</tr>
<tr>
<td>1</td>
<td>Making adequate provision of instructional materials in the school by educational administrators</td>
<td>3.11</td>
<td>0.21</td>
<td>3.07</td>
</tr>
<tr>
<td>2</td>
<td>Provision of recent laboratory equipment/apparatus in the laboratories</td>
<td>3.42</td>
<td>0.16</td>
<td>3.38</td>
</tr>
<tr>
<td>3</td>
<td>Furnishing the libraries with current books</td>
<td>3.46</td>
<td>0.15</td>
<td>3.39</td>
</tr>
<tr>
<td>4</td>
<td>Making the classroom blocks conducive for learning</td>
<td>3.52</td>
<td>0.13</td>
<td>3.47</td>
</tr>
<tr>
<td>5</td>
<td>Provision of the technological devices needed for instructional activities</td>
<td>3.22</td>
<td>0.19</td>
<td>3.16</td>
</tr>
<tr>
<td>6</td>
<td>Maintaining the available technological devices regularly</td>
<td>3.18</td>
<td>0.20</td>
<td>3.10</td>
</tr>
<tr>
<td>7</td>
<td>Creating instructional enhancement through proper coordination of lectures/research activities</td>
<td>3.49</td>
<td>0.14</td>
<td>3.45</td>
</tr>
<tr>
<td></td>
<td><strong>Aggregate Mean Score</strong></td>
<td><strong>3.34</strong></td>
<td><strong>0.169</strong></td>
<td><strong>3.29</strong></td>
</tr>
</tbody>
</table>

Data in Table 2 present the mean scores and standard deviation of male and female administrators in federal and state universities on the ways educational instructions can be managed to improve the academic performances of undergraduates at the period of Nigeria economic recession. Their responses indicate that, they agreed on all the items in the table with mean scores greater than the mean criterion of 2.50. The aggregate mean score of 3.34 and 3.29 indicate that, ways educational instructions can be managed to improve the academic performances of undergraduates at the period of Nigeria economic recession include: making adequate provision of instructional materials in the school by educational administrators, provision of recent laboratory equipment/apparatus in the laboratories, furnishing the libraries with current books, making the classroom blocks conducive for learning, provision of the technological devices needed for instructional activities, maintaining the available technological devices regularly, and creating instructional enhancement through proper coordination of lectures/research activities.

Test of Hypotheses

**Hypothesis One:** There is no significant difference between the mean scores of Federal and State administrative staff in their opinion on the ways undergraduate research activities can be managed to improve their academic performances at the period of Nigeria economic recession in Universities in South-East.

Table 3: Summary of z-test on the difference between the mean scores of Federal and State administrative staff in their opinion on the ways undergraduate research activities can be managed to improve their academic performances at the period of Nigeria economic recession

<table>
<thead>
<tr>
<th>Institutions</th>
<th>N</th>
<th>Mean</th>
<th>St.D</th>
<th>df</th>
<th>z-calculated value</th>
<th>Critical value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>75</td>
<td>3.22</td>
<td>0.194</td>
<td>123</td>
<td>0.422</td>
<td>±1.960</td>
<td>Accepted</td>
</tr>
<tr>
<td>State</td>
<td>50</td>
<td>3.20</td>
<td>0.279</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data in Table 3 show the summary of z-test on the difference between the mean scores of Federal and State administrative staff in their opinion on the ways undergraduate research activities can be managed to improve their academic performances at the period of Nigeria economic recession. The result showed that the z-calculated value of 0.422 is less than the z-critical value of ±1.960 indicating that the null hypothesis was accepted. Therefore, there is no significant difference between the mean scores of Federal and State administrative staff in their opinion on the ways undergraduate research activities can be managed to improve their academic performances at the period of Nigeria economic recession.

**Hypothesis Two:** There is no significant difference between the mean scores of male and female administrative staff in their opinion on the ways educational instructions can be managed to improve the academic performances of undergraduates at the period of Nigeria economic recession in Universities in South-East.
Table 4: Summary of z-test on the difference between the mean scores of male and female administrative staff in their opinion on the ways educational instructions can be managed to improve the academic performances of undergraduates at the period of Nigeria economic recession in Universities in South-East

<table>
<thead>
<tr>
<th>Gender of Staff</th>
<th>N</th>
<th>Mean</th>
<th>St.D</th>
<th>df</th>
<th>z-calculated value</th>
<th>Critical value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>80</td>
<td>3.19</td>
<td>0.24</td>
<td>123</td>
<td>0.303</td>
<td>±1.960</td>
<td>Accepted</td>
</tr>
<tr>
<td>Female</td>
<td>45</td>
<td>3.16</td>
<td>0.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data in Table 4 show the summary of z-test on the difference between the mean scores of male and female administrative staff in their opinion on the ways educational instructions can be managed to improve the academic performances of undergraduates at the period of Nigeria economic recession in Universities in South-East. The result showed that the z-calculated value of 0.303 is less than the z-critical value of ±1.960 indicating that the null hypothesis was accepted. Therefore, there is no significant difference between the mean scores of male and female administrative staff in their opinion on the ways educational instructions can be managed to improve the academic performances of undergraduates at the period of Nigeria economic recession in Universities in South-East.

Discussion of Findings

The findings revealed that, the ways undergraduate research activities can be managed to improve their academic performances at the period of Nigeria economic recession include: involving donor agencies in the provision of research facilities in university institution, donor agencies assisting in the maintenance of available research facilities through fund donations, students coming to school with some of the facilities they can afford, students involving their parents in the provision/ maintenance of research facilities, universities involving alumni members in the provision modern research facilities, universities partnering with industries for the provision of research facilities which can be of benefit to the industry, and universities using the fund generated revenues from academic projects in the provision of modern research facilities at this period of economic recession. The test of hypothesis one showed that, there is no significant difference between the mean scores of Federal and State administrative staff in their opinion on the ways undergraduate research activities can be managed to improve their academic performances at the period of Nigeria economic recession. However, the involvement of undergraduates in research activities equips them with new knowledge, relevant skills and ideas that would help them to build their academic structures for future development of the society. In line with the findings of Madumere-Obike, Ukala and Nwabueze (2013), university institutions take research as the key to new knowledge and skill development; and therefore, must be the most important and effective means of boosting sustainable economic development, which is geared towards reinforcing competitiveness in an era of economic recession in Nigeria. University institutions must continue to strengthen their scientific research projects in order to create sustainable development of a knowledge-based economy.

The findings equally revealed that, the ways educational instructions can be managed to improve the academic performances of undergraduates at the period of Nigeria economic recession include: making adequate provision of instructional materials in the school by educational administrators, provision of recent laboratory equipment/apparatus in the laboratories, furnishing the libraries with current books, making the classroom blocks conducive for learning, provision of the technological devices needed for instructional activities, maintaining the available technological devices regularly, and creating instructional enhancement through proper coordination of lectures/research activities. The test of hypothesis two showed that, there is no significant difference between the mean scores of male and female administrative staff in their opinion on the ways educational instructions can be managed to improve the academic performances of undergraduates at the period of Nigeria economic recession in Universities in South-East. However, educational instructions when properly managed help the students develop competencies in their areas of specialization, and be ready to contribute maximally to national development. In line with the findings, Uche and Nwabueze (2013) made the point that, through quality teaching and learning, knowledge is created; quality graduates are produced; the graduates are empowered for employment; researches to create sustainable future are made; and graduates are empowered to assume responsibility for creating a sustainable future. The point made here is that, without quality instruction which is the input process, knowledge cannot be created, the number of graduates produced will be unemployable and sustainable development is being hindered.
Conclusion

The findings of this study had shown that, research activities are very important in the training and development of undergraduates of universities. Through research processes, new knowledge and relevant skills are created, and important ideas and innovations are developed. Research aids teaching and learning for global competitiveness in an era of economic recession in Nigeria.

Recommendations

The following recommendations were made based on the findings of this study:

1. Donor agencies should be involved in the provision of research facilities in university institution to aid the students acquire new knowledge and relevant skills needed for global competitiveness at this period of Nigeria economic recession.
2. Donor agencies should equally assist in the maintenance of available research facilities through fund donations to maintain regular updates in the academic world.
3. Students of Nigerian universities should come to school with some of the facilities they can afford such as laptop computers, Ipads, flash drives, C.Ds etc. For knowledge sharing/building.
4. Students should equally involve their parents to participate in providing and maintenance of research facilities in the university institutions in South East, Nigeria.
5. Universities should partner with industries for the provision of research facilities which can be of benefit to the industry and university as well.
6. Universities should embark on other activities that can generate fund/revenues, which can be used in the provision of modern research facilities at this period of economic recession.

References


Twenty-First-Century Literacy, Game-Based Learning, Project-Based Learning
Elizabeth Lasley, Sam Houston State University, USA

ABSTRACT

Literacy in the twenty-first-century extends beyond symbolic representations of letters grouped together to signify words or concepts on a piece of paper. Twenty-first-century literacy involves the ability to compose and interpret imagery using visual and spatial reasoning through signs and symbolism in a contemporary format, such as video games (Gee, 2003; Johnson, 2005). How do video games support or even relate to literacy development? This paper will discuss the relationships between literacy in video games, Gee’s (2003) learning principles related to semiotics, critical thinking, play, and the application of games, such as SimCity in the classroom, an interdisciplinary project-based approach to learning.

Keywords: Literacy, Semiotics, Reading Comprehension, Game-Based Learning, Project-Based Learning
Instructional Planning
In Early Childhood Education
Belkis Tekmen, Başkent University, Turkey

ABSTRACT

How to design and adapt child observation and assessment tools is an essential competency for preschool teachers to monitor and support their students, particularly in early childhood. Observation and careful assessment of young children can help to build a stronger relationship in a more meaningful way, therefore an important tool for an early childhood teacher. However, research shows that early years practitioners struggle to observe children satisfactorily and find difficulty in planning activities based upon their observations. In this study, in order to understand the knowledge, preferences and expectations of the newly qualified preschool teachers about monitoring their students, they are interviewed about how they design, use and evaluate the observation tools in early childhood classrooms. In order to reach detailed information from the participants, study is designed as a qualitative research. Participants are selected through purposeful sampling and data is also collected through semi-structured interviews and open-ended questionnaires from thirty novice preschool teachers working at different early childhood education centers. In addition to the data collected from the participants, their instructional plans and activities are also analyzed in order to enrich the data sources and find out the areas need improvement most. Following the steps of the content analyses, the emerged themes are presented according to the mostly focused and related areas such as; teacher competencies, developmental areas, activities and techniques preferred and overall areas needed to be supported. Observation results can also guide to develop or adjust programs used to facilitate learning. Therefore, understanding the areas need to be supported is vital for a novice teacher’s professional development.
Developing A Business Degree Program: A Methodological Approach
Shaike Marom, Western Galilee College, Israel

Abstract
Against the background of the growing volume of business education, business schools are struggling with creating an effective business education program in terms of curriculum and pedagogy. The need is to tailor a specific program that attracts the target audience, is compatible with the education philosophy of the institution, addresses the needs of major stakeholders, and balances a rigorous academic theory-based business education and real-world practicality and relevance. This paper addresses the need of such planning by offering a systematic methodology on how to devise a business education program.
Value Enhancement From Tax Engineering: A Single-Country Case Study Of Inter-Jurisdictional Re-Incorporations

A. J. Stagliano, Saint Joseph’s University, USA

ABSTRACT

Business firms have a reasonably strong incentive to reincorporate in a non-domestic taxing jurisdiction as a means of creating shareholder value through lower taxes on net income. Since tax payments on profit are merely a distributional sharing of net operating results with non-owners, such a strategy has intuitive appeal as a presumably costless technique to increase net cash flow from operations. Furthermore, managers may well see this type of exploit as a riskless way to enhance their own wealth—since their remuneration likely is tied, in some manner, to after-tax “bottom line” profitability. Actions of this sort typically are called tax inversions.

This research reports on an investigation of whether low-tax-rate jurisdiction shopping practices actually create value for owners. By using case examples, developed from a recent 5-year period, an analysis is conducted of returns on assets to determine if the simple act of tax jurisdiction realignment leads to enterprise value enhancement.

The focus is on a single country’s inversions that were completed between 2010 and 2014. This limited scope was selected to assure that the work is contemporary and relevant, while maintaining accessibility to financial data from the post-inversion period. The project examines the impact from the lowest corporate tax rate country among developed nations, providing a strong likelihood of uncovering artificial value creation that may come about as a consequence of tax avoidance. An investigation focused on one country also limits complications caused by possible discrepancies in tax-law application.

Results from this research should be of interest to governmental units, policy makers, corporate management, and investing stakeholders. If inversions create shareholder value at the margin, then financial engineering of this kind could well lead to a significant world-wide migration of headquarters for many large multi-national business enterprises. Artificial value creation, in effect, might engender market disruptions and an altered geographic dispersion of financial power.

Keywords: Corporate Tax Inversions, Re-Incorporation, Shareholder Value
How To Make A Difference In The Banking Sector? The Impact Of Your Employees In A Competitive Environment

Raoul Graf, UQAM - Ecole Des Sciences De La Gestion, Canada
Gabrielle Lépine, Laval University, Canada
Manon Arcand, UQAM - Ecole Des Sciences De La Gestion, Canada

ABSTRACT

Purpose. Faced with today's expanding pool of competitors and fluctuating economy, financial institutions are keeping their ears to the ground for the latest marketing strategies. Consequently, this study sets out to analyze the various ways in which these companies can increase their share of wallet by banking on their human resources, and examines the impact of contact personnel's service attitude on satisfaction and on internal and external performance measures in the banking industry.

Design. This quantitative cross-sectional analysis was conducted following a review of the relevant literature, and the survey method chosen, i.e. online, generated 733 respondents.

Findings. The study findings illustrate the positive correlation between the service attitude of banks' contact personnel and customer satisfaction. The critical factors of service attitude—kindness and courtesy, problem-solving, empathy and knowledge of products, services and promotions—shape customers' perception of the service rendered, and by extension, their level of satisfaction. Moreover, in keeping with numerous other studies conducted in this sector, the correlation between satisfaction and loyalty is validated. And though they are rather weak, associations between share of wallet and satisfaction, loyalty and even service attitude were established.

Keywords: Service Attitude, Contact Personnel, Satisfaction, Loyalty, Share Of Wallet.
Strategic Management And Sustainable Energy Development: A Study Of The Impacts Of U.S. Domestic Natural Gas And Renewable Energy Development On WTI Crude Oil Prices

Steve Yallouz, British Columbia Institute of Technology, Canada

BACKGROUND

On July 1, 2014 the benchmark price of crude oil in the United States, West Texas Intermediate ("WTI"), was trading at US$106.06/barrel. In less than 18 months the WTI price dropped to US$35/barrel.\footnote{(U.S. Energy Information Administration, 2015a)} While there have been similar price declines in the past, the duration of this decrease has been the longest since the mid 1970’s when the Organization of Petroleum Exporting Countries ("OPEC") curtailed production to try an prop up global crude oil prices. Political instability in the Middle East and continuing threats to curtail oil production throughout the 1980’s encouraged the U.S. develop crude oil production in the 1980’s and 90’s and natural gas and renewable energy production in the 1990’s and 2000’s. As a result, this appears to be the first time since the globalization of crude oil pricing in the mid 1970’s that domestic energy supply sources have had a direct and significant impact on the 2014 WTI price decline.

The average “duration” of WTI price declines has been steadily increasing over the past 40 years as natural gas and renewable energy sources have grown in market share. In fact, the current downturn in West Texas Intermediate ("WTI") crude oil prices is now the longest since crude oil became a global energy source in the late 1980’s. Since 1986 there has been seven distinct crude oil price “decline episodes”, as shown in the Table below:

\footnote{(U.S. Energy Information Administration, 2015a)}

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How To Flip A Classroom
In Four Simple Steps
Baris Sezer, Hacettepe University, Turkey
Tufan Asli Sezer, Ankara University, Turkey
Samsun Lampotang, University of Florida, USA

ABSTRACT
When using the flipped classroom method as a pedagogical model, the typical lecture and homework elements of a course are reversed. An examination of the flipped classroom literature identifies numerous factors that can create problems when implementing a flipped classroom: students coming to class unprepared, failure to watch videos longer than 10 minutes, failure to embrace the method by students, conduct formative assessments by instructors, technical problems, lack of time on the part of the instructors to prepare materials, failure to use proper tools, and lack of technical support and equipment. To solve some of these issues, instructors can create interactive course materials with simple and free applications and share them with the students, monitor logs whether students view/study these materials, and more importantly, inform students about what the flipped classroom model involves and why it is being used. For successful implementation of a flipped classroom, it is crucial that students understand the method and that the above problems are addressed proactively. The steps suggested below can facilitate a successful transition to a flipped classroom.

1. Select affordable or free authoring apps to create interactive course materials, e.g., create videos with Screencastify, a free video screen capture tool. Use EDpuzzle, also a free app, to add interactivity by incorporating questions into videos to evaluate student knowledge or skills, to monitor logs how many times, and for how long the students watch the video, and to provide verbal/written feedback to the students on the basis of their answers or performance.

2. Utilize a collaboration, communication and coaching tool, e.g., Edmodo to help students get connected and stay organized in an online classroom, before the face-to-face class.

3. Use class time efficiently (i.e., learner-centered activities such as Think-Pair-Share, Using Task Cards, Role Play, Inquiry-Based Learning, Debate, and Reflective Thinking Practices).

4. Begin with the end in mind: Design the assessment methodology and evaluation criteria (evaluation of student logs and assignments, classroom interactions, relevant questions, etc.).

The flipped classroom method has many potential advantages (increased interaction and engagement, facilitation of student-centered education, optimization of instructor time, etc.) but it also has some limitations as mentioned above. We have used the four steps outlined above in middle and medical school students. We found that these four steps work. Using the four steps may also help you in implementing a flipped classroom.

Keywords: Educational Tools, Interactive Videos, Learner-Centered Activities.
Improved Academic Predictions And Recommendations For Graduating Students Using Ensemble Classification
Khawar Shakeel, Jinnah Model High School, Pakistan

ABSTRACT
Recently Educational Data Mining (EDM) has become very essential part of academics where predictions and recommendations are participating to form better decision making using Data Mining (DM) techniques on related data. In order to identify the detailed facts, intelligent information systems based on statistical methods are required that may possibly explore the facts that was unable to do with simple traditional information systems. These methods aim to analyze the valuable arrangements available in data to conclude the learning behavior of the students. Therefore, the stakeholders can be informed timely on initial stages using extracted piece of knowledge if teaching strategies need to be enhanced to assist specific group of students to fulfill their graduation requirements. Technically, the study also revealed higher accuracy using different ensemble classification algorithms as compared to single base classifiers. Stacking was decided to be the best ensemble classifier algorithm and implementation of the proposed prediction model confirmed the statement.

Keywords: Educational Data Mining, Ensemble Classification, Stacking, Prediction Model
A Workshop Demonstrating A Team-Based Business Simulation Within An On-Line Global Masters Programme: Making Constructivist Pedagogy Work

Alan Parkinson, University College London, United Kingdom
Lynsie Chew, University College London, United Kingdom

ABSTRACT

This workshop’s focus is the use of a bespoke business simulation – a game – within a strategic financial project (SFP) module, itself within an online global masters programme in professional accountancy (MPAcc). The programme is aimed at accountants and finance professionals. SFP is MPAcc’s final module. It introduces business research skills, leading to the preparation of a business plan concerning an organizational strategic initiative. A range of research literature examines challenges to learners within online education. These include, illustratively: feelings of isolation and disconnection; lack of interactivity; lack of community; These contribute to limiting critical and analytical dialogue opportunities. Consequently some learners struggle with being able to make sense of their learning, not generating understanding. MPAcc’s design endeavours to remedy such shortcomings. It does so through a constructivist pedagogy, changing knowledge as a product to knowing as a process. In SFP the challenge of managing an airport – in the guise of a simulation called Icarus – is put before online teams of five, tasked to achieve/ exceed key performance indicators across five financial years, with one week equating to one year. Each week students change management roles/responsibilities. This workshop demonstrates how constructivist educational theory is used to enhance meaning by linking students’ reflective statements on how Icarus contributes towards their final business plan, improving their online student experience.

Keywords: E-Learning; Constructivism; Disconnection; Community
Challenges Faced By Preschool Teachers During Story Telling Sessions In Preschools Of Mumbai Slums
Asha Menon, S.P.N. Doshi Women's College, India

ABSTRACT
In the early years, when teacher implement oral narratives it nurtures the skills in children. Listening to different narrative in the classroom contributes to social and emotional development as children feel for the characters. Stories aid in learning and create an acquisition rich-environment, which fosters the learning for children. With the numerous benefits of storytelling for the teachers as well as for the children there are certain challenges teachers faced while conducting storytelling sessions. This current study aims in finding the challenges faced by Government pre schools teachers and Private preschools teachers during story telling sessions in preschools of Mumbai slums. The objectives were to identify the parameters used by government preschool teachers and private preschools teachers for story telling sessions, to study the challenges faced by teachers during story telling sessions and to compare the preference of teaching aids for story telling used by government preschools teachers and private preschools teachers. Self-constructed tool was prepared to collect the data. Purposive sampling method was used to collect data. 96 preschool teachers participated in the study out of which 41 were Government preschool teachers and 55 were Private preschool teachers. The data collected was computed and testing of hypothesis was done to measure the mean scores, percentages and t Test was calculated. The results show that there is no significant difference in the selection of the story, in teacher’s readiness, preparatory skills and conduction skills between government preschool teachers and private preschools teachers for story telling sessions. It was found that there is a significant difference in choosing age appropriate stories for preschool children by government and private preschools teachers.

Keywords: Government Pre Schools, Private Preschools Teachers, Mumbai Slums

Introduction
Storytelling contributes in significant ways to children’s literacy skills and knowledge. Tales give children the opportunity to travel to a new world and unlock their imaginations while growing and developing along with their favorite character. Narratives are enjoyable and constructive tool that foster in children, a thirst to learn various concepts and get acquainted to new words.

Stories are important resources for teachers, which can be used to communicate and explore ideas. Values learned from the stories exert influence on the listener and makes it a lasting memory. Storytelling incorporated by the teacher in their curriculum, adds meaning to the teaching and also be an effective tool for teaching. Story telling when practiced in the classroom contributes to children in distinguishing their feelings, emotions and learns to appreciate the diverse cultures and traditions. When stories are told they bridge a gap between the teacher and the student.

In 2005, Caine. et.al. reported that the brain organizes retains and access information and experiences of every relationship and records it in the form of a story. In the “Strategic Application of Storytelling in Organizations,” Barker (2010) argued that storytelling is the best way for humans to communicate because stories foster a profound feeling of shared empathy on both a cognitive and emotional level. Storytelling concerning emotions and feelings align with the limbic system, thus creating synapses that enable retention (Kazlev, 2003). Freud (1957) argued that the mind is divided into three provinces reading, writing and math skills i.e. formal education have been basic education along with the exposure to general concepts. To enhance the instructions in the classroom storytelling should be used. Each child is a unique learner and there has been a growing awareness of the need to take into account the different types
of ‘intelligences’ (Gardner 1993), including emotional intelligence, that manifest themselves in different ways in each child. The richness of storytelling in terms of their content and illustrations of pictures used and the variety of activities conducted towards the end of the story, allow the teacher to cater to all the learners with different intelligences and to make learning experiences meaningful to each child. It gets enhanced when it is done in a relaxed and supportive classroom environment.

Stories when selected identifying the needs of the classroom environment help children learn from the environment. Teachers are the building blocks for learning but storytelling is the glue that blinds the class together and provides a strong foundation for learning. Teachers have an effective way of telling the story using different voice modulation and body gestures to relate to the story with various facial expressions. It is with the teachers that the children in the class are connected with, therefore catering to the child’s feelings to help them cope, develop their imaginations through storytelling in the classroom will create a child-centered classroom.

Setiaryni (2011) affirms that teachers when use storytelling in an appropriate and effective way enhance young learners’ skills and interest in improving their learning output. Storytelling done by the teachers of the class creates a powerful role in a healthy psychological development of children.

With the numerous benefits of storytelling for the teachers as well as for the children there are certain challenges among teachers to conduct storytelling sessions. The main challenge of any storyteller is to maintain the listener’s interest and attention. Ellis and Brewster (1991) listed down a few challenges: 1: teachers have lack of confidence in their ability to tell stories or read storybooks aloud, 2: feeling that the language in storybooks is too difficult, 3: a feeling that the content of storybooks was sometimes too childish, 4: lack of understanding about the true value of using storybooks, 5: lack of understanding of how to use storybooks and of time to prepare a plan of work.

It can be summarized that when storytelling is presented in a non-interactive way, with lack of interest it becomes challenging for the teachers to encourage children in learning and retaining the information of the concepts being taught. Hence to avoid challenges in future it becomes important that teachers acquire knowledge about the skills and practice is needed so as to use a storytelling in a way that appeals to the children and leaves an impact on their learning.

Paul and Fiebich (2005) reports that to be a successful storyteller one needs to choose adequate stories and must be a good performer, to execute the story for which it is crucial and requires both preparation and rehearsal. Dexter, Ellis and Simms (2012) suggested that there is a need for inclusive storytelling experience for children for which he gave guidelines for teachers that to be incorporated by them i.e. the titles and lettering of the story book or the teaching aid used for narrating a story should be large and attractive because displays of the story aid used encourage skills such as reading and listening, as well as simply looking would magnify their creative thinking and imagination which would further facilitate the memory skills of the children with the appropriate illustrations used for the story.

Storytelling is an important session in which preschool children learn in terms of language, expression, cultural diversity, concepts, imaginations, and clarity of speech. As there is no prescribed parameters for preschool teachers for conducting the storytelling session teachers are unaware of what should be done, how the session should be taken, what are the things that they need to know and feel in order to adopt the role of story teller effectively for preschool children. Therefore this current study aims in finding the challenges faced by Government pre schools teachers and Private preschools teachers during story telling sessions in preschools of Mumbai slums.

**Aim:** To study the challenges faced by Government pre schools teachers and Private preschools teachers during story telling sessions in preschools of Mumbai slums.

**Objectives:**

- To identify the parameters used by government preschool teachers and private preschools teachers for story telling sessions.
- To study the challenges faced by teachers during story telling sessions between government preschools and private preschools.
- To compare the preference of teaching aids for story telling used by government preschools teachers and private preschools teachers.
Hypothesis

- There is significant difference in the parameters used by government preschool teachers and private preschools teachers for story telling sessions.
- There is significant difference in the challenges faced by teachers during story telling sessions between government preschools and private preschools.
- There is significant difference in the preference of teaching aids for story telling used by government preschools teachers and private preschools teachers.

Research tool for data collection

Self-constructed tool was prepared to collect the data. It consisted of questionnaire for the teachers on the parameters they use for story telling sessions, challenges they face and the teaching aids they use during story telling sessions. The reliability of the tool was Cronbach alpha value is 0.883 and validity was Cronbach alpha value is 0.864.

Procedure for data collection

Purposive sampling method was used to collect data. The procedure for data collection began with identifying Government preschools and private preschools in the Mumbai slums. The supervisors of various preschools were approached requesting their permission to be granted to the preschool teachers to participate in the study.

Sample size

96 preschool teachers participated in the study out of which 41 were Government preschool teachers and 55 were Private preschool teachers.

Data Analysis

The data collected was computed and testing of hypothesis was done to measure the mean scores and t Test was calculated. The results are presented in the form of graph and tables.

Results and Discussion

- Demographic Details

Fig 1. Demographic Details

The graph below represents that 96 preschool teachers participated in the study. There were 41 Government preschool teachers out of which there were 12 Nursery school teachers, 13 Junior KG teachers and 16 senior KG teachers. There were 55 Private preschool teachers out of which there were 19 Nursery school teachers, 18 Junior KG teachers and 18 senior KG teachers.

- Parameters used by government preschool teachers and private preschools teachers for story telling sessions
Table 1. Parameters used by government preschool teachers and private preschools teachers for story telling sessions

<table>
<thead>
<tr>
<th>Parameters</th>
<th>School Mean</th>
<th>SD</th>
<th>Degrees of Freedom</th>
<th>t Calculated</th>
<th>t Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection of story</td>
<td>Government</td>
<td>17.07</td>
<td>24.00</td>
<td>98</td>
<td>2.095</td>
<td>.127</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>18.42</td>
<td>29.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical setting of story</td>
<td>Government</td>
<td>11.59</td>
<td>19.44</td>
<td>98</td>
<td>3.079</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>17.54</td>
<td>27.27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher readiness</td>
<td>Government</td>
<td>46.95</td>
<td>28.81</td>
<td>98</td>
<td>1.325</td>
<td>.269</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>37.28</td>
<td>26.54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparatory skills</td>
<td>Government</td>
<td>26.42</td>
<td>22.35</td>
<td>98</td>
<td>1.876</td>
<td>.158</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>30.41</td>
<td>28.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduction skills</td>
<td>Government</td>
<td>34.84</td>
<td>14.90</td>
<td>98</td>
<td>.612</td>
<td>.544</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>32.63</td>
<td>18.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recapitulation skills</td>
<td>Government</td>
<td>19.51</td>
<td>25.02</td>
<td>98</td>
<td>.663</td>
<td>.05</td>
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<tr>
<td></td>
<td>Private</td>
<td>18.42</td>
<td>21.98</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results show that there is no significant difference in the selection of the story between government preschool teachers and private preschools teachers for story telling sessions. There was significant difference physical setting of story between government preschool teachers and private preschools teachers for story telling sessions. The private preschools teachers enhanced the physical settings before a story telling session by creating an environment conducive for learning. It was found that there was no significant difference in teacher readiness, preparatory skills and conduction skills between government preschool teachers and private preschools teachers for story telling sessions. There was significant difference in the activities taken up for recapitulation skills between government preschool teachers and private preschools teachers for story telling sessions. The private preschool teachers took up more activities during recapitulation which helps children memorize and therefore enhance cognitive abilities. When the recap of the story is taken, the cognition level increases as children use their schema (Artino, 2008). A study done by Athanassiou et al. (2003) supports this present study, which states that, teachers should have questions post narration so as to encourage children in memorizing to enhance their cognitive ability.

- Challenges faced by teachers during story telling sessions between government and private preschools

Table 2. Challenges faced by teachers during story telling sessions between government and private preschools

<table>
<thead>
<tr>
<th>Challenges</th>
<th>School Mean</th>
<th>SD</th>
<th>Degrees of Freedom</th>
<th>t Calculated</th>
<th>t Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age appropriate</td>
<td>Government</td>
<td>3.84</td>
<td>1.765</td>
<td>98</td>
<td>8.783</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>3.66</td>
<td>1.987</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need of the curriculum</td>
<td>Government</td>
<td>3.72</td>
<td>1.354</td>
<td>98</td>
<td>4.316</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>3.46</td>
<td>1.234</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theme based</td>
<td>Government</td>
<td>3.32</td>
<td>1.154</td>
<td>98</td>
<td>2.082</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>3.71</td>
<td>1.543</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of teaching aids</td>
<td>Government</td>
<td>3.16</td>
<td>1.012</td>
<td>98</td>
<td>5.133</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>3.15</td>
<td>1.981</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As a recap of the concept</td>
<td>Government</td>
<td>2.95</td>
<td>1.564</td>
<td>98</td>
<td>0.95</td>
<td>2.01</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>2.78</td>
<td>1.461</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Stories aid in learning and create an acquisition rich- environment, which fosters learning for children. Teachers use different methods for executing the stories in the classroom through facial expression, voice modulations, maintaining the eye contact and seating in the comfortable area. However when teachers use these methods they find certain obstacles, which resist them in adding it into their curriculum, lack of confidence when the content is unaware, has
difficulty in using the teaching aids for the stories, time constraints and also the large class size.

Rokhayani (2010) considers storytelling is efficient and motivating by the teachers when certain guidelines like meaningful content, natural recitation, characters that are engaging, having interesting plots these all could incorporated. It was found that there is a significant difference in choosing age appropriate stories for preschool children by government and private preschools teachers. Private preschools teachers took efforts to see that the stories selected were age appropriate because most of the teachers were ECE trained. According to Perry (2005) when age appropriate stories are there it ignites the emotions and the cognitive parts of the brains that are activated to store new information. Story telling a need of the curriculum as a challenge seemed to be significant by teachers during story telling sessions for teachers of government and private preschools. Stories which are theme based were also a significant challenge for teachers of government and private preschools. Availability of teaching aids during story telling sessions were a significant challenge for teachers of government and private preschools. Recap of the concept was not a significant challenge for teachers of government and private preschools. In “The Storyteller’s Guide”, Mooney and Holt (1996) interviewed past and present public school teachers on the use of storytelling in their classrooms. While recognizing the fact that teachers are already burdened with demanding school schedules, overcrowded classrooms, administrative responsibilities, and other duties and obligations that leave little time for absorbing different methods of teaching, the authors argue that the use of stories may be the most effective teaching tool available.

- Preference of teaching aids for the story telling by government preschools teachers and private preschools teachers

It was found that there is a significant difference in the flash cards, flip cards, cubes and flannel boards used for story telling by government preschools teachers and private preschools teachers. A variety of flash cards, flip cards, cubes, flannel boards and puppets were used by private preschools teachers as compared to government preschools teachers. There was no significant difference in audios and books used for story telling by government preschools teachers and private preschools teachers. The preschools teachers equally preferred audios and books for storytelling.

<table>
<thead>
<tr>
<th>Preference of teaching aids</th>
<th>School</th>
<th>Mean</th>
<th>SD</th>
<th>Degrees of Freedom</th>
<th>t Calculated</th>
<th>t Value</th>
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<tr>
<td>Flash cards</td>
<td>Government</td>
<td>5.34</td>
<td>2.1877</td>
<td>98</td>
<td>3.99</td>
<td>.005</td>
<td>significant</td>
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<td>5.49</td>
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<td></td>
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<tr>
<td>Flip cards</td>
<td>Government</td>
<td>4.8</td>
<td>2.291</td>
<td>98</td>
<td>8.78</td>
<td>.000</td>
<td>significant</td>
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<td>Private</td>
<td>5.04</td>
<td>2.627</td>
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<td>Cube</td>
<td>Government</td>
<td>3.46</td>
<td>1.684</td>
<td>98</td>
<td>6.75</td>
<td>.000</td>
<td>significant</td>
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<td>Private</td>
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<td>1.987</td>
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<tr>
<td>Flannel boards</td>
<td>Government</td>
<td>4.07</td>
<td>2.067</td>
<td>98</td>
<td>2.31</td>
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</tr>
<tr>
<td></td>
<td>Private</td>
<td>4.33</td>
<td>1.998</td>
<td></td>
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<tr>
<td>Audio</td>
<td>Government</td>
<td>4.1</td>
<td>1.963</td>
<td>98</td>
<td>2.08</td>
<td>0.04</td>
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</tr>
<tr>
<td></td>
<td>Private</td>
<td>4.68</td>
<td>2.432</td>
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<tr>
<td>Book</td>
<td>Government</td>
<td>6.46</td>
<td>3.876</td>
<td>98</td>
<td>1.88</td>
<td>.065</td>
<td>Not significant</td>
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<td>Private</td>
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<td>2.675</td>
<td></td>
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<tr>
<td>Puppet</td>
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<td>3.39</td>
<td>1.876</td>
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<td>2.96</td>
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<td>4.41</td>
<td>2.214</td>
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</table>

Conclusion

In the early years, when teachers implement oral narratives it nurtures the skills in children. When children use their mind to create images based on the story told, they develop the abstract thinking skills. Teachers use different methods for executing the stories in the classroom through facial expression, voice modulations, maintain the eye contact and
seating in the comfortable area. The results show that there is no significant difference in the selection of the story between government preschool teachers and private preschools teachers for story telling sessions. It was found that the private preschools teachers enhanced the physical settings before a story telling session by creating an environment conducive for learning. It was also found that there was no significant difference in teacher readiness, preparatory skills and conduction skills between government preschool teachers and private preschools teachers for story telling sessions. The private preschool teachers took up more activities during recapitulation which helps children memorize and therefore enhance cognitive abilities. There is a significant difference in choosing age appropriate stories for preschool children by government and private preschools teachers. Stories which are theme based were also a significant challenge for teachers of government and private preschools. A variety of flash cards, flip cards, cubes, flannel boards and puppets were used by private preschools teachers as compared to government preschools teachers.

References


Challenges And Barriers To Success As Experienced By A Graduate International Student During Initial Acculturation Process

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Barbara N. Young, Middle Tennessee State University, USA

ABSTRACT

Particular challenges facing international students include: culture shock, adapting to new teaching / learning environments, understanding the American higher education system and U.S. social norms, adapting to food, climate, legal systems, as well dealing with feelings of homesickness and isolation. This acculturation (cross-cultural transition) process presents psychosocial, biological, and academic challenges and barriers to success that require adaptation. In addition to receiving correct and updated information, international students require professors and university personnel willing to be prepared not only academically but also socially and culturally to meet their needs.

The article identifies challenges and potential barriers to success facing one international graduate student during the initial transition process.
Quantitative Easing, Households’ Deposits, Mutual Funds, And Growth: A Luxembourgish Case Study
Sabbah Gueddoudj, Central Bank of Luxembourg/ENSTA-ParisTech, Luxembourg

ABSTRACT

“The problem with QE is it works in practice but it doesn’t work in theory” (Ben Bernanke, Brooking Institution, 2014).

The primary role of QE is to purchase a large scale of assets by central banks from the private sector. In theory, such policy tends to increase the liquidity of the private sector and therefore promote economic growth within a stable inflation framework. The impact on financial markets seems to be obvious. Indeed, the recent empirical literature suggests that purchases contribute to reducing yields, but the effects on the economy are very complex to evaluate. Saving and wealth behaviors are the engine of growth. This idea is not new, and plethoric theoretical and empirical studies tend to describe the effect of households’ savings and households’ wealth on growth (Harrod (1939), Domar (1946), Solow (1956), Summers and Heston (1991), Barro (1991), Mankiw, Romer and Weil (1992). According to Feldstein and Bachetta (1991), “an increase in saving has a substantial effect on the level of investment”. Simply, saving drives growth, therefore, it is legitimate to ask what is the appropriate monetary policy for growth to promote saving.

The basic monetary policy is based on the interest rate adjustment. Nevertheless, the interest rate adjustment has finally shown its limits to boost economic growth. Indeed, short-term interest rates are close to zero and the growth in the major advanced countries has remained weak. Central banks have adopted unconventional policies and notably quantitative easing to tackle the problem of interest rate’s weakness.

The purpose of this study is to present a small growth model to measure how QE policies impact the recovery through households’ savings. We notice that in Luxembourg, mutual funds, currency, and deposits shares (on total assets) represent more than 75%.

The simple growth model shows that households have been significant losers from “cheap money.” It may be surprising since one motive for quantitative easing was to ease the pain and financial stress for households who have borrowed far more than was prudent in the boom years. But this kind of results is in line with the effect of QE on interest rates. This latter remunerates the nonrisky assets. Remind that the model takes into account only financial assets such as mutual funds, currency, and deposits. And on this basis, households in Luxembourg are net savers, rather than net borrowers. Therefore when interest rates fall to exceptionally low levels, in the round the households are those who did not take advantage of this kind of policy, in particularly for the poorest. In other words, quantitative easing erodes savings values of those who had been putting money aside for decades for precautionary reasons.

The main lesson is when the environment is uncertain, aggregate saving increases and it dampens economic growth. Hence, the aim of the government is to restore agent’s confidence to increase the consumption and boost the economic growth.
Regime-Switching In The Present Value Models: A Backward-Solving Method
Jan R. Kim, Hankuk University of Foreign Studies, South Korea

ABSTRACT

This paper develops a new method for incorporating regime-shifts in the present value model. Existing studies solve the present-value problem forward, tracing the expectations of investors and regimes into the infinite future. Representing the present value problem in a recursive form, we propose a backward-solving approach where the initially guessed formulation of the present value is verified by the undetermined coefficients method. Applied to the Korean housing market, our regime-switching present value model detects two distinctive regimes in the behavior of the price-rent ratio.

JEL codes: C13; C32; G12; R31

Keywords: Regime-Switching, Present Value Model, Recursive Form, Backward-Solving, Undetermined Coefficients

1. Introduction

The central prediction of the present value model is that the price of an asset and its payoffs should move in tandem, so that the fundamental ratios (e.g., the price-dividend ratio or price-rent ratio) are stationary. At the empirical front, however, the majority of evidence in the literature is, at best, mixed (e.g., see Campbell and Shiller (1987), Diba and Grossman (1988), Craine (1993), and Balke and Wohar (2002) for stock market studies, and Girouard et al. (2006), Mikhed and Zemčík (2009), and Clark and Coggin (2011) for housing market studies).

Such empirical failure is usually attributed to the presence of non-fundamental factors such as speculative bubbles. As pointed out in Flood and Hodrik (1990) and Gurkaynak (2008), however, any empirical evidence for the speculative behavior can alternatively be justified by misspecified fundamentals. In this vein, recent studies (e.g., Zhu (2015), and Choi et al. (2017)) emphasize the role of regime switching in capturing the abrupt changes in the behavior of financial markets the standard present value models do not capture.

This paper presents a new method for introducing regime shifts in the present-value model. The key issue in present value models is how to calculate the infinite sum of expected future fundamentals. Previous studies solve this problem forward, tracing the evolution of expectations and regimes into the distant future. In contrast, we propose a backward-solving method utilizing the recursive nature of the present value problem, where the initially guessed formulation of present value is verified by the method of undetermined coefficients. Compared with the forward-solving method, ours can address more general specifications of regime shifts directly, without resorting to unnecessary approximations.

2. Formulating Present Value under Regime Shifts

We start with the standard present value problem

$$ p_v = E_t \{ \sum_{j=0}^{\infty} \rho^j x_{t+j+1} \} $$

(1)

where \( p_v \) is the present value of an asset, \( \rho \) is the (inverse of) discount rate, \( \{ x_{t+j+1}, j \geq 0 \} \) is the stream of a stationary variable intrinsic to the asset, and \( E_t [\cdot] \) is the expectation of investors conditional on their information set as of period \( t \).
As an extension of van Binsbergen and Koiijen (2010), we treat the one-period ahead expectation $E_t[x_{t+1}]$ of $x_t$ as an unobserved factor following an AR(2) process

$$z_t = \alpha_0 + \alpha_1 z_{t-1} + \alpha_2 z_{t-2} + \epsilon_t$$

(2)

where $\epsilon_t$'s are i.i.d. innovations. Using the law of motion (2), we get the formulation of the present value

$$p v_t = E_t\{\sum_{j=0}^{\infty} \rho^j x_{t+j+1}\} = E_t\{\sum_{j=0}^{\infty} \rho^j z_{t+j}\} = b_0 + b_1 z_t + b_2 z_{t-1}$$

(3)

in terms of the current and lagged expectations $(z_t, z_{t-1})$. In (3), the intercept $b_0$ and factor loading coefficients $(b_1, b_2)$ depends on the law of motion as follows:

$$b_0 = \frac{\rho}{1-\rho} [1 \ 0] (I - \rho A)^{-1} A_0,$$

$$[b_1 \ b_2] = [1 \ 0] (I - \rho A)^{-1}$$

(4)

with $A_0 = \begin{bmatrix} \alpha_0 \\ 0 \end{bmatrix}$, and $A = \begin{bmatrix} \alpha_1 & \alpha_2 \\ 1 & 0 \end{bmatrix}$.

We now proceed to introduce regime shifts into the present value problem above, under the following assumptions:

**Assumption 1.** Investors form their expectation differently across two regimes, whose realizations are governed by a latent regime indicator variable $S_t$:

- conditional on $S_t = 0$: $z_t = \alpha_0^0 + \alpha_1^0 z_{t-1} + \alpha_2^0 z_{t-2} + \epsilon_t$,

  (5a)

- conditional on $S_t = 1$: $z_t = \alpha_0^1 + \alpha_1^1 z_{t-1} + \alpha_2^1 z_{t-2} + \epsilon_t$,

  (5b)

where the superscripts denote the two regimes.

**Assumption 2.** $S_t$ follows a first-order Markov process with fixed transition probabilities

$$\Pr[S_t = 0|S_{t-1} = 0] = p^{00}; \quad \Pr[S_t = 1|S_{t-1} = 1] = p^{11}.$$  

(6)

**Assumption 3.** Reflecting the ‘mood’ of investors, the realizations of $S_t$ are in their information set as of period $t$.

To find the present-value formulation under regime shifts, we first rewrite the present-value problem in a recursive form:

$$p v_t = E_t\{\sum_{j=0}^{\infty} \rho^j z_{t+j}\} = z_t + \rho E_t\{E_{t+1}\{\sum_{j=0}^{\infty} \rho^j z_{t+j+1}\}\} = z_t + \rho E_t[p v_{t+1}].$$

(7)

By way of an analogy to (3), we guess the regime-specific formulation of the present value:

- conditional on $S_t = 0$: $pv_t = b_0^0 + b_1^0 z_t + b_2^0 z_{t-1}$,

  (8a)

- conditional on $S_t = 1$: $pv_t = b_0^1 + b_1^1 z_t + b_2^1 z_{t-1}$.

(8b)

where the superscripts denote the two regimes.

Using the law of motion in (5a)-(5b) and the guessed formulation in (8a)-(8b), we can evaluate $E_t[p v_{t+1}]$ in the far RHS of (7) in each regime:

**Assumption 4.**

- conditional on $S_t = 0$:

  $$E_t[p v_{t+1}] = \begin{cases} 
  (b_0^0 + b_1^0 (\alpha_0^0 + \alpha_1^0 z_t + \alpha_2^0 z_{t-1}) + b_2^0 z_t) & \text{if } S_t = 0 \text{ is followed by } S_{t+1} = 0 \\
  (b_0^1 + b_1^1 (\alpha_0^1 + \alpha_1^1 z_t + \alpha_2^1 z_{t-1}) + b_2^1 z_t) & \text{if } S_t = 0 \text{ is followed by } S_{t+1} = 1
  \end{cases}$$  

(9a)
conditional on $S_t = 1$:

$$E_t[pv_{t+1}] = \begin{cases} (b_0^0 + b_1^0 (a_0^0 + a_2^0 z_{t-1}) + b_2^0 z_t) & \text{if } S_t = 1 \text{ is followed by } S_{t+1} = 0 \\ (b_1^1 + b_1^1 (a_0^1 + a_2^1 z_{t-1}) + b_2^1 z_t) & \text{if } S_t = 1 \text{ is followed by } S_{t+1} = 1 \end{cases}$$

(9b)

Finally, we confirm our initial guess by finding $b^0 = (b_0^0, b_1^0, b_2^0)$ and $b^1 = (b_0^1, b_1^1, b_2^1)$ that satisfy the restrictions in (7a)-(7b) and (9a)-(9b). The resulting equations are:

$$\begin{bmatrix} 1 - \rho p_{10} & 0 & 0 & 0 \\ 0 & 1 - \rho p_{00} & 0 & 0 \\ 0 & 0 & 1 - \rho p_{00} & 0 \\ 0 & 0 & 0 & 1 - \rho p_{10} \end{bmatrix} \begin{bmatrix} b_0^0 \\ b_0^1 \\ b_1^0 \\ b_1^1 \end{bmatrix} = \begin{bmatrix} 0 \\ 1 \\ 0 \\ 1 \end{bmatrix}$$

(10)

The solution $(b^0, b^1)$ for (10) pins down the formulation of the present-value in terms of the ‘deep’ parameters describing the law of motion for the expectation and transition of regime $\gamma$.

Note that we solve the present value problem backward, by directly utilizing the recursive nature of the present value problem. In contrast, existing studies (e.g., Zhu (2015) and Choi et al. (2017)) solve the same problem forward, by tracing the evolution of investors’ expectation and regime into the infinite future. Under such forward-solving approach, the present value problem becomes quite complicated due to the interaction between the intercept and AR coefficients. To make the problem tractable, therefore, those studies resort to simplifications, such as using AR(1) specification for the one-step-ahead expectation, allowing regime-switching in the intercept only, or approximating the interim future expectation terms with their long-run limits. Unlike those previous studies, our method can easily deal with more realistic dynamics in investors’ expectations (i.e., AR of order 2) and more general form of regime-switching (i.e., in both the intercept and AR coefficients), without resorting to unnecessary approximations.

3. An Application

This section illustrates how our method can be applied to a full-fledged present value model. The present-value equation for the price-rent ratio a la Campbell and Shiller (1988a, b) is

$$pd_t = \sum_{j=0}^{\infty} \rho^j \left( \Delta d_{t+j+1} - i_{t+j+1} - \pi_{t+j+1} \right)$$

(11)

where $pd_t$ is the log price-rent ratio, $\Delta d_t$ is the real rent growth, $i_t$ is the (risk-free) real interest rate, and $\pi_t$ is the excess rate of return (reflecting the risk premium).

The one-period ahead expectations of rent growth, $g_t = E_t[\Delta d_{t+1}]$, real interest rate, $\mu_t = E_t[i_{t+1}]$, and housing premium, $\lambda_t = E_t[\pi_{t+1}]$, are treated as unobserved factors following regime-dependent AR(2) processes:

$$g_{t+1} = \gamma_0 (S_{t+1}) + \gamma_1 g_t + \gamma_2 g_{t-1} + \epsilon_{g_{t+1}}^d,$$  

(12a)

$$\mu_{t+1} = \delta_0 (S_{t+1}) + \delta_1 \mu_t + \delta_2 \mu_{t-1} + \epsilon_{\mu_{t+1}}^d,$$  

(12b)

$$\lambda_{t+1} = \theta_0 (S_{t+1}) + \theta_1 (S_{t+1}) \lambda_t + \theta_2 (S_{t+1}) \lambda_{t-1} + \epsilon_{\lambda_{t+1}}^d,$$  

(12c)

where the innovations in the expectations, $\epsilon_t = (\epsilon_{g_t}^d, \epsilon_{\mu_t}^d, \epsilon_{\lambda_t}^d)$, are a Gaussian i.i.d. process. Applying the backward-solving method to the three expectation terms, we obtain the regime-dependent formulation of the price-rent ratio of

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1 Unbeknownst to an econometrician, the deep parameters are estimated against data.

2 The higher the AR order, the higher the degree of complication.

3 More details of the model and results are available upon request.
the following form:

\[
    p_{d_t} = B_0(S_t) + B_1(S_t)G_t - B_2(S_t)M_t - B_3(S_t)A_t
\]

(13)

where \( G_t = \begin{bmatrix} g_t \\ g_{t-1} \end{bmatrix} \), \( M_t = \begin{bmatrix} \mu_t \\ \mu_{t-1} \end{bmatrix} \), \( A_t = \begin{bmatrix} \lambda_t \\ \lambda_{t-1} \end{bmatrix} \), and the intercept and factor loading coefficients are all regime-dependent.

The observations of the rent growth, \( \Delta d_t \), real interest rate, \( i_t \), and excess return, \( \pi_t \), are linked to their conditional expectation via

\[
    \Delta d_t = g_{t-1}^t + u_{m}^t, \quad i_t = \mu_{t-1} + u_{n}^t, \quad \pi_t = \lambda_{t-1} + u_{o}^t
\]

(14)

where \((u_{m}^t, u_{n}^t, u_{o}^t)\) are i.i.d Gaussian errors. Equations (13)-(14) constitute the ‘measurement’ equations, and the law of motion in (12a)-(12c) constitute the ‘transition’ equations. The present value model for the price-rent ratio is therefore cast into a state-space form subject to regime shifts, and is estimated by the method in Kim and Nelson (1999).

The model is estimated against the data of apartment market in Seoul\(^4\) spanning 1987:Q1-2014:Q4, and the key results are provided below. In Table 1, the regime-specific transition probabilities are sharply estimated, and the price-rent ratio exhibit quite different patterns of factor loading across the two regimes: in regime 0, the price-rent ratio has higher intercept and higher degree of dependence on the expectation of excess returns. Figure 1 plots the filtered estimates of Prob\{\( S_t = 0 \)\} along with the actual price-rent ratio. Since 2001, the market has been in regime 0 where the role of expected excess returns is more pronounced than in regime 1.

[Table 1] Key Estimation results

<table>
<thead>
<tr>
<th>Transition Probabilities</th>
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<tbody>
<tr>
<td>( p^{00} ) 0.9638 (s.e.=0.0046)</td>
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</table>

<table>
<thead>
<tr>
<th>Regime-dependence of the price-rent ratio</th>
</tr>
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<tbody>
<tr>
<td>( S_t=0: \quad p_{d_t} = 4.8034 + [2.4208 \cdot 0.3105]G_t - [13.4550 \cdot -7.1983]M_t - [19.6860 \cdot 1.4687]A_t )</td>
</tr>
</tbody>
</table>

\(^4\) Regarded efficient (e.g., Hwang et al. (2006)), this market is appropriate for the present value approach.
4. Conclusion

In this paper, we develop a new method for incorporating regime-shifts in the standard present value model. Previous studies solve for the present value under regime-switching forward, by tracing out the evolution of the regime and expectations of fundamentals into the infinite future. Utilizing the recursive nature of present value calculations, we propose a backward-solving approach where the initial guess of the present value formula is verified by the method of undetermined coefficients. Compared with the previous studies, our approach has a few advantages in that it allows more general forms of dynamics and regime shifts in the present value model, without resorting unnecessary approximations. Applied to the Korean housing market, the regime-switching present value model we construct detects two distinctive regimes in the price-rent ratio, across which the role of expected excess returns is qualitatively different.

References


A City Image Study: Application Of Fuzzy Linear Regression Model
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Kumru Didem Atalay, Baskent University, Turkey

ABSTRACT

The present study has two main objectives. The first is estimate satisfaction related to certain aspects of city image that have an impact on the behavioral intentions about the city. The second objective is to strengthen the use of the fuzzy likert scale method in the social sciences. As there is a possibility that the data obtained from the fuzzy likert scale might not prove the statistical regression assumptions, we attempt to obtain an appropriate and accurate prediction model using fuzzy regression. To the best of our knowledge, no other study has employed the data obtained from fuzzy likert scales in fuzzy linear regression models. Based on the results, the satisfaction related to three city image dimensions is found to influence positive behavioral intention.

Keywords: Fuzzy Likert Scale, Fuzzy Linear Regression, City Image, Security, Caring And Services
Real-Time Data Analytics
For Efficient Use Of Energy In Buildings
Jui-Sheng Chou, National Taiwan University of Science and Technology, Taiwan
Ngoc-Tri Ngo, University of Science and Technology, Vietnam

ABSTRACT
Efficient use of energy in buildings has become a major concern of a sustainable society. Minor shifts in peak demand have major implications in terms of savings for both consumers and utilities. This study develops a cloud computing-based big data analytics framework for a building energy efficiency (BEE) system that enables managers to facilitate efficient energy use in multiple residential buildings. The framework incorporates smart meter technology, remote sensing and monitoring, Bluetooth technology, big data analytics, cloud computing technology, optimization algorithm, web-based information technology, and electricity pricing policies. Initial experiment was performed to verify potential benefits of the proposed framework. Particularly, a smart grid infrastructure and sensors was installed in a building to retrieve data. An automated machine learning-based prediction model was developed to predict future usage of energy in buildings. The BEE system can support managers and encourage the end-users to effectively monitor daily and monthly energy usage of buildings.

Keywords: Cloud Computing, Big Data Mining, Building Energy Efficiency, Machine Learning, Data Visualization
ESL Lessons Utilizing Design Concepts To Facilitate Effective Presentation Skills For Japanese University Students
Michael Hall, Kyushu University, Japan

ABSTRACT

This ESL course for design students incorporates videos that introduce design concepts and processes in natural English. Even though the comments from last year's course were mostly positive, it has been revised to meet the students' request to increase the focus on presentation skills instead of the equal weight on listening and presentation skills supplied in the original plan. The course still provides listening and writing tasks that promote analytical thinking, which is often lacking in university ESL lessons in Japan, but examines the finer details, including teacher/student critiques to produce higher-level presentations. This course is also unique in that it was specifically developed for design majors that need to become familiar with technical language, and provide exercises to challenge them to reveal their innovative talents to serve them after they graduate. The results from the two surveys given to students, one at the half waypoint in the semester, and the other in the last class, showed that they gained confidence in public speaking and increased their listening comprehension and became more aware of the importance of critical thinking and the processes necessary to develop innovative solutions.

Keywords: ESL, Innovative Cognitions, Presentation Skills, Listening Skills
Measuring Individual Entrepreneurial Orientation And Intention Of University Students: A Comparative Study Of FEAS Students
Alba Kruja Demneri, Epoka University, Albania
Genti Kruja, Beder University, Albania

ABSTRACT

Entrepreneurship has been widely recognized as the engine of innovation, job creation and economic prosperity. Albania as a developing country facing high unemployment rates, continuously promotes among young adults the development of entrepreneurial activities, which can partially provide a solution to the increasing unemployment. The purpose of this research is to measure and compare the correlation between individual entrepreneurial orientation and entrepreneurial intention of students enrolled in the study programs of Faculty of Economics and Administrative Sciences (FEAS). The focus of FEAS’ study programs is on contributing to the country’s development in the businesses, organizational and management arena. As Albania is rated as a country in which starting and doing business is easy, this empirical study aims to point out the orientation and intention of the students towards entrepreneurship.

Keywords: Individual Entrepreneurial Orientation, Entrepreneurial Intention, University Students, Study Program, Albania, Correlation

JEL Classification: L26
Tqm: The Great Debate On Financial Performance & Evidence From Morocco
Mohammed Belkasseh, Hassan 1st University of Settat, Morocco
Morad Lemtaoui, Hassan 1st University of Settat, Morocco

ABSTRACT

This paper attempts to explore the link between TQM’s implementation and the corporate performance component. The challenge is particularly to clarify the effect of an effective implementation of the quality philosophy in the organizational environment on financial performance indicators evolution. By choosing to focus on Moroccan companies listed in Casablanca Stock Exchange, the study proposes a group of companies carefully selected according to a methodological sorting as an empirical field of verification. This would make it possible to put the Moroccan company’s commitment to ensuring conformity at the heart of a problematic debate at the international level.

The objective observation of the results makes it possible to confirm that an effective TQM implementation positively impacts the development of companies’ financial performance indicators. The results of the study are shared in many other theoretical analyses and empirical studies undertaken throughout the world.

A very interesting path forward of the study would be that it uses a situational determinant: the current economic crisis to better understand the variations observed over the defined periods of study. This was undertaken methodologically independently of the aim to study a state of crisis. Consequently, the reflection proposed by the paper remains faithful to a knowledge enrichment approach requiring, above all, a factual approach of analysis and understanding of the observed. By doing so, the paper suggests that an effective TQM implementation would also allow companies to "immunize" themselves against the uncertainties of an unfavorable economic situation.

At the same time, regarding its scientific results, the empirical study invites companies engaged in a process of quality implementation to expect its positive financial effect in the medium and long term.

Keywords: TQM, Financial Performance, Morocco, Empirical Verification, Quality Debate, Methodology, Objective Observation
Exchange Rate Misalignment And Economic Growth: On The Transmission Channels For Emerging Economies

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Marthinus C. Breitenbach, University of Pretoria, South Africa
Mulatu F. Zerihun, Tshwane University of Technology, South Africa

ABSTRACT

Despite the large body of work that exists on the impact of exchange rate undervaluation on economic growth, there is very little focus on the potential transmission mechanisms. Rodrik (2008) considers the size of the tradable sector as the operative channel through which undervaluation impacts economic growth. This is due to poor contracting environment and market failures that are prominent in the tradable sector. We look at this issue in this chapter for a set of emerging economies using annual data from 1970 to 2014. We find that the size of the tradable sector is the operative channel through which undervaluation impacts growth. We have ruled out that bad institutions ‘tax’ tradables more than non-tradables. This later casts doubt on Rodrik (2008) explanation. Our results highlight the importance of total factor productivity surge induced by an undervaluation in increasing growth. An undervaluation strategy coupled with large investment on modern tradables may lead to a rise in total factor productivity and economic growth.
To Gamble Or Not To Gamble: Effect Of Price Discount On Consumer Behavior

Yung-Chien Lou, National Chengchi University, Taiwan
Pei-Chun Tsai, National Chengchi University, Taiwan
Wei-Chih Tseng, National Chengchi University, Taiwan

ABSTRACT

Marketers use multiple promotional programs to entice customers to buy products, in pursuit of higher sales revenue as well as to maximize profit. However, with frequent and diverse promotions, consumers seem to be less and less responsive.

Research has shown evidence that price discounts might provide customers incentive to purchase and/or repurchase the products, but at the same time they also bring negative effects, for example, regular price discounts (RPDs) lower customers' internal reference price (IRP) and change customers' perceived quality toward the products; when price discount exceed 20% of the regular price, it would lead to negative perception on the products, and consequently lower customers' purchases (e.g., Delvecchio, Henard and Freling 2006).

Over the past few years, marketers have developed a special type of price promotion, in which customers receive a discount based on the outcome of a probabilistic gamble; this is defined as Gambled Price Discount (GPD), and it is characterized by uncertain discount and immediate benefit to the customers. Major retailers have been changing their promotional plans, shifting from traditional RPDs, like coupons, rebates...etc., to popular GPDs, providing customers differentiated discounts through games like scratch cards, throwing dices...etc. The change in promotional activities did attract customers' interests and consequently boosted sales of products. Goldsmith & Amir (2010) also indicates that in comparison with RPDs, GPDs have similar effects on persuasive purchase incentives to customers.

GPDs are also common in Taiwan, they're often used by the major convenience-store chains; for example, in summer time, to stimulate the sales of cold drinks, the stores had launched a promotional program with slot games for every purchase of two beverages, and did effectively increase the sales on beverage products.

The retailing-channels in Taiwan are in a highly competitive environment, a great variety of promotional activities are often used in the market. However, unlike in Europe or America, in Taiwan, there is no academic research relating to the impact of GPDs on customers' IRPs, perceived value of products and repurchase behavior. Especially it is a stereotype that Asians have a better mathematic ability and thus might be immune to the gambled pricing. Therefore, this research extended the scope of gambled pricing to the Asian market, exploring the effect of GPDs on Asian consumers; i.e., would the uncertain price discounts lead to similar results as RPDs, and also change Asian customers' IRPs?

The objective of this study was to verify the influence of both RPD and GPD on IRPs. Meanwhile, the purpose for the study is to examine how consumers interpret the information of different types of price discounts, how the interpretation influence their perceived value and purchase intention; and to investigate the possible mediators such as atypicality and diagnosticity principle or the entertaining promotional activities (Alavi, Bornemann, & Wieseke, 2015; Ailawadi, Gedenk, Langer, Ma and Neslin, 2014).

Sample description. We conducted a simple experiment and data were collected from 86 college students at a university in northern Taiwan. Almost equal number of respondents for each conditions (RPD: 30 students, GPD: 29, Control: 27). We observed and measured changes in their IRP’s evoked by the different price promotion design.

Price promotion manipulation To test our hypotheses, we used a three-group pretest-posttest design and manipulated the type of price promotion: control group, GPD group and RPD group. The stimulus we selected was a shampoo sold at a regular price at 300 local currency, New Taiwan Dollar (NTD). Innate to the uncertainty mechanism of GPDs is
that the discount for each subject is different depending on whether they win the lottery or not. In line with previous research, we applied an average regular discount of 25% (Alavi, Bornemann, and Wieseke, 2015; Grewal, Marmorstein, and Sharma 1996; Tsios and Hardesty 2010). We have designed a flyer for each of the groups. For the control group, the price shown was NTD 300. For the RPD with a discount of 25%, the tag price was cross out on the flyer, instead, the discount of 25% is highlighted without the final price stated on it. And, finally, for the GPD group, we emphasized the probability of 50% to win the half-price shampoo with a simple dice game.

We started our experiment with introducing the procedures to the participants. In pretest period (t1), the phenomenon of an acceptable price range was utilized in the pre-test in which subjects were asked to fill out the highest and lowest acceptable price they would pay for the shampoo. Then, they read the flyer of 25% discount in RPD condition or 50% chance to pay the Shampoo for half the price (GPD condition), and again provide the highest and lowest price they would be willing to pay for the shampoo, and the result was for post-treatment (t2). And for measuring the lasting effects(t3), the participants fill-out a questionnaire regarding their willingness to repurchase the product at the tag price when the promotion is over. All measures of IRPs, willingness to pay (WTP), perceived value, uncertainty, atypicality, entertainment benefit exceed the reliability threshold of 0.7.

**Results.** The results affirm our assumption and depict that GPDs and RPDs influence IRPs and WTPs as we expected. Consistent with H1a, the IRPs_t2 mean values of three conditions did differ significantly. \( M_{control} = 274.96 > M_{GPD} = 236.34 > M_{RPD} = 227.63; \ t = .042 \), whereas the results of the IRPs_t3 and perceived value still remain unaffected for different price promotion treatment, hypotheses H1b was not supported \( M_{control} = 251.93 > M_{GPD} = 241.222 > M_{RPD} = 231.98; \ t = .477 \) and H2 \( M_{control} = 4.12, M_{GPD} = 4.31, M_{RPD} = 4.01; \ t = .422 \).

Second, we used three constructs, uncertainty, atypicality and entertainment benefit to examine the mechanism under the gambled pricing. The first two constructs originated from Alavi, Bornemann and Wieseke (2015), and the last one from Ailawadi, Gedenk, Langer, Ma and Neslin (2014). (Measurement and scale see APPENDIX A.)

The results depict that uncertainty \( M_{control} = 4.46, M_{GPD} = 5.16, M_{RPD} = 4.23; \ t = .017 \) and entertainment \( M_{control} = 3.59, M_{GPD} = 4.57, M_{RPD} = 3.33; \ t = .000 \) did alter significantly. Further analysis of regression has shown supportive results to our hypotheses H3b, H4b and H4c. The regression results demonstrated that the information atypicality did influence on the subjects' IRPs_t2 and WTP_t2, while the entertainment of promotion only affect subjects' WTP_t2 and WTP_t3. Meanwhile, the result didn’t support our hypothesis H5 by its mean value of WTPs_t3 \( M_{control} = 2.69, M_{GPD} = 3.14, M_{RPD} = 2.63; \ t = .227 \).

This study partly replicated the conceptual framework of Alavi, Bornemann, and Wieseke (2015) in regards to the method used to measure the influence of IRP effect. The results of H1a, H1b and H3b are consistent with their findings, however, the hypothesis of uncertainty isn’t supported by data. Our study depicts that entertainment benefit indeed influence more in the subject’s repurchase behavior than atypicality and uncertainty do.

Regarding the contributions of this research, firstly, in terms of the IRP effect, we found that GPDs result in higher IRP than RPDs and no-discount control condition; secondly, the research on perceived value demonstrated that customers' perceived value is higher when GPD is taking place, comparable to RPD or no-discount and lastly, it also came out that perceived uncertainty and atypicality of the sale price do affect customers' purchase intention, as well as the entertaining effect on promotional activities. Also, comparing to RPDs and no-discount, GPDs induce higher intention to repurchase the products at regular price, after the promotion ends.

The study also contributes to marketing practice, verifying the huge spending by the companies on retailing channels, in order to bring customers to the stores (Darke and Chung 2005). In this research, we have designed both RPD and GPD with same expectation value. The experiment demonstrated that, with same marketing expense budget, GPDs are more effective than RPDs; GPDs are not only minimizing the negative effect on IRP, they can effectively bring customers to the physical stores for joining the promotional activities. GPDs let marketers achieve the goal of increasing sales of products, while customers also receive benefit from their purchases.

**Keywords:** Internal Reference Price, Price Promotion, Gambled Price Discounts, Perceived Value, Willingness To Pay
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A Case Study Of A Teacher From Hong Kong: What Does An International Teacher Really Think About U.S. Education?

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ABSTRACT

This case study was conducted to gain an understanding of one teacher from Hong Kong and their perceptions about American teachers and the American culture. It is critical to explore these thoughts to ultimately enhance cultural awareness. Information will be shared about their thoughts on education and current practices of teachers.

Keywords: International Education, Study Abroad, Teacher Perceptions, Cultural Awareness, Hong Kong, United States Of America

Purpose and Literature Review

With a drastic increase in diverse students in the United States over the last decade and an emphasis on 21st century skills for educators, it is important for teacher preparation programs to help teacher candidates develop global understanding of education. Many teacher candidates have misunderstandings and misconceptions of other cultures and education. Sitting in the classroom and reading about diverse cultural perspectives does not help to build sound and reasonable knowledge about the real world. To combat cultural misconception, research suggests that teacher candidates should be immersed in different cultures (Abel, 2014). Thus, studying abroad is a valuable learning experience because it provides opportunities for students to interact with diverse populations (Zamastil-Vondrova, 2005).

“The link between Hong Kong and the two coasts in the US has had a long history that started about the same time that Hong Kong became a British colony in the mid-19th Century (Ford & Slethaug, 1999).” After 1997, the former British colony was handed back to China; in turn, there have been a lot of changes to the educational system in Hong Kong that is more similar to China and the United States (New York Times, 1997). As the most international part of China and a former British colony, Hong Kong has adopted English and Chinese as the two official languages in education and public administration (Luk, 2013). Some families begin teaching both languages prior to their child enrolled in school, and then during their primary years the focus in schools is to increase biliterate (i.e. English and Chinese) and trilingual (i.e. English, Putonghua and Cantonese) abilities (Education Bureau of Hong Kong, 2016).

Due to the history in Hong Kong and the United States, some institutes of higher education have had a desire to develop study abroad programs between the two countries to enrich students’ understandings of culture. It is critical when developing study abroad programs not to “assume that students know nothing, or, in turn, to ignore their misapprehensions” (Janes, 2011). Janes conducted a study where he examined a study abroad program in the United Kingdom (2011). He found that the individuals had “strong pre-conceptions about British culture and society prior to their arrival.” He discussed that individuals possessed a “culturally mediated state of subjectivity which I refer to as ‘ignorance’ and that this can become a valuable resource for teaching and learning.”

The current research was important to address; however, there was limited research in the area of the perceptions of teachers in Hong Kong about the American culture. It was critical to explore their thoughts prior conducting a short-term study abroad course to ultimately enhance cultural awareness between key stakeholders. Thus, the purpose of
this research was to gain an understanding of a teacher in Hong Kong and their perceptions about American teachers and the American culture.

Method

This qualitative study used case study inquiry (Kohlbacher, 2006). Using the exploratory case study method this enabled the researchers to study a “contemporary phenomenon within some real-life context (e.g., teacher’s perceptions from Hong Kong).” This research method focused on an individual’s perspective, experiences, and practices so that the researchers could understand how the world appears to others (Trochim, 2006). The rationale for this chosen method was to gain an understanding of a teacher from Hong Kong and their perception about American teachers and American culture.

The participant was chosen using the purposeful sampling method. The second researchers’ former teacher had agreed to provide a list of referrals through her network. Based on these referrals, a diverse population of teachers from Hong Kong were chosen based on gender, teaching placement, education level, as well as those with and without prior experience in America. An e-mail was sent about the study and invited those potential participants to be involved. All selected participants agreed to be involved in the study. From the selected participants, one participant was chosen at random. That participant was selected as a pilot case study to help researchers prepare for data collection of a larger study. By doing this, it refined the data collection and analysis process with respect to the content of the data and the procedures to be followed (Yin, 2003).

The source of evidence that was collected for this research was an in-depth, semi-structured, one-to-one interview in Hong Kong. The interview questions consisted of a variety of structured questions to gather information about their perceptions of American education and culture. The interview was conducted in Cantonese (the main language spoken in Hong Kong) and was recorded by the second researcher. The audio files of the data from the interviews were then transcribed to English for data analysis.

The analytic strategy that was used in this study was developing case description (Yin, 2003). The ultimate goal of case study research is to “uncover patterns, determine meanings, construct conclusions and build theory” (Patton & Applebaum, 2003). The results and findings were reported in narrative form (Yin, 2003). Upon completion of the data analysis, the results were sent to the participant to ensure that the interpretation was accurate (Hartley, 2004).

To address the construct validity, the participant and researchers reviewed transcripts, parts of the data analysis, and final report outlining the findings (Yin, 1994). If applicable, they changed any unclear aspects of the report. Internal validity was achieved by cross-checking the results. Finally, reliability was determined in three ways, (1) by two researchers who continually communicated about methodological decisions (LeCompte & Goetz, 1982), (2) the interviews were recorded using a tape recorder (Nair & Riege, 1995), and (3) peer examination was used upon completion of the narrative (LeCompte & Goetz, 1982).

Case Study

This study was conducted with one female teacher, Jen (pseudonym), who had taught for ten years in the Hong Kong public school system. She was teaching English in the elementary setting. She explained, “…English occupies most part of it. Big part of it. Actually moreover, because in Hong Kong we rarely talk about teaching which subject, English and other extra curriculum.” There are a total of thirty-three students in her class who range from first through third grade. Of the thirty-three she has six students with disabilities (e.g., ADHD, weak-sighted, limited intelligence). She did not have any experience studying abroad, or living out of the country.

When thinking about the American culture Jen described that it had “more freedom for career opportunity. Your work, all the choices is more, and free, not as much limitation.” When discussing more with her she explained that there were more career choices in America (in reference to schooling). She stated:

Maybe the students in America, like if I am interested in certain area, I can learn more about it. Whereas in Hong Kong there might not be such opportunity. They have to for example...they just don’t have the...
opportunity…"Oh I like to cook"… you still have to struggle through and after Form 6 to pursue further subject like that. It’s more limited to academics in Hong Kong (personal communication, May 2, 2017).

Jen explained that she thought that American schools are similar to Hong Kong schools except for the focus on examinations (i.e., TSA) and “…the rush”. The “TSA is like a benchmark, turning out our exam paper, teaching, are all very much focused on the examination-taking skills, right…I think America’s schooling might have less in this area.” When opening up more she described that the “less area” was that America did not focus as much on examination-taking skills and that American schools focused more on, “…self-learning.” She then described “…the rush” and stated:

To be honest Hong Kong schools has too many activities/events, so many activities/events that at elementary school, during recess, they might also have to be selected to attend activities/events. Even during lunch, there were times the department of education would have school-evaluation visitors to assess your school, they gave us suggestions that we should ask the student to do performance during lunch break, let people enjoy a performance. I would feel that the moment they step their foot in school, before the class official begins, they have to start reading, then lessons, and the recess is being occupied by other activities/events, only 30 - 45 minutes lunch break, then recess has to partner-writing and partner-reading, until school is over. And there is after school…turns out they have to be quick in everything (personal communication, May 2, 2017).

She further described that in America it is not as rushed and it is “like normal pace to take class, normal pace for recess, lunch time is lunch time. Um...like that...at least homework load should be less I think, not as much as Hong Kong” and “…Maybe America’s students just study, self-study. Whereas Hong Kong students, besides academics, of course lots of homework, but also have to go to piano lesson, learning this and that…”

Jen described only positive outcomes toward education in America with a her rationale of an increase of career options for schooling, more “self-learning”, and decreased pacing of students’ lives.

Discussion & Implications

Upon reflection of the data, it is important to note Jen’s first point about her perception of an increase in career options. She shared her thoughts that America provided more “freedom” than she had in Hong Kong. Moving forward with this theme of the data it would be important to see if there are or are not more career options, or what the differences in Hong Kong compared to America are.

The second area that was discussed was “self-learning”, much of Jen’s interview discussed focused on the impacts of testing in Hong Kong. It was her perception that in America there is less focus on testing and that students were learning skills that would help in their future careers. This would be another important factor to investigate to determine the impacts of testing in Hong Kong and America.

The last major area that Jen focused on was the pacing for the students. From her perspective it is important to note all of the differing activities and responsibilities that are expected in Hong Kong that may not be expected in America. Future research should be designed to examine the expectations of students in and outside of the classroom and the differences of those who are in Hong Kong compared to those in America.

Limitations

There were some limitations in this study that are important to note. The first is the triangulation of the data. In this study only one form of data was collected. To gain more information about the impacts of the participants insights additional forms of data should be collected (e.g., observation, questionnaire). The second limitation, which is connected to the first limitation, was that external validity should have been conducted more concretely by comparing evidence with the literature to clearly outline the contributions and limitations of the scope and boundaries of the research. Finally, was that this was a case study, so this is just the perception of one teacher in Hong Kong. It would be beneficial to conduct the interviews on a larger sample and compare their thoughts to gain deeper insight.
Conclusion

By having Jen’s perspective it aids future educators to understand the perception of a teacher in Hong Kong. When studying abroad, students may want to inquire and communicate about experiences of college, testing, and pace of life. By having the exchange of knowledge and experience it may help both cultures learn more about each other.

References

School Organization: Autonomy For The Unknown Or Hegemony Of The Known?

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ABSTRACT

This paper reflects on the need to improve the administrative framework to allow schools to gain more autonomy so that they can have real and effective flexibility to change structures in order to explore new paths to search success and efficiency. Sharing the opinion of a broad group of researchers, we consider that moving to a more autonomous school structures generates a deeper action in real students' social and cultural context. The increase of autonomy in schools is related to an improvement in the quality of the teaching-learning process. A higher level of autonomy has consequently an impact on the organization of schools that leads to a better quality and results. In recent years there have been constant apparent efforts by education authorities to improve the situation of educational quality and academic performance. Several plans to improve the quality of teaching or incident plans in education have landed in schools with a palliative function. However, none of these reforms get the expected success if they are not based on the real needs of each school according to their context, social reality and idiosyncrasy. The conclusion of this paper is that the dilemma between autonomy or centralization must be overcome in favor of a higher quality education.

Keywords: Autonomy; Policy Implementation; Evaluation; Teaching-Learning Process; High Quality Education

Introduction

We highlight the lack of autonomy of schools as a factor of significant impact fully in the performance of our centers. There have been many laws that have tried to overturn regulatory efforts to deal with what has been a drag on the real and genuine development of the centers. However, what has been termed autonomy does not seem to convince all members of the educational network as a useful tool to improve our schools and colleges. The fact that all centers share an organizational system of management and a nearly modus operandi does not allow the necessary adaptation required to respond to every educational reality. It is right that schools are regulated following legal patterns that generate an institutional control but regulations cannot constrict the necessary management so that centers develop with the freedom that their contextual realities require.

Autonomy: face and cross?

Fullan (2002) affirms that the educational centers start from a centralist tradition whose homogenizing tendency has not at all favored the development of own projects in the centers and does not help to stimulate innovation and improvement. Given the idea that we present, we do not doubt that there will be those who think that our educational systems have given real competencies in educational matters to the different states, provinces or regions, depending on the case. It is true, however, that this exercise of decentralization has not translated into greater school autonomy, but has been relegated to the political and bureaucratic framework of transfers of these same competencies in education.

The educational projects of the center have failed to reflect the real idiosyncrasy of schools and high schools, and we discover that they are a cold document, unknown to most members of the faculty and without a true identity in centers with radically different contextual realities.

The Eurydice report (2008), which measures the level of autonomy of European educational fields, states that the countries of northern Europe have the greatest educational autonomy and are the ones that obtain the best results. The
school must be inserted in its socio-economic and cultural context, only in this way it can truly respond to the students it receives each day. Centers should be able to create their own proposals with a great capacity for self-management and organization, to create and promote real curricular projects with objectives that respond to their realities. The decision to organize spaces, times and curriculum, the possibility of organizing the templates and the schedules considering the competences and not the subjects, the possibility of having the suitable staff for the implemented projects should be a priority for the centers that they wish achieve school success. It is important to avoid, as Barroso (2004) has argued, that the autonomy of the centers to be resolved with a new legal framework that defines competences and distribution of powers equally for all. Each center starts from a different point of departure and what we must aspire to is to create the necessary channels for this freedom to develop.

Without a doubt, the autonomy of the schools has gained an important position at the point of debate of a whole stream of researchers, of agents belonging to the educational inspection and of local and national institutions. In different forums, centralization is increasingly seen as a factor that slows down and hinders effective educational management. The most radical faction in this sense is clearly betting on what is called school-based management, that is, a very considerable increase in the autonomy of schools, in the belief that autonomy can become an incentive in the improvement of schools, mobilizing educational and social agents, revitalizing the institutions and thus creating, according to Bolívar (2008), a true institutional identity in achieving common objectives that give greater cohesion to the action of schools.

The arguments in favor of the greater autonomy of the centres are many and varied, from the purely pedagogical ones, which defend a greater adequacy of the curriculum to the concrete educational realities, going through politicians, in the belief that a closer and more internal government can better detect the weaknesses and strengths of the centers to promote their development in more responsible entities in the education of their collective. Nor do we overlook mercantilist arguments, which defend competitiveness as an element that can awaken the initiative to seek improvement and effectiveness.

Another great spectrum is formed by those who support the autonomy of the centers, but controlled by the administration. This sector that defends the administrative control exposes its fears to the risks that can lead to an excess of autonomy, as may be the lack of homogeneity in the centers, the possible development of schools and institutes at different speeds and, therefore, without a guarantee of basic quality, or in a more fearful and pessimistic scenario, the fear exhibited by Bolívar (2008) that the excessive desire to demand greater autonomy of the centers contributes to the dismantling of public education in favor of the private one.

Be that as it may, autonomy has its face and its cross. We could admit the pedagogical and organisational risks that it might carry, but it must be kept apart from ideologization and political approaches for or against centralization that are often hidden behind the debate. The autonomy of the centers continues to be a controversy that has a vision of becoming a crossroad if we are not able to define the objectives that are intended with its application. We are in a position to give the centers the necessary tools to promote their initiatives, in order to offer them greater capacity for their own decisions in the face of the challenges that are raised at every moment in their educational history. Now, we must consider, as Marchesi (2003) warns, that the autonomy of the centers is not an objective in itself, but must be understood as a means to achieve other purposes of greater magnitude, as can be the improvement of quality and equity in education. It will therefore be necessary to analyze in every moment its influence in obtaining these objectives.

Darling-Hammond (2004) has been defending and proving that applying new decentralizing educational policies the schools enhance and are able to invigorate the different system agents needed for this improvement. The same author claims that a new paradigm is needed to focus educational policy. This new administrative vision of education would change the worries of politicians and administrators, obsessed with designing controls, for others who focus on developing the capacities of schools and teachers to be responsible for learning and considering the needs of students and community concerns.

A picture is worth a thousand words

This dilemma between trusting autonomy or following the well-known steps of centralization goes beyond any country affecting any educational system. During the last years administrations have launched new policies to increase school
autonomy and the so-called empowerment schools have proliferated not only in the United States but also in some European countries. According to Honig and Rainey (2012), Boston Public Schools, Chicago Public Schools, Los Angeles Unified School District, New York City public Schools, and Oakland Unified School District among others, have implemented high-profile reform initiatives to offer those schools more autonomy and assist them in implementing their teaching and learning improvement strategies. The initiatives in these places offered new autonomy in areas such as human resources, curriculum and instruction. The first analysis revealed that students in participating high schools scored slightly better than their counterparts in nonparticipating schools in English and language arts and math, with a considerable improvement in attendance. Another important result is the one related to teachers. According to Sparks and Malkus (2015), schools with higher standards of autonomy have a more satisfied faculty. The school autonomy means more teacher autonomy, which is positively associated with teachers' job satisfaction and retention.

In Spain, these new policies (autonomy programs for educational centers, PAC) have been launched in Catalonia with excellent results. Gabilondo (2010) expresses emphatically that the centers with better educational results are linked to the centers with more autonomy. The educational projects developed under these PAC have achieved an increase of 16% as a mean of school success. The Centers enjoy more organizational capacity and the Administration provides the necessary resources for the implementation of the educational projects. This implies, from the established curricular framework, the possibility of actively intervening in the curriculum and school organization. Thus, the possibility that in primary and secondary schools can design their own ways of integrating the curriculum, grouping in areas curricular subjects, represents a considerable degree of autonomy. It also includes more autonomy in aspects such as the organization of time, grouping of students, use of the spaces of the center and the assignment of the classes to each teacher. For this objective some educational projects such as “contrat d'objectifs” in France or PAC in Spain have been satisfactory designed and applied.

Focusing on Europe, the PISA report (OECD, 2012) compares the results of Spain with those of Portugal and Poland, considered to be comparable due to their geographical situation and size, and concludes that both Portugal and Poland have undergone considerable improvement without increasing public spending. This improvement is due to policies aimed at a greater autonomy of educational centers and accountability mechanisms that involve a more autonomous management of the center itself. The report also stresses that Spanish centers have less autonomy than the OECD average for content development, implementation of new forms of methodology, organization and evaluation. The United States is even lower in the table. In this report, Schleicher invites us to reflect on the fact that one of the general patterns that defines the countries that get the best results is the sharing of responsibility between the authorities and the schools. Schools with formal autonomy status organize human and material resources to match student need and facilitate teacher learning and growth. This data should be the incentive necessary, from within the centers themselves, to claim greater autonomy.

Autonomy and fear of inequality

According to Bolívar (2010), autonomy is aimed at improving the teaching and learning levels of students, together with setting up the school or high schools with a culture of research and improvement of what is done. The aim of our schools is to respond to all students, giving them the acquisition of basic competencies that enable them to develop successfully in society to avoid exclusion. This primary objective is only achieved if we apply educational projects that directly affect the sociocultural context in which we are working. It is not worth justifying school failure in some centers blaming the context, making tedious statistics of the cultural, economic and social parameters in which we work without having designed and implemented a valid and real project that manages to channel the appropriate actions of all the agents involved in the achievement of our objectives.

Marchesi (2003) has been defending the autonomy of the centers for years, affirming that autonomy is a means to achieve other objectives of greater impact such as improving the quality and the fairness of education. Following this thought, Dillon (2011) states that whether schools have autonomy or not, factors such as strong leadership and professional capacity are vital for success.

However, in many occasions it is warned that autonomy also encloses risks that need to be assessed in depth before deciding on it. Marchesi (2003) poses it as a dilemma. Widening the autonomy of schools can result in an increase in inequalities between them by the different resources they can get, or by their different forms of organizing and
managing the centers. On the contrary, if we do not extend the autonomy of the centers, we can lose a good strategy to stimulate processes of change in them.

According to Marchesi (2003), many schools are considering autonomy as an occasion to improve their pedagogical projects and adapt them to their environment, give personality to the center, limit the bureaucracy and interventionism of the administration, develop plans of quality and equity, etc. Others, however, consider increasing autonomy and its corollary, more as a threat than as an opportunity for improvement.

Martín (2010) affirms that we must overcome this barrier and defends that the evaluation is one of the necessary pieces to verify the effects of autonomy.

In Europe, according to the Eurydice report (2012) only a group of seven countries are evaluated by their respective local authority or education provider, which are Czech Republic, Estonia, Lithuania, Poland, Sweden, the United Kingdom and Iceland. These countries have the evaluation integrated in their daily practice. In many others, like Spain, evaluation keeps on being considered a synonym of control. One of the causes for this feeling is the fact that schools do not have the guarantee they can learn from the results. We can then say that the centers would be much more satisfied with the guarantee that these results will be analyzed from a pedagogical point of view and not as a bureaucratic analysis. Among the risks involved in applying autonomy in the schools, there is a shadow of an imbalance between the same ones that put equality into play. Calero (2010) writes about the difficult balance that arises between autonomy and equity. It is difficult but necessary to strike a balance because the benefits outweigh the risks. Equality can be favored if we focus our efforts on evaluation processes, leadership reinforcement and compensation monitoring of the worst-results centers. In an interesting study of Hanusheck, Link and Woessman (2012), they conclude that autonomy in schools improves student achievement in developed countries but undermines it in developing countries. That means that in low levels of economic development, increased autonomy is not a benefit for student outcomes, especially in curriculum decisions. By contrast, in high-income countries, increased autonomy over academic content exerts positive effects on student achievement. Does it mean that inequality does not emerge from autonomy? Is it possible that more autonomy could be an effective tool against that endemic harm? We think so.

**Autonomy and evaluation: quid pro quo**

As it was said before, autonomy must be understood as a means to achieve better and more effective objectives, and for that reason it is necessary to analyze and evaluate its influence on obtaining these objectives.

According to the OECD’s TALIS report (2009), teachers continue to show resistances to be assessed. At present, our centers face external testing such as diagnostic tests and PISA tests or the much-debated state tests in some countries. It is clear that our performance as teachers is publicly exposed to the whole collective of the educational institution, families and public administrations. Whether we want to or not, the results obtained in these external tests are already an assessment, although poorly managed and insufficient.

The problem of the rejection of the evaluation of the teaching practice comes from an enormous lack of information and teacher training in this sense. What kind of assessment should we expose ourselves to? Who is the right agent for that assessment? Is that assessment going to be translated into information, or into bureaucratic demand? Evaluation for improvement or mere control? There are many questions that teachers are doing in an exercise for which they are not prepared and therefore willing. Ignorance provokes reticence.

The solution is to introduce in the centers, from within, an evaluation philosophy that underscores the benefits that this necessary educational action brings with it and minimizes the inconveniences and fears existing. Let's start by the beginning. In the evaluation, we move before an axis in continuous movement. The centers are probably not able to respond because we must recognize a worrisome lack of teaching maturity before the evaluation. However, not all the responsibility is of the centers themselves, since again it is tried to put solutions to a problem without having the fundamental pillar, the training of the teachers. Without continuing training in the need for evaluation, progress towards teaching quality cannot be encouraged. The critical exercise of evaluation and self-evaluation cannot be imposed and always escapes the normative instructions. The evaluation implemented from outside and not internalized acquires the value of a fiscal failure, losing its motivating and guiding character. We must make it integrated in the teaching practice, as the respect for the curriculum or the evaluation of the students. The assessment should begin to
be considered not as a threat, but as a change-generating exercise. It is paradoxical that a profession that constantly and periodically evaluates as part of its competences, is so reluctant, and at best, suspicious to be assessed. The evaluation is necessarily a work inherent in the teaching practice and a factor of adaptation to the educational reality and the achievement of the improvement. Bolívar (2010) says that any possible external evaluation will have little effect if it does not provoke, at the same time, internal evaluation processes conducive to making things better.

Teachers and management teams must be ready to look for solutions to get involved by the philosophy of evaluation. The evaluation must be a useful tool, which focuses on common programs within the center and on the direct interaction of students within the classroom rather than on indirect variables.

As for the question of how to establish the assessment, there is also a broad debate that does not have a positive impact on the spirit of evaluation of the centers. Braskamp and Ory (1994), world-wide pioneers in this field, have already marked a line of action that has been followed for a long time. They pointed out that the primary objective of the teacher evaluation is to contribute to raising the level of qualification of the teachers, it is to improve the qualifications of the students so that the evaluation of the teacher is made from the results obtained by them. This criterion is highly dangerous and is rejected head-on by the teaching group. In an exercise of reflection of the situation, Martín (2003) defends as the most interesting model for the evaluation, the one designed by Stufflebeam and Skinfield (1985), which values dimensions of four types, namely:

- The sociocultural level of departure of the students of the center, since the investigations carried out in this field have shown that it is a variable with a high correlation with the learnings of the students.
- The starting point of the students, as a clear condition of the results.
- The processes of operation in the center and in the classroom.
- The results.

It is very important to carry out an evaluation that allows to understand which part of the results of the students are due to the performance of the center and which is explained by other factors. The models that consider the added value are precisely to bring this perspective to the evaluated center. When you know the socio-cultural context and the level of learning with which the pupil arrives and the effect of these two variables is controlled in the analyses, the positive or negative differences in the performance can be attributed more reliably to the specific characteristics of the center. What Martín (2010) is trying to tell us is that we must step out of a possible simplistic view of some centers that explain everything in terms of "the raw material" they receive. We agree with this approach because it happens frequently that when comparing centers with others of equal context and equal input yields, some, with the same "raw material", are more capable than others to promote the learning of their students.

There are many challenges to face when improving the schools. The evaluation is one of them. Without a weighted evaluation exercise, there can be no judicious reflection on the teaching practice. Rejecting the evaluation, we reject the self-critical attitude and the ability to adapt to changes. To accept autonomy as an essential policy for the improvement and quality of the educational centers it is necessary one change in our educational culture. According to Silva (2013), the external evaluation has made it possible to strengthen the performance of the inspection and to create a new culture of work in the schools. He states that, having participated in an evaluation process, the centers have had the opportunity to better understand their own educational achievements, the aspects that affect their centre and it has been easier to design joint improvement actions. However, the exercise of evaluation must be considered by all, teachers, management teams and Administration as a real instrument at the service of the search for the improvement of the quality of the centres. Changing the evaluator profile to the one that is evaluated involves a process of institutional and academic maturity in which we are taking short but firm steps. We will have to continue to prepare the ground with wisdom until we end the drought of quality actions in evaluation. By now, in our personal gradebook, for this assignment most of us are far from an A.

Conclusion

The real idiosyncrasy of schools are not reflected in their educational projects and most schools do not have a real identity. Having radically different contextual realities, the centralization force schools to follow the same actions. Autonomy gives the centers the necessary tools to promote their initiatives, in order to face the challenges that are raised in every moment of their history. New decentralizing educational policies must be demanded by schools to
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improve the quality of the education that their students need. Autonomy of the centers means a key tool for the new educational paradigm reclaimed by the schools which have as their main aim innovation and a high-quality education.

References


The Source And The Driving Force Behind
The Modernization Of English Language
By Inventing New Words from Old Ones
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ABSTRACT

This paper is the third in a series on social and linguistic impacts on the formation of abbreviations and acronyms in modern English. Earlier articles offered suggestions on contemporary issues in language and education, like how the introduction of ‘literature circles’ have led to the stimulation of social interaction among language learners (1); and a brief background on the history of English language and tracing the development of English (2). Subsequently, the present paper examines the driving force behind the latest trends in language production and the modernization of English language.

Even though the fundamental objective of this paper is to discover the source and the driving force behind the modernization of English language by inventing new words from old ones, it also seeks answers to questions like what led to the change that popularized modern English over traditional English; how the modern English language has evolved due to the introduction of communication across the virtual world; through what medium new abbreviations are coined and how they gain unprecedented popularity in a short span of time.

The primary data analysis shows that modern English became more popular over the traditional English as a result of increasing popularity of social media which enabled faster adoption of new terms and hence the new English, followed by a demand for rapid communication through expanding utilization of abbreviations, acronyms and emoticons frequently. Consequently, the demand for accelerated and concise means of communication, added to the growing popularity of social media platforms as means of influence ensured the switch from traditional to a modern English language. The research on drivers of language change has determined that social norms and speaker reflexes inspire the changes happening in language, such that any changes in speaker reflexes are automatically considered as new patterns of that language, thereby suggesting that language and speakers cannot be assumed to be independent of each other (3).

When the primary data analysis was observed, different factors that have led to the development of definite internet lexicons like abbreviations, acronyms, and emoticons were determined. Predominantly, the introduction and popularity of such terms during online gaming sessions, demand for quicker and speedier forms of communication in texts and chats; and lastly, a need for introducing personal dimensions to the impersonal electronic communication messages were found to be significant drivers of coining and development of new abbreviations, acronyms, and emoticons. Although the origins and popularity of abbreviations and acronyms, along with emoticons could be traced back text messaging times, when a need for shorter and faster means of communication existed, social media platforms further enhanced this development as a result of online gaming sessions and networking, popularity of informal language and need for expressing feelings through text messages (4, 5).

Keywords: Abbreviations, Acronyms, Education, Emoticons, English, Language, Production

REFERENCES


Enhancing Women’s Economic Empowerment through Self-Reliance Mechanisms with Special Reference to India – An Empirical Study

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ABSTRACT

Economic empowerment is the pre-requisite for the sustainable development, and this study is possible only by increasing participation in the economics. The path towards women’s economic empowerment is described as a process which helps to have control over the factors which affect their lives. In gaining control of financial resources, activity, savings serve as the reliable way to cushion against economic shocks while providing a way for women to plan their future. Financial empowerment, provides the variety of benefits, like better-paying returns, wealth and skill building and conscious individuals, who are politically active, economically productive and independent and can make intelligent discussion in matters that affect them. Economic empowerment and factors contributing to economic enhancement are studied by two qualitative (grounded theory) and quantitative (relationship & association between the variables are considered) in this research. Speaking directly to women is an important aspect of measuring changes in women’s Economic Empowerment. In-depth interview techniques, and focus group discussions, and participatory & direct observations are used. This approach helped to have the qualitative data, and further, a questionnaire was administered to hundred women who are the members of the collective groups for quantitative data collection for understanding in detail the level of Economic Empowerment. The present paper tries to explain the Economic Enhancement of women in Indian perspective, through self-sufficient mechanisms for greater leadership by a sample study believing that the position of women and their status in any society is the index of its civilization. The study indicates that women with their savings, capable of exercising more bargaining power and decision-making capabilities within the household and in the larger society with greater potential investing in family & children.

Keywords: Empowerment, Economic Enhancement, Collective groups, Leadership Bargaining power

Introduction

Women are the rudimentary unit of the society, by making them involved in the economy the country can progress. They become even more important as a long-term solution to a sustainable livelihood in the rural and urban economy. Women entrepreneurship through leadership and empowerment aims to create human resources within the productive sector and to sustain for the further development process of the economy. According to the opinion of Robert Zoellick, President world bank ‘one motivation for women’s empowerment is elementary fairness and decency, young girls should have the same opportunities that boys do to lead full and productive lives’. In Indian Scenario, great strides are made for women through political changes at the base of the pyramid, such as making a conscious effort to increase the representation of women in elected local bodies as a well rapid spread of the phenomena of self-help groups (SHGs) across the states. Through this movement of SHGs, most of the women have been able to better their economic and social condition through access to microfinance. There is widespread evidence that SHGs, have become the key vehicles of economic, social and political empowerment for women and the success of this mechanism, unique to India, has been widely noted in studies all over the world. But now there should be a conscious effort to be made by all the stake-holders to make these groups into small business activity hubs by making them choose as collective groups. Capacity building’ for women, especially for greater market access and control. This can be taken up in two phases, 1Livelihood security phase, women are made involved in elementary income-generating activities; with training, they begin to understand market channels and operations and the requirements for undertaking
sustainable micro-enterprises; coping mechanisms are in place in generally non-transparent and changing market relationships. The second stage i.e., enterprise growth there is a demonstrable capacity of women to act entrepreneurially; they understand markets beyond the local; enterprises are yielding enough income with reduced dependence on intermittent wage labor. Kerala is only state in India, that has attained a remarkable status fulfilling all the criterion of various social well-beings compared with some of the developed countries in the world, which is widely known as the 'Kerala model of development' Kudumbashree2. The achievement is reflected in the literacy level of women, salary wage, professional services, equality of women at par with men. The inspiration of developing the consciousness about the poverty concept and promoting them to the next level of economic growth by creating awareness on various aspects of women empowerment and entrepreneurship. Micro-finance in India is still in the nascent stage to create a massive impact in poverty alleviation. But the introduction of micro-credit through Self Help Groups (SHG’s) has created positive ripples in the rural and urban India. Considering the entrepreneurial environment women’s activities are very motivating as they have the major source of knowledge and innovation. Women experienced in balancing and handling difficulties and taking striking decisions at the household level. This is a unique model with a blend of micro-credit to women and the entrepreneurial instinct of women. The banks also play a very imperative role by providing loans to SHGs at an amazingly low-interest rate, and Self-Help Groups can access loans from banks. Banks play a crucial role in empowering poor women by providing them dignity, self-esteem and economic independence. Banks are benefitted as their loans get repaid in the process. The women grow enormously self-confident as they get to handle money by themselves.

I. Literature Review

The National Policy for the Empowerment of Women, 2001 views empowerment as an enabling process that must lead to their economic as well as social transformation. The government has sought to operationalize this approach through legislative and programmatic interventions as well as by mainstreaming gender into the development planning process. Kabeer, Nai (1998) defined ‘Agency’ as an essential feature of women’s empowerment, although they use different terminology. Women’s agency is expressed regarding as women’s ability to make decisions and affect outcomes of importance to themselves and their families or, put another way, as women’s control over their own lives and resources. Kabeer (2001) in his study offers a useful definition of empowerment that captures both elements, which we employ as a reference point in this paper: for her, empowerment refers to ‘the expansion in people’s ability to make strategic life choices in a context denied previously’5. According to Malhotra, Anju, Sidney Schuler, and Carol Boender (2002) ‘Strategic choices’ refers to major decisions that affect a person's subsequent life trajectory, such as decisions related to marriage, childbirth, education, and employment. However, such decisions are made relatively infrequently in a woman's lifetime. Empirical studies therefore often assume that the ability to make strategic choices are manifested in an ability to make smaller, day-to-day decision6. According to Duflo, Esther, (2012), Women empowerment and economic development are closely related to each other it is a bi-directional process in one direction, development alone can play a significant role in driving down inequality between men and women7; in the other direction, empowering women alone who share 50 percent of the population also contribute for growth. It implies that pushing the levers from both sides will benefit the society at great. Since eternities the factor of recognizing the women’s role in economic contribution to the countries growth is neglected. To enhance women’s economic empowerment micro-credit should be streamlined at the ground level by encouraging the groups to engage themselves in rudimentary activities by proper mentoring. One of the reasons for the failure of SHG’s and the linking of micro credit as they are not involved in any income generating activities and the repaying capacity is coming down year after year. The burden on the individual families and at large on the government is increasing. The results Chopde, K. D.; Kadam, M. M.; Bondhore, V. O, (2015), show that employment, balancing income and expenses, savings and entrepreneurship have influential and determining role in continuation and sustainability of people’s economic empowerment. The overall results of the qualitative research show that some relatives who live together, family-orientation, social capital, cooperation, social correlation, and supporting each other are some operative factors on empowerment growth. Also, the results of the quantitative research indicate that training and employment are the most important factual factors on vulnerable women's empowerment in empowerment staff of Tehran Municipality.8 Toragall, Parivina A.; Vyas, Brijmohan.(2014) referred in their study, Women empowerment activities must be given importance to eradicate poverty, increase the economic growth and the better standard of living 9 Singh, A. Pushpalata; Das, Subhrabaran,(2013) opined in their study, Women participation in Self-Help Groups have clearly shaped seamless impact upon the life pattern and style of poor women and have empowered them at various levels not only as individuals but also as members of the family members of the community and the society as complete. They come
together for solving their joint problems through self-help, and mutual help. Empowerment of women is of paramount necessity as they form a big component of human resources of our country. Without involving women in the development process, the inclusive growth and development of the economy cannot be realized. For the overall progress of the nation, particularly the rural development at village level is essential in developing countries like India. For this, bringing up of better and broader outlook of the people, especially the women belonging to the rural areas is imperative. Increasing economic opportunities for rural women is vital to accelerate economic growth, and development. Rural development is an integral process of economic growth and social progress. The role of micro-finance and women empowerment in this context is important because it provides an environment of sustainable improvement in the quality of life of rural womenfolk enabling them to have equal opportunities in the decision-making process and participation in community life. Empowering women particularly rural women is a test. Women economically empowered through small-scale entrepreneurship program with the help of Self-Help movement. According to Devi, R Uma. (2013), Economic empowerment of women primes to socio-economic opportunity, property rights, political representation, family development, and community development and at last the nation development. Kulb, Carolyn; Hennink, Monique; Kiti, Ndunge; Mutinda, Jane.(2016), in their study discoursed, shifting the development paradigm from the predominant 'top-down' (deficit) approach towards a 'bottom-up' (asset-based) approach, thereby building capacity from existing community resources.

II. Research Methodology

The exploratory form of research was adopted to identify and understand the experiences, opinions, perceptions of women on their economic parameters. Two data gathering tools were used in this study are through Questionnaires & Personal Behavioral Interview as the sample are not educated to record their opinions. The universe for the present study consists of all women who are economically empowered through a livelihood and earning money for their sustainability and development in different sectors belonging to the state of Andhra Pradesh, India. The Stratified simple random sampling method of Probability Sampling technique was used for the present study. The sample includes only women who are engaged in economic activity and involved in household decision making through their grossing. Women of all ages and experience with varied outlook are appropriately represented in the trial. The total illustration consists of women within the age group of 20-55 years. The current sample considered for the study are 100 from Orvakallu Mandal of Kurnool district, Andhra Pradesh, India. The purpose of this model is not to maximize the profits, but to promote ideas to maximize social impact through shared involvement of the SHG’s at the village level by exploring the possibilities in graduating the self-help groups into micro enterprises. The following is the seven step-process implemented.
The Seven Step Process for Economic Enhancement

Creating safety nets around the poor

Fight against the social evils

Enable them to choose the path of right livelihoods

Livelihood opportunities created

Impact: The poor shifted from daily labor to business

Outcome: Doors of capital were opened

Enable them to access capital

SHG’S enabled to get finance

Outcome: Community Resource persons took its birth

Unleash their potential

A new concept of poor identifying the poor, peer learning

Outcome: Social Mobilization

Enable the poor to organize themselves

Sowed the seeds of courage, conviction & confidence

Activity

Identification of the poor

3 women volunteers walked around 27 villages of Orvakal Mandal

Fig: 1Source: Model developed from the understanding of the field study by the author

This model is not gaining a larger share of the pie, but about making the pie larger in a sustainable and financially self-sufficient manner. The core objective is building capacity for women, especially for greater access and control.

(i) Objectives of the Study

1. To study the women economic empowerment dimensions according to their background (Demographic factors)
2. To learn the women participation in economic decisions at the house-hold level
3. To know how efficiently they can use their earned money for their sustainable development & future growth
4. To appreciate the impact of economic empowerment on their decision making

(ii) Background of the Sample:

Rayalaseema region of Andhra Pradesh is known for its backwardness and poverty. Orvakal is one of the Mandals in Kurnool(district) of Rayalaseema region. The poverty scenario of this Mandal in 1995 was very pathetic. It was a drought prone area with sparse rainfall. 90 percent of the women married at the age below 15 years. Child marriages, Un-touchability was very intense in this area. 90 percent of the women are illiterate. Violence against women was alarming. Factionism made poor people’s lives more miserable. The developing plan initiated at Orvakallu was apart from the rest of the area. The first step is to save a rupee a day by the members of the society. Now it is spread to 27 villages, 12000 families, 843 groups and 9260 members. Each member is having their individual livelihood earning for themselves and repaying the loan and thus being a part of the assets of the society. Members children are now engineers and doctors. They have started a school with their own money with the modern facilities. Mutually assisted groups are made active at the ground level by developing them as more conscious individuals, who are politically active, economically productive and independent and can make intelligent discussion in matters that affect them. At the grass
root level women groups were trained and made realize their potential of receiving through innovative programs and demonstrated through few case studies.

(iii) Demographic Profile

Fig:2

![Age of the Women](image)

Fig:3

![Marital status](image)

Fig:4

![SHG Group Age](image)
Analysis: From the above figures: 2, 3, 4, 5, & 6 the demographic profile of the women is explained. The age of the women, education level, marital status, SHG group age & no of years in the SHG group is been considered. For the further analysis women education & no of years in the SHG group is considered as important parameter for the sustainable development.

III. Analysis & Interpretation

According to the international center for research on women, woman is economically empowered where she can succeed and advance economically and the power to make and act on economic decisions. Augmenting the understanding of women’s savings has positive implications for enhancing economic empowerment the present study also showed the positive correlation. The following is the qualitative analysis of data proving the correlation between economic enhancement leading to more bargaining power & decision-making power.

Table 1. Age wise Association of women Agency (Money & Participation in Economic Decisions)

<table>
<thead>
<tr>
<th>S..No</th>
<th>Variables</th>
<th>X²</th>
<th>df</th>
<th>p</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age*Literate</td>
<td>31.59</td>
<td>4</td>
<td>.000</td>
<td>Dependent</td>
</tr>
<tr>
<td>2</td>
<td>Age*Marital status</td>
<td>39.92</td>
<td>4</td>
<td>.000</td>
<td>Dependent</td>
</tr>
<tr>
<td>3</td>
<td>Age*SHG group age</td>
<td>16.79</td>
<td>8</td>
<td>.032</td>
<td>Dependent</td>
</tr>
<tr>
<td>4</td>
<td>Age*No of years in the group</td>
<td>8.379</td>
<td>8</td>
<td>.397</td>
<td>Independent</td>
</tr>
<tr>
<td>5</td>
<td>Age*decision about domestic expenditure</td>
<td>26.492</td>
<td>12</td>
<td>.009</td>
<td>Dependent</td>
</tr>
<tr>
<td>6</td>
<td>Age*express your opinion freely</td>
<td>13.319</td>
<td>12</td>
<td>.342</td>
<td>Independent</td>
</tr>
</tbody>
</table>
Explanation: It is observed that the age & literate, age & marital status, age & SHG group age and age & decision about domestic expenditure are dependent and there is a committed relationship between these two factors. On the other hand, age & no of years in the group, age & express your opinion freely and age & economic investment decisions are independent and there is no meaningful relationship between these variables. Hence, Null hypothesis is rejected. In the given sample women can independently take decisions about the domestic expenditure and involved in the household decisions. Which proves that women economically empowered can reap the benefits to the family and extend to the society as well.

Table 2. Literate wise Association of Agency (Money & participation in house-hold decisions)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Variables</th>
<th>X²</th>
<th>df</th>
<th>p</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Literate *Marital status</td>
<td>18.919</td>
<td>1</td>
<td>.000</td>
<td>Dependent</td>
</tr>
<tr>
<td>2</td>
<td>Literate*SHG group age</td>
<td>5.073</td>
<td>2</td>
<td>.079</td>
<td>Independent</td>
</tr>
<tr>
<td>3</td>
<td>Literate *No of years in the group</td>
<td>4.708</td>
<td>2</td>
<td>.095</td>
<td>Independent</td>
</tr>
<tr>
<td>4</td>
<td>Literate *decision about domestic expenditure</td>
<td>5.908</td>
<td>3</td>
<td>.116</td>
<td>Independent</td>
</tr>
<tr>
<td>5</td>
<td>Literate*stake about economic investment</td>
<td>2.0483</td>
<td>3</td>
<td>.563</td>
<td>Independent</td>
</tr>
<tr>
<td>6</td>
<td>Literate*capability in managing money</td>
<td>4.133</td>
<td>1</td>
<td>.042</td>
<td>Dependent</td>
</tr>
<tr>
<td>7</td>
<td>Literate*spend on child care &amp; house hold</td>
<td>6.952</td>
<td>2</td>
<td>.031</td>
<td>Dependent</td>
</tr>
</tbody>
</table>

Source: survey data- 2017

Explanation: Table:2 it indicates that the literate*marital status, literate*capability in managing money, literate*spend on child care & house-hold management are dependent and there is a meaningful relationship between the variables. On the other hand, literate*SHG group age, literate*decision about domestic expenditure, literate*stake about economic investment decisions and literate*no of years in the group are independent and there is no meaningful relationship between the variables. In the given sample, most of the respondents are married, literate*marital status is dependent. The respondents who are literate and have some education are skilled to manage money.

Table 3. SHG group age wise Association of Agency (Household decision & Physical mobility)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Variables</th>
<th>X²</th>
<th>df</th>
<th>p</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SHG group age*no of years in the group</td>
<td>39.742</td>
<td>4</td>
<td>.000</td>
<td>Dependent</td>
</tr>
<tr>
<td>2</td>
<td>SHG group age*help from home in doing</td>
<td>13.051</td>
<td>6</td>
<td>.042</td>
<td>Dependent</td>
</tr>
<tr>
<td></td>
<td>domestic work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>SHG group age*permission to visit health</td>
<td>10.448</td>
<td>4</td>
<td>.034</td>
<td>Dependent</td>
</tr>
<tr>
<td></td>
<td>centers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Explanation: Table:3 SHG group age*no of years in the group, SHG group age* help from home in doing domestic work and SHG group age* permission to visit health centers are dependent and there is a sincere relationship between the variables. The chi-square value is less than the table value. In the given sample, the respondents are categorized into three categories i.e more than one year, more than three years and more than 5 years. Respondents (women) who are part of senior group and the members joined the group their leadership position made them to involve more in the activities of the group. SHG group age enables us to estimate the experience leadership capabilities in economic mobilization and social mobilization.
Table 4. No of years in the group wise Association of Agency (Mobility, Work-load)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Variables</th>
<th>$X^2$</th>
<th>df</th>
<th>p</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No of years in the group* express your opinions freely to your husband regarding house-hold</td>
<td>1.317</td>
<td>6</td>
<td>.971</td>
<td>Independent</td>
</tr>
<tr>
<td>2</td>
<td>No of years in the group*can you express your opinion spontaneously to your husband family</td>
<td>3.078</td>
<td>6</td>
<td>.799</td>
<td>Independent</td>
</tr>
<tr>
<td>3</td>
<td>No of years in the group*decision about domestic expenditure</td>
<td>2.861</td>
<td>6</td>
<td>.826</td>
<td>Independent</td>
</tr>
<tr>
<td>4</td>
<td>No of years in the group*your stake about economic investment decision</td>
<td>4.549</td>
<td>6</td>
<td>.603</td>
<td>Independent</td>
</tr>
<tr>
<td>5</td>
<td>No of years in the group*do you think a woman should decide to use the money she acquires herself</td>
<td>3.632</td>
<td>4</td>
<td>.458</td>
<td>Independent</td>
</tr>
<tr>
<td>6</td>
<td>No of years in the group*help from home in doing domestic work</td>
<td>15.901</td>
<td>6</td>
<td>.014</td>
<td>Dependent</td>
</tr>
</tbody>
</table>

Explanation: From the above table:4 no of years in the group* express your opinions freely to your husband regarding house-hold expenses, no of years* express opinion without restrictions to husband family, no of years in the group*decision about domestic expenditure, no of years in the group*stake about economic decisions and no of years*women should translate to use the money she acquires herself are independent and there is no meaningful relationship between the variables. On the contrary no of years*help from home in doing domestic work are dependent and there is committed relationship between the variables. In the given sample, the respondents can take independent decisions. The group members who are seniors i.e., members who are in the group for more than five years have a mentoring role to educate and motivate the younger members who have joined the group, in fulfilling this charm they are spending more time outside the house.

IV. Findings & Suggestions

The following are the conclusions of the existing study

- In the present learning 42 percent of the women can express their opinion at will and 24 percent of them prompt their inability to their husband and family related to any matter of monetary & non-monetary possessions.
- In the total taster 48 percent women are involved in farm action and 52 percent are in the non-farm movement. In farm activity both wife and husband are involved. Non-farm activity women are tangled as daily labor getting day-to-day wages.
- 64 percent of the women can involve themselves in house-hold & domestic expenditures of the family.
- 65 percent among 90 percent of married women can express their judgement effortlessly on sending their kids to school and say on how many children they want to have.
- 60 percent of the women expressed that they equally contribute for all the necessary expenditures from the earned income.
- All the women felt that they can manage the money they received.
- Most of the women felt that they are double loaded and less support in the domestic work is rendered by the counterpart. Mutual sharing of work is very less and spent more time on internal course of work.
- The confidence of looking after themselves and outside the house is much higher among the women. Most of them took the liberty of decision making by mere informing in the family.
- 87 percent of the total sample did not get any immovable property passed on from their mother. Only 13 percent got property from their mother. All the women are self-reliant and independent in earning money and spending the same for sustainable development.
- Freedom of movement or mobility is predominantly not restricted in the contemporary study. All the women have the confidence that they can freely move where women’s presence is required.
• The increase in self-esteem & shared self-assurance of women. Evident changes in public participation.
• Positive changes in social attitude, greater access to community resources.
• Visible changes in physical health.
• Momentous change in literacy enrolment rate at the grass root level.
• Equal treatment to girls and boys in the family.
• Female education has increased in the local area where the survey was done.
• The number of women participating in the development activities increased considerably.

V. Conclusion

The magnitude of involvement of women in the income generating activities (farm or non-farm movement, employment etc.,) leading to contribution in household earnings can improve their access to and control over economic resources. To enhance their say in decision making in various aspects of food consumption, health care, schooling of children and financial investment decisions. The resultant improvement in security of the household would bring a sustainable change in self and at wider perspective of the society. It is proved in the present study that enhanced regular cash flow holds talent of improved savings and credit worthiness in the market and thereby facilitates better access to credit. Thus, improved wage incomes of women would help in proper spending in health care, nutrition and education of children (Human and Social Capital creation). The enlightened and enabled women can also participate in the community matters with the support of the CBOs such as SHGs and women empowerment program. The membership of women in community organizations would expedite the change process. It is imperative that factors like literacy, awareness, participation in development and social capital play a critical role in accelerating the empowerment process. The increased self-confidence, social recognition, changed roles and leadership qualities together transform their personal functioning. This type of change in women can be interpreted as an important indicator of their economic empowerment leading sustainable growth. The step forward for the sustainable development government should start Gender Budgeting (GB for women) and ensure training & employment generating initiatives are taken up at all the levels by confirming adequate budgetary commitments.

Acknowledgements

The author wishes to thank all the women members of the mutually aided working groups and the support rendered by the volunteers in understanding the details of the group behavioral aspects.

References

Curriculum Imperatives Of Some Activities In Compassionate Home And Special Needs Schools In Abia State, Nigeria
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Udodirim Angela Igwe, Nigeria

ABSTRACT
This paper highlights the curriculum imperatives of some activities programmed for the effective upkeep and care of children and adolescents in a compassionate home in Abia State, Nigeria. This was done through observation and the use of documentary resources. Thus, the researchers will engage themselves in interactive sessions with special needs children and their care givers in the compassionate home and special need schools. The rationale and objectives of establishing the home was mastered in order to match same with daily activities exhibited. In as much as care giving and necessary physical upkeep may rank high, pertinent curriculum imperatives such as friendly coexistence traits, team spirit, cooperation, orderliness, self-esteem, ability in disability, personal hygiene and focus were duly explored. It was observed that some curriculum imperative that enhanced learning existed and students well exposed to fun and games as major strategies for effective learning. However, the study recommends that teacher pupil ratio of 1:10 should be revisited especially in the learning challenge classrooms. Also there is need for the employment of teacher aid in each classroom in the special needs centre. Equally classrooms and sitting arrangements should be structured to match the special needs of specific learners. The for regular training and retraining of teachers was suggested.

Introduction
Curriculum refers to the sequence of all potential activities planned and arranged for learners under the auspicious of a school compassionate home any other organized setting. The purpose of such activities is to provide shelter, care and training for children and youths therein and thereby avail them opportunities for willful growth. This will, equally, enable them become useful and competent members of their community depending on each learner’s ability or disability.

This paper will highlight some curriculum imperatives evident in compassionate homes and classrooms in the course of care giving or lesson delivery to special needs learners. It will focus on these sub-headings:

1) The Classroom and Teacher Effectiveness
2) Aims and Objectives of Special Needs Education in Nigeria
3) Some Activities in Special Needs, Homes and Human Development
4) Curriculum Imperatives
5) Summary and Conclusion.

The Classroom and Teacher Effectiveness
Learning primarily takes place under a conducive, non-threatening, secured, safe and democratic classroom cum environment. The classroom is conducive when learners are respected and cared for as individuals who have constitutional right to quality education that will lead to their maximal development of potentials. In that case the learners will feel free and willing to learn. In the same vein, a well secured classroom is one in which learners feel safe, protected and relaxed during the course of learning.

Teacher to student interaction as well as students’ interaction is thereby very cordial and friendly with each party serving severally as team leader and team mate as the case may be. Naturally such a classroom will be
encouraging, friendly and lively with each student contributing and participating effectively. Everyone in such a democratic environment sees himself or herself as having equal right in the classroom because personal abilities or disabilities are taken into consideration.

Thus, gender responsive pedagogy prevails and effective classroom management that recognizes human development characteristic needs and aspirations are put in place. Thus, the teacher or care giver, in managing the classroom is equally sensitive to the maturational characteristics and developments of girls and boys and evident individual differences. The healthy or positive challenges that arise are collectively handled and resolved by all students who have garnered relevant experiences as members of the class/group.

Whereas learners without overt physical or mental challenges attend well-structured schools, where teaching and learning take place under a conducive climate, those with overt special needs have the option to be mainstreamed into such schools or attend distinct inclusive education schools or be in compassionate homes. These distinct schools or homes are also charged with the mandate of effective curriculum delivery. Each school or home is designed to address the special needs of pupils or students. The curriculum is the same for all types of learners and Nigerian government is charged with the responsibility of equipping all schools with relevant instructional resources, in order, to develop and enhance learning. The extent of teacher effectiveness will determine the extent classroom instructional resources are harnessed and employed in order to attain stipulated specific objectives. Thus, an effective teacher who has adequate insight into the family background of his/her pupils as well as their cognitive and developmental challenges is better poised for curriculum actualization than the teacher who is ignorant of those vital facts. An effective teacher is thus, a teacher who has good knowledge of the subject matter as well as being competent and efficient in providing individual needs to all students in his or her classroom. On the whole, acquisition of appropriate teaching skills, good communication and organizational abilities, teacher-flexibility, self-confidence, appropriate initial training, resourcefulness, patience, perseverance, humility, cheerfulness, good team spirit to mention but few will enhance teacher effectiveness in a special needs school or home.

Aims of Special Needs Education in Nigeria

Federal Government of Nigeria (FRN) (2013:38), National Policy on Education stated the aims of special needs education as follows:

a. Provide access to education for all persons in an inclusive environment
b. Equalize educational opportunities for all settings, persons irrespective of their genetic composition, and social, physical, sensory, mental, psychological or emotional disabilities.
c. Provide adequate education for all persons with special needs in order that they may fully contribute their own quota to the development of the union.
d. Provide opportunities for exceptionally gifted and talented persons to develop their talents natural endowments/traits to their own pace in the interest of national development and
e. Design a diversified and appropriate curriculum for the different target groups.

All special needs children and youths in Nigeria have equal access to education as any other child or youth. Education is free for the special need learners. It, therefore, becomes worrisome when parents or guardians do not avail their children/wards of such free access to education. There is no discrimination as per gender, social, physical, sensory, mental, psychological or emotional ability or disability. Learning is tailored towards individual needs and unique peculiarities/circumstances. For instance, even though the curriculum is the same for all learners, the duration of programme is subject to individual needs and peculiarities as mentioned earlier.

Often times, the entry behavior is not the same hence differs based on abilities or disabilities of learners. Thus, a unit of work that may take two weeks in a normal school may take one semester (three months) in an inclusive education school. The same unit may take up to ten months in a compassionate home. This is because compassionate homes spend quality time in giving care, affection and love to the children. Some of them have serious challenges relating to speech coordination, mobility, toilet training, self-hygiene and environmental cleanliness. The act and sequence of transmitting these traits form part of the curriculum of compassionate homes.

Contribution of one’s quota towards national development does not necessarily mean being able to construct bridges
across oceans and rivers or building houses and installing sophisticated electronic gadgets. Contributions to national development can also mean taking care of one’s self, mastery cum some body control relating to feeding, clothing and even use of the toilets as well as being at ease with one’s self there are also major contribution to nation building. Hence comes the quest for maximum activation of potentialities which are indices of mental development and learning. When all the five senses of a learner are in order then learning progresses sequentially. However, when there is a malfunction of one sense organ or more then the need for special attention arises.

FGN (2013:36) categorized special needs person as follows;

a) Visual impairment (Blind and the partially sighted)
b) Hearing impairment (deaf and the partially hearing)
c) Physical and health impairment
d) Intellectual disability (mild, moderate, severed and profound)
e) Emotional and behavioral disorders (hyperactive, hypoactive/the socially maladjusted).
f) Speech and language impairment
g) Learning disabilities (have psychological/neurological phobia or challenge)
h) Multiple disabilities
i) The gifted and talented and
j) Albinos: There are a number of issues and challenges that hinder and affect the total well-being of an Albino. These include; vision, skin, problems, lack of self-esteem, myths about Albinoism, stigmatization, stereotype and their effects on learning.

These categories and persons who cannot benefit from the formal school setting are sent to special schools duly designed to meet their special and peculiar needs. In addition, religious groups, non-governmental organizations, philanthropists and stakeholders in education set up compassionate homes or care centres to take care of those children with multiple physical or psychological challenges as well as those abandoned by their parents. It may be pertinent at this juncture to look at some compassionate homes and highlight the curriculum imperatives therein.

Some Activities in Special Needs Schools and Compassionate Homes

Some selected special needs schools and compassionate homes in Abia, Anambra and Rivers states of Nigeria were visited in order to observe the activities that take place there. In the course of this research some research assistants were requested to visit two special needs school and two compassionate homes, in addition to the research and documentaries of the writers. The reports are as follows;

In a school for the Deaf and Dumb and the challenged and compassionate home comprising three centres, namely primary school section for the deaf and dumb and the blind, the junior secondary school for the deaf and dumb and the senior secondary school section for the deaf and dumb, some curriculum activities were observed.

The classroom atmosphere was conducive, especially, at the deaf and dumb section. Students paid attention to the teacher. The classroom was well organized and in the absence of the teacher students engaged themselves in discussions using sign language. At the sections of the learning challenged there were noticeable evidence of disorder and random movements by learners even as lesson went on. Some of them bluntly refused to pay attention to the lesson and even bent down their heads on their desks hence did not look at the black board to see the illustrations made by the teacher. There was also evidence of very low retention rate especially while learning numeracy/counting and English alphabets. However, the older students are a little better in coordination, accommodation and orderliness than the younger ones.

There was high degree of personal hygiene on the part of the students. This shows that the students can, at least, take proper care of themselves, as regards neatness and cleanliness. The school compound was also clean which is evidence that the students maintain environmentally clean and friendly atmosphere.

The deaf and dumb demonstrated higher self-esteem than the hearing challenged. This could be perhaps because of greater coordination and mental stability and focus. There is evidence of team spirit among all the students including the blind. They exchanged hearing aid materials among themselves in their various categories. This underscores the
fact that every child has opportunity to benefit from education if the parents wish to irrespective of the child’s ability or disability. The children in special needs centres have the privilege and right to acquire knowledge, skills, positive attitudes, competences and abilities to contribute and improve their lives and that of the country.

Compassionate homes provide and create safe and positive independent living environment for special needs, children and their care givers. Their primary purpose is to assist special needs learners in their pursuit of knowledge and skills to develop healthy attitudes that would enable them to live in harmony and also contribute their quota to nation building. According to Steve (2009 in Nwofor, 2017) “special needs children who are motivated, encouraged and made to feel worthwhile would thrive”. The use of verbal material and non-material reinforcement usually serve as great motivating forces to special needs learners. The same is overt appreciation of their little efforts to learn especially while handling learning in the challenged group. These instructional strategies form the basis of curriculum imperatives inherent in the act of teaching and presenting other activities in compassionate homes or special needs centres/schools.

**Curriculum Imperative**

Some curriculum imperatives that foster and enhance team spirit, cooperation, friendly co-existence traits, orderliness self-esteem, and personal hygiene, ability in disability, perseverance, focus and trust-in-self will be highlighted to the extent they existed in the centres and homes observed.

Football is curriculum imperative which management of some compassionate homes and centres integrate and harness in order to inject fun, orderliness, cooperation and physical fitness into the daily activities of the children and youths. It serves as game and simulation employed for purposeful living. Some learners, depending on their abilities or disabilities are selected to form the football team. The spirit of sportsmanship and espirt de corps are brought to bear. Those who cannot participate in the field such as the deaf and dumb as well as the blind form part of the spectators. Whereas the deaf and dumb can see the actual act of football/soccer going on in the field, the blind are cued in through the intensive comments of the commentator. Those students who serve as the referee or linesmen are also being trained through fun and play to be good observers and impartial judges.

The game of football/soccer also acts as a form of entertainment and relaxation to the students/inmates and their teachers/caregivers. For example, there is equal representation of each team; every player is urged to abide by the rules of the game and also display approved methods of kicking or heading the ball. Each player has his/her own distinct area of operation be he/she the goalkeeper, defender, midfielder or even the centre forward. Each person/player is bound to respect the other player’s right in order to avoid foul play. It is believed that parents and guardians whose children/wards are in these homes/centers will be happy to watch them display some skills in football/soccer. Even those on wheel chair can be taught wheelchair soccer. The deaf and dumb can be engaged in egg-race, sack-race and thread the needle race. These games are educative and entertaining. In this way their hope in the ability of those children/wards despite their disabilities is beefed up. These, among other things, serve as a reassuring curriculum technique or imperative.

Classroom arrangement and sitting arrangement have some curriculum imperatives. In reference to the hearing impaired and deaf and dumb students/pupils, the conventional chairs and desks used in conventional basic and secondary school do not match their purpose because they (chairs/desks) somehow hinder and obstruct hand movements as required in the mastery and demonstration of sign language.

Precisely, the pupils need enough leg space to be able to demonstrate sign language as taught by the teachers. It must have been noticed that most sign language teachers stand up while teaching. In fact, learners observed during the course of research remained standing while learning. That position (standing) made the concept of learning on the part of those students herculean, stressful and abstract. One wonders, therefore, whether the deaf and dumb can have a more conducive learning environment or studio just like architectural students have in their studio viz long/high stool and drawing board with partitions for their pencils and eraser.

Availability, adequacy and maximum utilization of relevant instructional resources are very crucial to the optimal attainment of stipulated objectives in special needs homes, centres or schools. The absence of instructional resources in classrooms leaves much to be desired.
Certainly, teachers that have initial requisite training in special needs education are duly employed to teach children/pupils that have peculiar special needs. As stipulated in FRN (2013) teacher-pupil ratio is 1:10. First and foremost there is need for a teacher and a teacher-aid in each class. The teacher should also have appropriate qualification to serve/operate in the class assigned. Secondly that ratio of 1:10 should not be sacrosanct as there may be need to reduce it especially in the group or class for the learning challenged.

Evidence usually abound where some of them may refuse to pay attention or participate while lessons or activities are going on. Since no force or compulsion is usually applied, individualized instructional strategy is employed to enable each learning challenged pupil or inmate to learn and duly participate in activities in line with his/her cognitive disposition. There is, then, need for more than one teacher in such a class or home setting.

Regular training of teachers becomes imperative if not mandatory, in order, to equip them (teachers) with current strategies for facilitating learning through fun and games in a very conducive environment. Naturally the teachers should be duly motivated through payment of salaries as and when due in addition to other necessary incentives. It is equally pertinent to indicate that hunger is one of the major factors that obliterate or mar learning especially within the group of the learning challenge. Anyone of them who is hungry demonstrates that by being disorderly, unruly or even walking out of the class or group-setting. Such instances should be avoided in order to maximize learning opportunities.

On the whole, curriculum imperatives exhibited in the various activities organized in compassionate homes and special needs schools cluster around friendly co-existence, team spirit, cooperation, orderliness, self-esteem, ability in disability, personal hygiene, cues and environmental cleanliness, to mention but a few. Mastery of learning and achievement of tasks are individualized, as mentioned earlier. Thus, by employing patience, care, concern and love the trained teachers take all special needs children through their daily activities. Even though special needs schools employ the same syllabus as that stipulated for conventional schools, the duration of programme are matched to the needs of the learner as the case may be.

Summary and Conclusion

This paper focused on the curriculum imperatives of some compassionate homes and special needs schools in Abia, Anambra, and Rivers States of Nigeria, using observation, documentary resources and hindsight. The programmes and activities of the compassionate homes and special needs school were discussed under the following sub-heading indicated earlier: The classroom and teacher effectiveness; Objectives of special needs education in Nigeria; some activities in special need schools cum compassionate homes and human development, curriculum imperatives and summary/conclusion.

The paper affirms that the classroom should be conducive and stimulating as well as being adorned with relevant instructional resources. Classroom management skills namely authority, knowledge individualization, perseverance, patience and time management are usually brought to bear by effective teachers. This is to enable each learner to maximally develop his or her potentialities.

The thrust of learning and participation in daily activities are not only for the acquisition of numeracy, oracy and calculative skills. Thus personal care cum hygiene, emotional stability, co-existence, cooperation, friendliness, coordinated motor skills and focus are also major attributes of learning. The objectives of special needs education as stipulated in Federal Republic of Nigeria (2013) National Policy on Education provide the bearing and compass. Pertinent activities in the compassionate homes and special schools include the employment of enter educate strategies, games and simulation in teaching and learning. To that extent, the stipulated teacher-students ratio of 1:10 needs to be revisited especially in the section of the learning challenged. Employment of more than one teacher in a class was equally suggested.

It is a well-known fact that slow and steady wins the race. Thus, even though special needs learners use the same syllabus as employed in conventional school, as indicated earlier, the duration of programme is not the same because of obvious challenges on the special needs learners. The paper concludes by stressing the fact that all children irrespective of their abilities or disabilities have fundamental human right to be educated. The onus is, therefore, on well trained teachers to provide learners, especially those with physical, mental and emotional challenges desired
quality education by injecting curriculum imperatives via fun, play and relaxation into their daily activities.

REFERENCES


The Skills That Matter: Embedding Intrapersonal and Interpersonal Competencies into the Secondary Classroom

Amy Gaumer Erickson, University of Kansas, USA

Abstract

This session represents a collaborative effort with more than a thousand middle and high school educators to translate social/emotional research into truly applicable instructional practices. Participants will learn implementation criteria to plan instruction of research-based intrapersonal and interpersonal competencies, embedded within content-area curriculum, supporting positive in-school and post-school outcomes for all students. Example from the field of quality embedded instruction and student impacts will be shared.

Participant Outcomes

Participants will:

Analyze their current implementation of intra- and interpersonal competencies (i.e., self-efficacy, self-regulation and conflict management) in content-area instruction.

Explore research-based instructional strategies that simultaneously teach social/emotional skills and content-area standards.

Research Base

Students who demonstrate social/emotional competencies improve retention of subject matter and sustained attention, attain higher levels of education, are better able to avoid drug use, and experience less bullying (Dignath, Buettner, & Langfeldt, 2008; Duckworth, Grant, Loew, Oettingen, & Gollwitzer, 2011; Eskreis-Winkler, Shulman, Beal, & Duckworth, 2014; Nota, Soresi, & Zimmerman, 2004; Ursache, Blair, & Raver, 2012). Social/emotional competencies are not only research based, they’re also teachable through integration in content-area learning (Ettingon & Camp, 2002; Farrington et al., 2012; Hulleman & Harackiewicz, 2009; Meyer & Turner, 2002; Mueller & Fleming, 2001; Oettingen & Gollwitzer, 2010).

Impact

This session evolved from a multi-year professional learning initiative in collaboration with the Arizona, Kansas, Missouri, and Vermont State Departments of Education. Through ongoing professional learning and collaboration, data-based decision making, site visits, implementation fidelity measures, and student outcome data, evaluators have found that when middle and high school students are provided evidence-based instruction and ongoing practice with feedback in self-efficacy, self-regulation, and conflict management they improve academic engagement, increase homework completion, earn higher grades, and decrease office referrals. These short-term outcomes were evident within six months of implementation.

Presenter Bio

Dr. Amy S. Gaumer Erickson is an associate research professor at the University of Kansas. Gaumer Erickson has taught at the middle and high school levels, in urban, suburban, charter and alternative schools. For the past 14 years, her work has focused on the implementation of instructional strategies within a Multi-Tiered System of Supports.
(MTSS) that enable students with and without disabilities to become college and career ready. To this end, she with her colleague, Pattie Noonan, published four books, more than 20 peer-reviewed articles, and an integrated framework, all of which translate research results into practical applications. Dr. Gaumer Erickson has been providing high quality professional development to thousands of secondary-level educators in numerous states for over a decade, learning from these educators through a practice-based research approach. Learn more about Dr. Gaumer Erickson and her research at www.cccframework.org.

References


An Educational Data Science Approach Towards Prediction Of Student Performance
Haseeb Akmal, University of Management and Technology, Pakistan
Rebecca Fox, George Mason University, USA
Shaukat Iqbal, University of Management and Technology, Pakistan
Yaser Daanial Khan, University of Management and Technology, Pakistan

ABSTRACT

This paper attempts to apply classification techniques on educational data to predict student performance during studies. Classification is one of the active techniques to find out potential hidden interesting patterns within datasets. The aim is to help teachers focusing and improving on students’ results through predicting their future academic performance in advance. In this paper, WEKA (free-ware tool widely used in Data Mining industry) is used to apply classification techniques and obtain fruitful results.

Keywords: Data Mining, Educational Data Mining, KDD, Classification, Prediction, Naïve Bayes, JRip, J48

INTRODUCTION

Educational data mining is a challenging research area that utilizes data mining techniques to extract useful information about learners in educational setup. With the advent of new tools and technologies and increased number of users, one of the biggest challenges faced by academia is the rapid growth of data which is increasing day by day. Several researches have conducted experiments to mine these huge data sets to bear fruitful results and hence increasing the productivity by establishing realistic accuracy in decision-making. Data Mining, sometimes also referred as Knowledge Discovery in Databases (KDD) is a process of applying computational techniques for discovering or uncovering interesting hidden patterns in the huge data set. The goal of data mining is to extract information from the large-scale data in order to improve decision-making process in the organizations.

Figure 1: Knowledge Discovery Process

KDD is an emerging area that mostly utilizes machine-learning algorithms on large data sets for discovering interesting and useful patterns for users. Some of the popular applications are business intelligence, retail and sales marketing, drug discovery, data analysis, predictive analytics, web mining and many more. Several methodologies of Data Mining involved anomaly or outlier (fraud) detection, neural networks, classification, clustering, decision tree, genetic algorithm, sequence mining, text mining, structured data analysis etc.
Educational Data Mining (shortly referred as EDM) is a research area concerned with the application of data mining (and machine learning) techniques and methods on large data that comes from educational settings. These online academic setups may be Learning Management Systems (LMS), Intelligent Tutoring Systems (ITS), Online Web Forums or Discussion boards or even distance learning systems in colleges and universities. The emphasis is on better understanding students, their learning needs, and interaction with teacher, performance, evaluation, feedback and related academic activities.

Figure 2: EDM as Interdisciplinary Approach

Over the years, it has been an important question for academicians that what will be the performance of students. How many students will get good grades, average grades or bad grades? Similarly, how many students will get good remarks, average remarks or bad remarks? This prediction is equally concerning for both teacher as well as students. As everyone knows, learning plays significant role in building personalities as well as societies. This personal and social phenomenon is important part of everyone’s life.

Currently, educational organizations are interested in applications of data mining techniques to get right data about their educational systems in order to perform efficient and accurate decision making in the business. This requires extraction of useful information from the data by applying data mining techniques like classification and clustering.

The increasing research interests in educational data mining aid in conceptualizing analysis of user learning style, learner’s personalization, users’ behavior, visualization of data, classification or grouping of students, relationship mining, improving education system, aiding instructors, improving teachers, enhancing overall education system, development of recommendation systems, syllabus, organizations, student’s modeling, predicting student registration and predicting student’s performance. Some of the most commonly used classification techniques for these models are decision tree, neural networks, k-nearest algorithm, naïve bayes, support vector machines and many more.

There are six components of Educational Data Mining containing Stakeholder, Environment, Data, Task, Method and Tools. In EDM, stakeholder is a person, group, or organization that has interest or concern in applying data mining techniques concepts. These groups or organizations can be divided into three subcategories; primary, secondary and hybrid. Primary stakeholders are those participants who are interesting in learning or teaching practices like students and teachers. Secondary, stakeholder are those who have indirect involvement in growth of an organization e.g. alumni and parents. Finally, hybrid stakeholders, which have the decision making, or administration related power for making right decisions including administrators, educationists, and domain experts [1,2].

Environment is the second most important component of EDM in communication model among stakeholders is categorized as formal, informal and computer-aided. The formal environment is concerned with direct face-to-face
communication in students and teachers while indirect approach deals with E-learning and/or Web-based systems like LMS, Moodle etc. Finally, Computer-aided environment focuses blend of internet and/or computer services through Intelligent Tutoring System (ITS), Web-based tutors, online forums and discussion/bulletin boards.

Third significant component of EDM is data itself. Data is generated from several heterogeneous data sources with diverse types of data. Offline and online data can be one simple way of categorizing data in EDM. By offline data, we mean data generated in direct interaction in classes, for example student test results, quizzes marks, score in midterms exams, final papers, group activity and grading etc. On the other hand, online data is heavily dependent on factors like Web-based learning systems and distance education mode [6].

In educational settings and institutions, EDM works as a task to perform decisions for administration at organizational level to achieve high level objectives. For learner based task, EDM supports obtaining academic objectives for primary stakeholders i.e. learners and teacher. The core component of EDM is Data Mining methods comprising algorithms to solve problems of this domain. Two major classes may be; verification-oriented versus discovery-oriented method [10]. The verification-oriented methods often requires application of statistical techniques, hypothesis testing, analysis of variables and related while on the other hand, discovery-based approaches focuses classification, prediction, clustering, association rule mining, outlier analysis, neural network, relationship mining etc.

Classification or prediction means a technique in which a single aspect or dimension of data (also called as predicted variable) can be inferred from several other aspects of dimensions of data (also called as predictor variables). It is a supervised learning technique in data mining in which the pre-defined classes or most common categories (or label) with in data sets are already known in advance [7]. A typical example of classification is assigning an email to “spam” class or “non-spam” class. It is important to note that EDM is one of the important application areas of classification.

Three main techniques for classification are; non-parametric, mathematical and rule-based models. Non-parametric model is a two-step process and do not take any external input. In 1st step, it checks the entire data with single selected data point and incase if any particular group is denser than other groups, that particular group will be the winner. In next step, classification is performed on the basis of winner group and so on. The popular algorithm for the Non-parametric is K-Nearest mean. Mathematical models use the neural networks with the mathematical expression to find the best classification of data. Rule-based models use the relationship between the known attributes and test data. Incase rule is strong, model assigns the data to this particular group but on the other hand, if it is not the case the data is assigned to other groups [11,15]. One of the most popular algorithms in this area is decision tree, which is considered as best for nominal data. Some of the variations of decision tree include algorithms like; ID3, C4.5, CART, CHAID and MARS.

<table>
<thead>
<tr>
<th>Table 1: Popular Tools for Data Mining</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Software</strong></td>
</tr>
<tr>
<td>Rapid Miner</td>
</tr>
<tr>
<td>SQL Server</td>
</tr>
<tr>
<td>Poly Analyst</td>
</tr>
<tr>
<td>Carrot</td>
</tr>
<tr>
<td>SPSS Modeler</td>
</tr>
<tr>
<td>Weka</td>
</tr>
</tbody>
</table>
Unlike Classification, clustering is a technique in data mining in which the pre-defined classes or most common categories (or labels) with in data sets are already not known (in advance). Clustering builds categorizations based on similar instances and groups them together as a cluster. Broad division of clustering can be hierarchal versus non-hierarchal. Hierarchal clustering (also called connectivity-based clustering) is based upon the principle of step-by-step integration of data into one other by considering similarity in instances. Hierarchal clusters are represented by using dendograms where ANIS and DIANA work by building new big clusters through combining small clusters and by dividing big clusters in to small ones respectively. Some of the major hierarchical clustering algorithms are; single linkage (or minimum distance), complete linkage (or maximum distance) and (Unweight Paired Group Method with Arithmetic mean (UPGMA). For non-hierarchal clustering, centroid-based algorithm are used which focuses on center value of given data and compare its distance with every other data for the distance. The minimum distanced points group together to make a single cluster. The most widely used algorithm is k-means. Some of the other popular centroid-based algorithms are k-medoids, k-median and k-means++. Statistics methods use s mean, mode, standard deviation and variance as measures to identify the outlier fields. Prediction is used to find out the missing values of data by using statistics and classification. Association rule mining observes the relationship between the two or more data sets to find the support and confidence the rule with more confidence and support, called strong rules. Web mining is a set of techniques to find out the patterns from the World Wide Web. Web mining can be divided into three subcategories like web usage mining, web structure mining and web content mining. Web usage mining discovers the interesting usage patterns from the web data for the enhancement of web-based applications. Web structure mining use graph theory to find the nodes and connections between websites. Web content mining mine, extract and integrate useful data.

Outlier analysis which is used to find the data (or mostly data points) which is (mostly) not part of the actual data and treated as a noise. The object of outlier analysis is to discover such unusual behavior or position of data to find useful patterns and knowledge. Some major methods for achieving this goal are; statistical distribution based, distance-based and OLAP data cube. Block procedures and consecutive procedures are two types of statistical distribution. Distance-based outlier techniques consist of index-based, nested-loop, cell-based, density-based and deviation-based. OLAP data cube identifies the anomalies in large-scale multidimensional data sets.

The famous clustering models include connectivity models, centroid models, distribution models, density models, group models and graph-based models. Some of the popular clustering methods or algorithms are k-means algorithm (and its variations), hierarchical clustering, DBSCAN, fuzzy clustering, canopy clustering, single linkage clustering and many more.

There are several popular Data mining tools available commercially as well as freely to extract and visualize interesting and unique patterns from data sets. It is important to note that in year 2015, 9% users used open/free tools for mining their data whereas 27% community used commercially paid ones and a total of 64% used mix of both. Interestingly, the most popular software in year 2015 was “R” with 46.9% of overall share in DM industry.

Some of the major challenges in field of EDM include incremental nature of data due to increased no. of students and courses offered by departments and institutions, lack of interoperability as data is stored at wide ranges of locations which makes it critical to manage, and possibility of uncertainty that does not allow EDM to produce 100% results.

RELATED WORK

Several researchers working in the field of education and data science have worked hard to establish and analyse such intelligent models. Some of the most recent work in highlighted in the Table 2.
<table>
<thead>
<tr>
<th>S#</th>
<th>Problem Addressed</th>
<th>Data Sets</th>
<th>Predictor (s)</th>
<th>Solution Technique(s)</th>
<th>Conclusion</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Application of Educational Data Mining techniques in E-learning and E-commerce industry (Survey paper)</td>
<td>Web servers access logs for E-commerce, Student interaction for E-learning</td>
<td>Transactional history in E-commerce, Online forum messages in E-learning</td>
<td>Sequence Pattern mining, Association, Classification, Text mining, Clustering, Prediction, Visualization, Outlier Detection</td>
<td>Recommendation agents in E-learning and Semantic web mining are significant areas in EDM</td>
<td>2007</td>
</tr>
<tr>
<td>2</td>
<td>Exploring domain of Educational Data Mining and Education, applications, research areas, techniques, tools (Survey paper)</td>
<td>Student academic data, demographics, learner's ability etc.</td>
<td>Nil</td>
<td>Classification, Clustering, Bayesian modeling, Outlier detection, Relationship mining, Discovery with models, Text mining</td>
<td>Decision Tree (white-box approach) is more suitable than Neural Networks (black-box approach)</td>
<td>2013</td>
</tr>
</tbody>
</table>

Table 2 Recent work on Educational Data mining.

<table>
<thead>
<tr>
<th>Ref</th>
<th>Topic</th>
<th>Student level</th>
<th>Data source</th>
<th>Prediction method</th>
<th>Results</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Discussed Educational Data Mining field, components and trends, mining educational objectives (Survey paper)</td>
<td>Nil</td>
<td>Nil</td>
<td>K-means, Apriori, J75, ID3, C5.0 CART, Artificial Neural Network, C4.5</td>
<td>Academic objectives were targeted by most of authors from 50 EDM papers.</td>
<td>2013</td>
</tr>
<tr>
<td>5</td>
<td>Attempts to find applications of data mining in higher education as well as identify which technique is suitable for what application.</td>
<td>University Student Data</td>
<td>Attendance, Assignment, Sessional, GPA, Final Grade</td>
<td>Association analysis, Classification IF-THEN rules, Clustering</td>
<td>Applied Data Mining techniques for</td>
<td>2014</td>
</tr>
<tr>
<td>8</td>
<td>To Predict the final grade of Student</td>
<td>Information System Department session 2005-2010</td>
<td>Department of Students, High School Degree of Students, Midterm Marks, Lab Test Grade, Seminar Performance, Assignment, Measure of student Participants, Attendance, Home Work and Final Grade Marks</td>
<td>Decision Tree ID3</td>
<td>Midterm got highest gain</td>
<td>2014</td>
</tr>
<tr>
<td>[9]</td>
<td>Compare Data Mining Techniques on prediction of Students’ performance</td>
<td>University of Tuzla, Faculty of Economics, Academic year 2010-2011</td>
<td>Earning, Grade Importance, Internet, Materials, Time, Scholarship, Entrance Exam, GPA, High School, Distance, Family and Gender</td>
<td>Naïve Bayes, J48 and Multilayer Perceptron</td>
<td>76.55% Accuracy</td>
<td>2012</td>
</tr>
<tr>
<td>[10]</td>
<td>Predicting students’ Performance on the behalf of different consideration</td>
<td>MCA (Master of Computer Application) course session 2008 to 2011 from VBS Purvanchal University, Jaunpur (Uttar Pradesh), India</td>
<td>Cumulative Grade Point Average (CGPA), attendance, class test, seminars marks, assignment marks</td>
<td>Decision tree Iterative Dichotomiser 3 (ID3), C4.5, Classification And Regression Trees (CART)</td>
<td>True positive rate for FAIL class 85.6%</td>
<td>2012</td>
</tr>
<tr>
<td>[12]</td>
<td>To predict final grades and performance of graduate students.</td>
<td>Graduate students in College of Science and Technology Khanyounis (1993-2007)</td>
<td>Attendance, class test, seminars, assignment marks.</td>
<td>Rule-based classification, Naïve Bayes, Association rules; Clustering through K-mean, Outlier detection (distance-based and density-based approach)</td>
<td>Educational data mining techniques showed how useful data mining can be used in higher education particularly to improve graduate students’ performance. We used graduate students data collected from the college of Science and Technology</td>
<td>2012</td>
</tr>
<tr>
<td>[13]</td>
<td>To predict the success rate of student in placement test</td>
<td>Secondary Education Transition System, Turkey</td>
<td>Previous test results, numbers of siblings, scholarship or not, previous year grade average</td>
<td>Artificial neural network, Support vector machine, Decision tree (C5), Multinomial logistic regression</td>
<td>Decision tree with 94.5% accuracy</td>
<td>2012</td>
</tr>
</tbody>
</table>
A predictive process aims to quantify characteristics and attributes of a complex structure with a measurable state. Quantification of any state yields data. To interact with such a structure one needs to manipulate data defined by its state. In the digital world such quantification of data is of finite nature. Hence, such data is subjected to various analysis to extract information. Data by itself is meaningless but the information embedded within the data is useful. Information is extracted either from data itself or from the patterns formed by data. Retrieval of information from any type of data requires determination of patterns and trends formed by it. This extraction of information from data is performed by human mind whenever it perceives an object, action or event. Patterns in fact forms a method of disbursement of data where occurrence of each pattern connote an interpretation. The ability to identify these patterns is a powerful tool; it allows reasoning with samples, which may previously be unknown. Every day we see new faces but still we identify them as humans, we hear new voices but still we are able to identify its language, we see newly made objects but still we identify their type [16-20].

Endeavoring to predict the performance of a student requires accumulation of data relevant to his past performance. Initially this is collected. There can be numerous sources of such data but the most recent and relevant information best highlights the current state of the student. An instance of such information is depicted in Fig 3. The objective is to predict the future performance of the student based on his current status. Firstly, the data is preprocessed. Duplication is removed and the data is mapped onto a fixed dimensionality suitable for prediction model. After this transformation various classifiers are employed to predict the future performance of the student.

**Figure 3: Student Individual Report**
The classifiers used for the purpose are Naïve Bayes, JRIP and J48. The prediction results obtained from each classifier are depicted in fig 4.

Figure 4 Prediction Results

<table>
<thead>
<tr>
<th>Naïve Bayes</th>
<th>JRIP</th>
<th>J48</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Prediction Results" /></td>
<td><img src="image2.png" alt="Prediction Results" /></td>
<td><img src="image3.png" alt="Prediction Results" /></td>
</tr>
</tbody>
</table>

Each classifier was trained to provide one of three classes as the outcome VBD (Very Bad Drop), BD (Bad Drop) and D (Drop).

CONCLUSION AND DISCUSSION

Data mining technique like classification is the most popular topic for researcher as well as academicians to predict academic performance of students. Classification is effective for its accuracy and efficiency in knowledge discovery that contains several types of techniques like decision tree, bayes, MI, rules etc.

In this paper we applied decision tree (J48), Bayes (Naïve bayes) and Rules (JRip) classifiers to predict students' performance which are likely to fall in VBD, BD and D categories. For such types of weak students whose academic performance is not up-to-the mark, we suggest teachers to take some counter measures (for example paying extra attention and time) so that they can learn concepts better, increase their study grades and consequently improve their overall academic performance in class.

REFERENCES


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The Roles Of Outcome Expectations In IS Use Behavior
Kwahk, Kee-Young, Kookmin University, Republic of Korea

ABSTRACT

Considering that the appropriate management of expectations may play an important role in making a positive behavior toward newly implemented systems, this study examines the role of outcome expectations in the determination of information systems (IS) use from social cognitive perspective. For doing this, we investigate the antecedents and the consequences of outcome expectations. Also, to explain the user’s usage behavior in the mandatory context better, we conceptualize conative IS use as an aggregate construct. To test the proposed research model, we analyzed the survey data from enterprise systems users by structural equation modeling using LISREL 8.8. Significant relationships were found between IS characteristics and outcome expectations, and between outcome expectations and intention for mandated use and conative use. Perceived system quality was found to exert a significant influence on personal outcome expectation, whereas perceived information quality significantly affected performance outcome expectation. In turn, performance outcome expectation was found to influence intention to use IS, while personal outcome expectation was significantly related to conative IS use.
Project Manager Motivation: Job Motivators and Maintenance Factors

Tom Henkel, Embry-Riddle Aeronautical University, USA
Jim Marion, Assistant Professor, Embry-Riddle Aeronautical University, USA
Debra Bourdeau, Assistant Professor, Embry-Riddle Aeronautical University, USA

ABSTRACT
The present study explored the applicable motivation factors that contribute to job satisfactory in terms of job motivators and maintenance factors when working projects. Students enrolled in a university advanced project management leadership course were asked to respond to a job motivators and maintenance factors self-assessment which is a useful framework to determine the factors that contribute to their motivation when working projects (Lusser & Achua, 2016). A chi-square test was conducted to determine if the observed values were significantly different from an expected value of 18. The chi-square goodness of fit test led to the rejection of H1o and the acceptance of H1a with a p<.001. Additionally, the chi-square goodness of fit test led to the acceptance of H2o and the rejection of H2a with a p=.994. The self-assessment revealed the students tended to exhibit higher motivator scores, and lower maintenance scores. The findings of this study have significant implications for leadership behavior when leading project teams. These findings can also contribute to better understanding of the motivation factors which characterize team members for the completion of successful projects.

INTRODUCTION
What motivates project managers and project team members? Is it simply money? Are they motivated by company benefits, status, achievement, affiliation or advancement? These are all good questions for a project manager to answer if he or she is going to be effective in motivating the team members for project success. Project team members’ motivation affects productivity, so a large part of a project manager leadership’s responsibility is to channel the team towards the successful accomplishment of the project in terms of the triple constraints of scope, time, and cost which should be accomplished in a quality manner (PmBOK, 2013). A project manager may have the necessary technical skills for managing a project; however, throughout the life cycle of a project, he or she is responsible for motivating the project team from project stage to stage for a successful project completion (Schmid & Adams, 2008; Arora & Baronikian, 2013). It begs the question: “What factors motivate project managers and project team members?”

One way a project manager can motivate the project team members is by providing several extrinsic rewards which can include such incentives as outstanding employee awards, bonuses, and merit pay for performance, to name just a few. However, not all project managers have the power to use all these extrinsic rewards, especially if they are managing projects in a functional or weak matrix organizational structure (Larson & Gray, 2011). Therefore, it behooves project managers to study the concept of motivation in order to know what motivates project team members to initiate action, and what can be done to ensure these team members perform in an outstanding manner which will lead to superior project completion that satisfies the customer.

In the 1960s, Frederick Herzberg published his popular two-factor theory needs theory. He interviewed hundreds of employees with the question: When were you highly motivated to work, and when were you very dissatisfied and not motivated to work? (Daft, 2014). He combined Maslow’s Hierarchy lower-level needs into one classification he called hygiene factors (Arora & Baronikian, 2013). The hygiene factors also are referred to as extrinsic motivators because motivation comes from outside the person and from the job itself. They include working conditions, pay, job security, and title, company policies, and interpersonal relationships (Lussier & Achua, 2016). These factors are related to meeting Maslow’s Hierarchy lower-level needs such as physiological needs, safety needs, and self-actualization (Arora & Baronikian, 2013).
Herzberg (1968) referred to Maslow’s Hierarchy higher-level needs into a classification labeled motivators factors which also can be referred to as intrinsic motivators which derive from within the employee through the work itself (Arora & Baronikian, 2013). Intrinsic motivators include achievement, recognition, responsibility, work itself, challenge, and personal growth (Daft, 2014). These factors are related to meeting Maslow’s Hierarchy (1943) higher-level needs of esteem needs and self-actuation, and are better suited at motivating employees than extrinsic factors (Arora & Baronikian, 2013).

Based on their research, Herzberg (1968) and associates disagreed with the traditional view that satisfaction and dissatisfaction were at opposite ends of one continuum (a one-dimensional model). They submitted that there are two continuums: one that is associated with being not dissatisfied with the environment (maintenance) to being dissatisfied, and one associated with satisfaction with the job itself (motivators) to not being satisfied with the job itself (a two-dimensional model). Herzberg (1968) asserts that organizations providing maintenance factors will keep employees from being dissatisfied, but it will not make them satisfied or motivate them with their work.

Under the old management concept, money served as an extrinsic motivator and was considered the best motivator to get employees to work harder. Money does matter more to some people than others, and may motivate some employees but not all employees. However, money does not necessarily motivate employees to work harder. Under the new leadership paradigm, pay is important, but it is not the best motivator; intrinsic motivators are. Herzberg fits the new paradigm: He says that managers must first ensure that the employees’ level of pay and other maintenance factors are adequate. Once employees are not dissatisfied with their pay (and other maintenance factors), they can be motivated through their jobs (Lussier & Achua, 2016). Herzberg (2003) also developed job enrichment, which involves the process of building motivators into the job itself by making it more interesting and challenging.

In a quest to understand employee motivation, a study conducted by Dr. Kenneth Kovach (1999), a professor of management at George Mason University, 1,000 employees and 100 of their supervisors were asked to list the things that they believe motivate employees. Results showed that there was no overlap at the top of the two lists. Supervisors listed that employees would be motivated by extrinsic motivators such as good wages and job security. Conversely, employees listed intrinsic motivation factors such as participating in interesting work, feeling appreciated at work and being “in on” things. The employees ranked extrinsic motivators such as job security and good wages as important but lower on the list (Kovach, 1999).

### Table 1. Motivating Employees

<table>
<thead>
<tr>
<th>Associates’ Ranking</th>
<th>Items</th>
<th>Employers’ Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Interesting work</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Appreciation of work</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>Feeling “in on things”</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Job security</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Good wages</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Promotion/growth</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Good working conditions</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Personal loyalty</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>Tactful discipline</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>Sympathetic help with problems</td>
<td>9</td>
</tr>
</tbody>
</table>


It is interesting to note that after all the motivation research, studies, and discussions by motivation theorists such as Abraham Maslow (1943) and Fredrick Herzberg (1968), that the supervisors still rated good wages and security as #1 and #2 for employees. It seems that these supervisors were, as McGregor (1960) stated, Theory X managers who...
believe that “employees seek security above all else” instead of Theory Y managers who believe that “employees’ commitment to objectives is a function of the rewards associated with employees’ achievement” (Daft, 2014). Most managers may not argue that wages and security are extremely important, but the employees in the Kovach (1999) study rated interesting work and feeling appreciated as most important. What can be learned from Kovach’s study (1999) and analyzing motivation for project managers when leading a team? The hope is to capitalize on information such as the Kovach (1999) research study and assist in answering what factors motivate team members for project success completion. To answer this question, let us first take at what employees identified in Kovach’s study as being their # 2 ranking: appreciation of their work (Kovach, 1999). Project managers can encourage team members by showing appreciation and encouragement, both of which come in a variety of forms.

It is important to motivate project team members to superior performance levels and the higher level of Maslow’s Hierarchy labeled motivators factors, which also can be referred to as intrinsic motivators, components that form within the employee through the work itself. To do so, it is central to first purge any dissatisfaction they are experiencing, and then support them toward achieving satisfaction. Relying on Herzberg’s theory, the project manager should focus particularly on motivation (satisfaction) factors such as those that employees rated # 1 on Kovach’s study (interesting work), and concentrate less on hygiene factors (Arora & Baronikian, 2013). The classical motivation content theorists would add other factors such as authority, responsibility, autonomy, power, and status, along with meaningful and challenging jobs (Daft, 2014). In summary, an essential principle for successfully motivating project team members is for the project manager show leadership by example and be motivated, committed and enthusiastic about the project and concentrate more on what Herzberg lists as motivating factors and less on hygiene factors (Arora & Baronikian, 2013).

RESEARCH QUESTION

The preceding review of motivation research concerning project manager and project team motivation should provide a basis for the factors that motivate project managers and project team members to ensure the success of a project. The current study specifically focuses on the perceptions of students attending an advanced project leadership course regarding motivation in a project setting and attempts to shed light onto the following question:

1. Do students enrolled in an advanced project management leadership course report job motivators or maintenance factors as their primary motivation when working projects?

PURPOSE OF THE STUDY

The purpose of this present research study was to assess the overall alignment of self-assessment survey results of project management students as a means of discovering insight to the factors that motivate them on the job by evaluating survey results.

HYPOTHESES

$H_{10}$: Students enrolled in an advanced project management leadership course do not exhibit job motivators as their primary motivator as indicated by their leadership self-assessment scores.

$H_{1a}$: Students enrolled in an advanced project management leadership course do exhibit job motivators as their primary motivator as indicated by their leadership self-assessment scores.

$H_{20}$: Students enrolled in an advanced project management leadership course do not exhibit motivation maintenance factors as their primary motivator as indicated by their leadership self-assessment scores.

$H_{2a}$: Students enrolled in an advanced project management leadership course do exhibit motivation maintenance factors as their primary motivator as indicated by their leadership self-assessment scores.
METHODOLOGY

Thus, we began our consideration of project management students’ factors that motivate them on the job with the following research question:

1) Do students enrolled in an advanced project management leadership course report Job Motivators or Motivation Maintenance Factors as their primary motivator when working projects?

To find the answers for this question, a comprehensive literature review was completed followed by research hypotheses. After a descriptive analysis, a chi-square analysis was completed and results produced.

Data Collection

Students enrolled in an advanced project management leadership course were requested to complete a job motivators and maintenance factors self-assessment which is a useful framework to determine the factors that contribute to their motivation when working projects. The student responses were tabulated to determine their preferred motivation factors.

Sample Characteristics

Students working in various industries and organizations internationally and across the United States, to include U.S. military members, responded to the survey; in total, 189 students answered the self-assessment survey which could be considered a substantial sample of the overall population. The self-assessment consisted of 12 job factors questions contribute to job satisfaction (Lussier, & Achua, 2016). Respondents’ privacy and confidentiality were strictly protected.

ANALYSIS OF FINDINGS

The Job Motivators and Maintenance Factors Style Self-Assessment (Lussier, & Achua, 2016) which is a useful framework for evaluating motivation factors, revealed the students tended to have higher Job Motivators scores than Maintenance Factors scores. As a first step in evaluating the hypotheses, the descriptive statistics of the results of the student assessment were collected and evaluated.

Descriptive Statistics

From inspection of the descriptive statistics in Table 2, it is evident that the mean is greater than the midpoint (a score of 18), and the most common score (mode) was 24.

<table>
<thead>
<tr>
<th>Table 2. Job Motivators Data Analysis responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Motivators</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Standard Error</td>
</tr>
<tr>
<td>Median</td>
</tr>
<tr>
<td>Mode</td>
</tr>
<tr>
<td>Standard Deviation</td>
</tr>
<tr>
<td>Minimum</td>
</tr>
<tr>
<td>Maximum</td>
</tr>
<tr>
<td>Count</td>
</tr>
</tbody>
</table>
Frequency Analysis-Job Motivators

The overall distribution of scores is provided in the frequency analysis chart. From inspection, the majority of scores exceeded the midpoint.

![Motivators](image1.png)

**Figure 1. Frequency Analysis-Motivator Ranked Responses**

Significance of Job Motivators Scores

A clear pattern is observed in the descriptive statistics and frequency analysis. Of interest is the degree to which the scores are above the mid-point. The data is presented graphically as follows:

![Job Motivators: Observed versus Expected](image2.png)

**Figure 2. Observed versus Job Motivators Responses**

A chi-square test was conducted to determine if the observed values were significantly different from an expected value of 18 (midpoint of scale from 6 to 30). With a p value < .001, the differences were determined to be significant. The chi-square goodness of fit test leads to the rejection of $H_{10}$ and the acceptance of $H_{1a}$ (Minitab, 2013).
From inspection of the descriptive statistics in Table 2, it is evident that the mean is greater than the midpoint (a score of 18), but the most common score (mode) was 17. The scores lower than the midpoint contributed to the rejection of the null hypothesis as observed in the chi square goodness of fit test.

Table 3. Maintenance Data Analysis responses

<table>
<thead>
<tr>
<th>Maintenance Factors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>19.01</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.25</td>
</tr>
<tr>
<td>Median</td>
<td>19.00</td>
</tr>
<tr>
<td>Mode</td>
<td>17.00</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>3.39</td>
</tr>
<tr>
<td>Minimum</td>
<td>10.00</td>
</tr>
<tr>
<td>Maximum</td>
<td>30.00</td>
</tr>
<tr>
<td>Count</td>
<td>184.00</td>
</tr>
</tbody>
</table>

Significance of Maintenance Factors Scores

A clear pattern is observed in the descriptive statistics and frequency analysis. Of interest is the degree to which the scores are above the mid-point. The data is presented graphically as follows:

A chi-square test was conducted to determine if the observed values were significantly different from an expected value of 18 (midpoint of scale from 6 to 30). With a p value = .994, the differences were determined to not be significant. The chi-square goodness of fit test leads to the acceptance of $H_2_0$ and the rejection of $H_2_a$ (Minitab, 2013).

Chi-square: Observed versus expected of 18 (midpoint of scale from 6 to 30) $P \leq .994$. Maintenance found to NOT be significant.
SUMMARY

The historical development of motivation theory presented provides the formulation of a theoretical perspective for understanding employee motivation as presented by Abraham Maslow’s Hierarchy of Needs theory (1943) and Frederick Herzberg’s Two-Factor theory (1968). Basically, these content theories attempted to explain why humans are motivated in their work, and also propose applying reinforcement for shaping and motivating human behavior (Schermerhorn, Hunt, & Osborn, 2010). Moreover, these content theories are designed around the concepts of providing extrinsic and intrinsic rewards as incentives for creating a motivating work environment. Project managers can influence project team members’ motivation behavior by creating a work environment in which appropriate extrinsic are presented, but their aim should be providing the intrinsic motivation factors that will be most beneficial because the team members will be connected to the cause or goal of the project, instead of the rewards that are attached to it (Schmid & Adams, 2008). Therefore, it is vital that a project manager be skilled in the interpersonal skills of leading and realize the factors associated with motivating themselves and the project team members to successful project completion (PmBOK, 2013).

The goal of this present research study was to assess the overall alignment of self-assessment survey results of project management students as a means of discovering insight to the factors that motivate them and project team members on the job by evaluating survey results. It is with hope that the findings of this study provided insight to the factors that motivate project managers and project team members when working on assigned projects. The research revealed the students tended to exhibit higher motivator scores, and lower maintenance scores. The findings of this study have significant implications for project managers when leading project teams for success.

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Collaborative Software Adoption
In A Non-Profit Organization
To Aide Curriculum Design

Soydan Soylu, Middlesex University, UK
Ahmet Süerdem, Middlesex University, UK

ABSTRACT

Objectives: Collaborative software are increasingly becoming a part of the organizational life and curriculum design. However, although they are equipped with many tools to assist the members of an organization to achieve a common task, this software usually is not used to their full potential. While there are many opportunities regarding the functions these tools possess, their success is dependent on the extent they are adopted and diffused within organizations. This paper presents a comprehensive case study exploring the factors that block the collaborative software adoption and diffusion in curriculum design process.

Data and Method: This paper presents the part of a larger case study conducted in a non-governmental education volunteer’s organization in Turkey. A team of industrial engineers and social researchers intervened to research and consult why the members do not adopt Chatter collaborative software upon the call of the project officers of the organization. The team conducted three focus groups and twenty interviews with various stakeholders including the project team, curriculum trainers, and volunteers. The interviews elicited information about the current organizational structure, the business flow processes, the expectations from a collaborative software by the project officers, the perceived pros and cons of this software by the users, and the suggestions about the elimination of the disadvantages. This study limits its scope to the thematic analysis of the collected data.

Results: Thematic analysis detected four major obstacles to the adoption and diffusion of the groupware technology: The degree of professionalism within the organization; the role of current communication channels; the role the influential people and the role of established working patterns. Our findings suggest that human and technology interaction does not simply entail the adoption or refusal of technology.

Conclusions: These findings have important managerial implications: Actors in different situations and roles have different perspectives implying that the adoption of a technology needs the customized efforts towards different actors. Moreover, the members of the organization do not perceive a software as a technological tool but conceive it as a collaborative aspect as well. Managerial efforts during the introduction of a new technology need to take the human element into account. These implications give significant insights about the technology adoption and diffusion in organizations.

As this study only depends on the qualitative analysis of interviews and focus groups, it is limited with perspectives in the sample. These findings are exploratory and at the hypothesis level. We need to confirm the results using data covered by an appropriate sample size.

Keywords: Management of Technological Innovation and R&D; Collaborative software; curriculum design, Technology adoption
Enterprise Risk Management (ERM) And Risk Professionals

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Armand Stefan Dumitriu, Sales & Service Group Manager, Royal Bank of Canada, Canada

ABSTRACT

Enterprise Risk Management (ERM) is a new concept, a process, and a powerful governance tool that allows the Board of Directors to identify, assess, monitor and mitigate the business risks of their organizations. The purpose of this paper is (a) to understand this process; (b) to explain the risk manager’s role and responsibilities within the organization, and; (c) to identify the knowledge, skills and abilities that these risk professionals should possess. We used the ABI Inform Global database and retrieved 2387 academic articles on Risk Management/ERM that were published between 1949 and 2016. Their contents were analyzed by using the ECA method in order to design a data collection instrument. Then, data was collected from two employment databases for North America, which comprised 119 job postings for the position of ‘enterprise risk manager’/risk analyst. We identified (a) the main industries in which the companies that had posted these jobs operate, (b) the education, knowledge and qualifications that candidates for these jobs should possess, (c) the nature of their activity, and; (d) the ERM reporting systems within the organization. The results show that (a) the need for this new kind of risk professional in some industries appears to be more stringent than in others, and that (b) some specific types of knowledge, skills and abilities that these risk professionals should possess are industry-related, while others are rather general. These findings and their theoretical and practical implications are discussed further in the paper.

Keywords: Enterprise Risk Management (ERM), Corporate Governance; Risk Manager; Risk Analyst
Is This The End Of An Era For An Icon?

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Vincent Puchik, Montclair State University, USA

ABSTRACT

Barbie Dolls have over a half-century of history as being an aspirational toy for girls worldwide. However, recent declining sales of the popular fashion doll coupled with management shake-ups at parent company Mattel, Inc. and a rapidly declining stock price question the long-term viability of the icon and the company as a whole. This paper uses a financial statement analysis approach, Securities and Exchange Commission filings, and reports from the financial press to examine these topics.
Homogeneity In Hollywood: Demographic Disparities In Motion Pictures

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Zoe Pinczower, Scripps College, USA

ABSTRACT

This study augments traditional models of film financial success to determine if there is a relationship between the demographic characteristics of actors cast in Hollywood films and the size of theatre audiences. Female and minority actors in our sample of motion pictures are underrepresented in comparison to both the population of moviegoers and the U.S. population generally. However, an empirical analysis of domestic and international movie revenue suggests that some consumer bias, especially from audiences abroad, may be the source of this homogeneity in Hollywood films (i.e., the prevalence of white, male casts). The finding is important because it directs us to a potential source for the observed demographic discrepancies in Hollywood films as movie studios and producers pursue revenue/profit maximizing strategies.

Keywords: Discrimination, Consumer Demand, Hollywood Films
A Case Study On Consumer Evaluation Test Under Quasi-Real Environment (Living Lab)

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Min-Sun Kim, Korean Institute of Industrial Technology, South Korea
Jung-Min Yun, Korean Institute of Industrial Technology, South Korea
Sun-Hee Cho, Korean Institute of Industrial Technology, South Korea

Abstract

The concept of Living Labs was considered from the beginning of 2000 to solve the social problems. Nowadays, the consumer evaluation test method was invented as the innovation of the new product. In this research, consumer-enterprise matching integration will be conducted for the products of enterprises of medium- and medium-sized enterprises selected for R & D program for improving the competitiveness of new products.

In this study, we suggested the new approach solve the new product and improve the products by using the consumer evaluation test under the real environment. And also, we chose and calculated the proper material of foot plate of 3-wheel electric kick board by using the computer simulation. It is necessary to develop the newer method and activities to develop new products and services.

Keywords: Personal Mobility, Usability, User Evaluation Test, Living Lab

1. Introduction

In this research, we conducted the consumer-enterprise matching integration for the products of enterprises of medium and medium-sized enterprises selected for R & D program for improving the competitiveness of new products. To realize innovation at the time when changes in the current business environment are accelerating, companies are required to have the ability to respond flexibly to change. If companies do not change, the competitors will appear in the industry, so it is necessary to continuously develop the newer method and activities to develop new products and services.

For this reason, to grasp the value of the product that the ultimate consumer feels through consumer-company matching and reflect it in product development, we can ensure the competitiveness of the market. It aims to support research activities.

In the Europe, the researchers invented a new concept of consumer evaluation test method as the innovation of new product called Living Labs. They create ideas and work capabilities existing among different stakeholder groups. It is a similar process to open methodologies, and innovation [1, 2], crowdsourcing [3, 4] and involving lead users [5, 6]. The concept of Living Lab started from the beginning of 2000 [7], and the focus initially was to test new technologies in home-like constructed environments. We could define the Living Labs as an environment [8, 9], as a methodology [10], and as a system [11].

2. Procedure of Research

In this research, we will study the consumer reviews committee for products of eight companies selected as "R & D program for improving the competitiveness of consumer-enterprise matching fusion new products."

First of all, to grasp the understanding of the prototype and the level of the company's request through corporate
interviews, correctly define and understand the end user of the manufacturer’s products, after conducting market research (Pre-Research) Discuss with enterprises and final selection of potential customers.

Secondly, for important customers, to discover the value felt by companies' products and problems of existing products and to grasp the requirements, advance the consumer reviews committee.

Finally, for the products that reflect the demands of the company's products derived from the consumer appraisal meeting, we proceeded to the secondary consumer reviews committee to evaluate the satisfaction level of the products and the primary Evaluate the improvement level of secondary product relative to the product.

![Fig. 1] Consumer evaluation test process

2.1 Preparation of Consumer Evaluation Test

2.1.1. Analysis of corporate needs

To understand the product and to advance the exhibition planning about the method of committee management in advance by grasping the question and answer time of the product and the needs of the company through interviews.

2.1.2 Council management plan

It is very important to create consumer credit committee management method, activity schedule, a method of a committee meeting, a content of questionnaires, etc. and complete final discussion with company side.

2.1.3 Design of the questionnaire

Design product specific functions and component-specific questionnaires.
<table>
<thead>
<tr>
<th>Action</th>
<th>Questionnaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greetings</td>
<td>We recommend you to check your reaction and suggestion. If you turn the current product in a better direction, you can ask for free opinions.</td>
</tr>
<tr>
<td>Start of Consumer Evaluation</td>
<td>I will show you a video of the product introduction of the three-wheel electric kickboard made in Green Track first. It is slightly different from the finished product now. We can classify the function of this product into core, additional, convenience function. Let's try to focus on identifying these features.</td>
</tr>
</tbody>
</table>
|                                | - Key Features: 3-wheel structure  
- Additional Features: 3-stage folding system, removable battery  
- Convenience: LED footrest, brake                                                                                                         |
|                                | Next, let's take a moment to get on board.                                                                                                                                                                  |
| Product testing                | We divide into two teams and board product (approximately 5 minutes per person) And Request to fill out the questionnaire.                                                                                 |
| First impressions of products  | How was your product exploration?  
What was your first impression when you first saw the product?  
Is there a different impression between the first product and the second boarding?  
What about product design? What did you like and what did you like?  
- Design: color, material, form, etc.                                                                                                           |
| (10 minutes)                   |                                                                                                                                                                                                          |
| Main Function                  | Please tell us about the function of a three-wheel electric kickboard. It feels like a feeling. Satisfied. If not satisfied why.                                                                                                                                         |
| (25 minutes)                   | ① Core function: 3 wheel structure  
② Additional function: 3-stage folding system / removable battery  
③ Convenient function: LED footrest / brake                                                                                                                                                             |
|                                | I felt safe and easy to use.  
I want to recommend this product to my parents.                                                                                                                                                             |
| Additional functions           | What are the functions that you can add?                                                                                                                                                                  |
| (10 minutes)                   | If you look at the electric kickboard and electric wheel products, I installed various accessories. What kind of accessories do you use mainly? What accessories would you add to this product?                                                                  |
| Confirm price satisfaction     | Are you interested in purchasing this product? If not, why? Green Track expects the current price of this product to be around 1,500 USD. Are you satisfied with the price?                                                                 |
| Closing                        | As a result, we will conclude the 'Three Wheel Electric Kickboard' consumer show. If you fill out the questionnaire we distributed earlier; I will send you your ID card and the fee. Thank you for participating in the fair. |
2.2.2 Product Features

The principal function of this product definition is three-wheel structure, folding system, detachable battery, LED lighting seat, and 3-wheel disc brake.

(a) 3-wheel structure: one front wheel and two wheels on the rear wheel, the product stands by itself, and the stability at boarding of the product is high.
(b) Folding system: We can apply one touch folding system as ① traveling mode ② parking mode ③ usable in conveying mode.
(c) Detachable battery: There is a removable battery under the scaffold, a battery is detached and charged separately, or a battery can be used for long distance operation.
(d) LED lighting scaffolding: We can install the upper LED lamp in the scaffold
(e) 3-wheel disc brake: provides double brake system for safe driving

2.2.3 Market research

Interest in personal mobility (PM), which is an eco-friendly means of moving with electric power, is increasing. The necessity of new transportation is getting higher due to a strengthening of environmental regulations, an large cities, expansion of 1 to 2 households, aging of the total population, etc. According to the “Transparency Market Research”, the market for personal mobility products will grow at an annual average of 7.2% since 2015 and will reach approximately 14.4 billion dollars in 2024. Personal mobility products such as electrical kick boards have various possibilities of development with the development of IT technology and as a means of transportation without pollution, as means of solving traffic congestion in the cities, parking problems. There is also a high possibility.

![The market size of personal mobility products](image)

(3) Management of the First Council of Consumer evaluation test

(a) Stability of the cornering

This product is required to have higher stability than the conventional two-wheel kickboard as an electric kickboard composed of three wheels, but the phenomenon of floating the rear wheel of the kick board at the time of the curve occurs. Improvement in stability is required. In the straight section, you could ride more stable than the existing two-wheel kick board, but even if you barely move the steering wheel, the rear wheel will soar, and the product will shake.
(b) Folding system

There can be many opinions that the structure of a product that we can be fold at a single touch by convenience. There is a need to do one-touch operation a little more smoothly. We can put the product upright, and in parking lot mode, it does not seem to be frequently used, but it is always necessary function for safety. Although it is good to fold with folding function, the product itself is heavy, and cooperation of public transportation is considered to be difficult.

(c) Detachable battery

Personal mobility products have an extremely high preference for detachable battery function as the limit of battery capacity. The detachable type battery has a merit that it is easy to charge the battery, and it is possible to board a long distance. When forcibly pulling out the battery by giving force, there is a possibility that the socket may be easily broken, so (1) install the battery grip in front so that it can easily fall off or (2) insert the handle grip part on the front of the battery, (3) opinion on adding a detach button.

(d) LED lighting scaffolding

LED lighting is not front/back, but rather light up the light upwards rather than practical; a design is satisfied, the scaffolding made of the transparent acrylic for LED tends to be slippery, grip tape reinforced.

(e) Product design

Despite the electric kickboard has three wheels, there is no sense of resistance in the first impression with sophisticated design, the color of the simple product of monotone, the LED lighting scaffolding.

3. Research and Development

3.1 Finite Element Analysis Procedures

We performed the static FEM analysis under the conditions according to the process; three dimensional geometry modeling, material decision, definitions element, creation of mesh, and boundary conditions, load condition, constraint definition, definitions, and results review.

3.1.1 Modeling for Analysis

We accomplished geometric modeling of foot plate to conduct the analysis.

![Fig.3] Three-dimensional modeling for foot plate of electric kick board

3.1.2 FEM analysis

According to different conditions of foot plate materials and boundary conditions, we found out the solutions that meet the proper requirement
(a) Condition #1
- LED Plate: PC, Plate Bottom: Al 6061, Plate Cover: PE
- Load to foot plate: 2,000 N
- Analysis result: Total Deformation: max 53.136 mm, Equivalent Stress: max. 1,049.2 MPa

(b) Condition #2
- LED Plate: PC, Plate Bottom: Al 6061, Plate Cover: PE
- Load to foot plate: 1,300 N
- Analysis result: Total Deformation: max 36.489 mm, Equivalent Stress: max. 682 MPa

(c) Condition #3
- LED Plate: PC, Plate Bottom: Al 6061, Plate Cover: Al
- Load to foot plate: 2,000 N
- Analysis result: Total Deformation: max 9.8 mm, Equivalent Stress: max. 851 MPa

(d) Condition #4
- LED Plate-PC, Plate Bottom: Al 6061, Plate Cover: Al
- Load to foot-plate: 1,300 N
- Analysis result: Total Deformation: max 6.3 mm, Equivalent Stress: max. 553 MPa

3.1.3 FEM Analysis Result

The mechanical material properties and analysis results are as shown in Fig.4 and Table 2.

[Fig.4] Analysis results (Deformation)
Table 2] Mechanical Properties

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Condition 1</th>
<th>Condition 2</th>
<th>Condition 3</th>
<th>Condition 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Conditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LED plate material</td>
<td>PC</td>
<td>PC</td>
<td>PC</td>
<td>PC</td>
</tr>
<tr>
<td>Plate Bottom material</td>
<td>Al</td>
<td>Al</td>
<td>Al</td>
<td>Al</td>
</tr>
<tr>
<td>Plate Cover material</td>
<td>PE</td>
<td>PE</td>
<td>Al</td>
<td>Al</td>
</tr>
<tr>
<td>Load (N)</td>
<td>2,000</td>
<td>1,300</td>
<td>2,000</td>
<td>1,300</td>
</tr>
<tr>
<td>Analysis Result</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Deformation (mm)</td>
<td>53.1</td>
<td>36.5</td>
<td>9.8</td>
<td>6.4</td>
</tr>
<tr>
<td>Equivalent Stress (MPa)</td>
<td>1,049</td>
<td>682</td>
<td>851</td>
<td>553</td>
</tr>
</tbody>
</table>

3.2 Prototype fabrication

3.2.1 Reflection of Consumer evaluation test result

We made new prototype due to the customer evaluation test result as shown in Fig. 3.

![Fig.5] Comparison between old and new prototype

3.2.2 Improvement of function and design

There is room for improvement to obtain attractive results targeting improved functions. Change function in progress LED switch position change Compare yes goal tolerance. The position of the LED switch moves from the inside of the foam cover on the underside of the foam board. The power button and LED button all deviate from the lower side of the firing board cover.
4. Comparison of Satisfaction after new prototype through R&D

4.1 Execution result

As a result of the 1st and 2nd Consumer evaluation test, we could get the improvement of cornering bracket, torsion stability, and cornering stability. Because this product is a B2C (Business to Customer) product, users who have experience in using existing products, constitute many users interested in electrical kickboard products with Consumer evaluation test room, converge various opinions.

In existing products, the phenomenon that the rear wheels floated on the curve occurred, the advantage of the three-wheel product could not be taken advantage of, the safety after the improvement of the stability of the curve was greatly improved, and the satisfaction of the function And product preference will rise.

[Fig.6] Satisfaction result of Function improvement

[Fig.7] Comparison of satisfaction between 1st and 2nd consumer evaluation test
5. Conclusion

5.1 Consumer evaluation test at Living Lab
In our innovative process, our living lab (Living Lab) is a user-driven open innovation ecosystem where users are actively involved. The strong interaction for user-driven innovation in the actual testing environment where this user and producer performs co-creative innovation was effective to improve the quality of goods.

Users actively participated in innovative activities, contributed to the development of products and services, contributed to improving the utilization of results. Businesses utilize ideas through collaboration with other companies, utilizing user experience, etc.

Research and support organizations have cooperation between living lab participants is promoted Medium technology - Social innovation can fuse new innovative. This living lab is a laboratory and a test bed where users and producers jointly make innovation in real life settings.

- Life scene (real-life setting) allows users to participate in the design and development process.
- Implementation of ideas, accelerate innovation activities by reducing gaps in the process of practical application after development

5.2 Simulation of performance
LED Plate and Plate Bottom assume the same material and interpret the material of Plate Cover which is the most important part of changing to aluminum and PE type. We could analyze the load condition by setting it to 2,000 N which is the severe condition based on 1300 N which is the design specification of the electric board.

In the case of the analysis result, condition 1, an extra deformation amount occurs, the amount of warp of the bottom plate is many, the equivalent stress exceeds the yield strength, and it is impossible to apply it.

Conditions 3 and 4 appear as those that satisfy the design specification of the analysis result and are judged to be applicable. However, in the future, additional design changes and improvements are considered to be necessary continuously to reduce weight and reduce manufacturing costs.

The comparison between computational analysis and real experiment is highly recommended to get the result. We think that additional researches are needed to verify the accuracy of analysis such as experiment and further analysis. Also, E-N curve and S-N curve should be made to get more reliability in fatigue analysis.

Acknowledgements
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References


Writing Processes In A Research School With Script Cultures From Both University And Industry

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ABSTRACT

To succeed, students at industrial research schools must be adapt with diverse script cultures, but little is known about how the students manage this challenge. This paper presents a study on writing in a PhD education with script cultures from both university and industry. A socio-cultural perspective is used, which means that thinking and language are seen as woven together in the students’ socialization processes. According to this view, texts are mediating the learning. The definition of “learning” is that the interplay processes are a prerequisite for the mental processes (Vygotsky 1999). The unit of analysis in the study is the students’ interplay in the cultures around writing. The objective is to increase the knowledge about the students’ situation in the organization of research schools and the main question is: How do the PhD students manage the interaction with different script cultures and what are the challenges? The sub-questions are: What do the writing processes look like? What are the forms of communication? Who is the knowledgeable other, in relation to whom they learn from? The empirical data came from in-depth interviews with 11 PhD students, done 2014 in an industrial research school in Sweden. This experience-based qualitative study reveals that students have built-in opportunities to manage the diverse script cultures in an industrial research school. It also reveals challenges that students have with diverse script cultures and discuss them in relation to different phases of co-production research projects. Finally, some suggestions are made on how to meet these challenges for a PhD education with script cultures from both university and industry.

Keywords: Writing Processes, Script Cultures, Socio-Cultural Theory, Socialization, Higher Education, Phd Education, University–Industry Collaboration, Qualitative
First Year Evaluation of Post-Secondary Education Program for Students with Intellectual and Developmental Disabilities

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Fern Aefsky, Saint Leo University, USA
Patricia Bassey, SUNY Orange, USA

ABSTRACT

Post-secondary education (PSE) programs for students with Asperger’s or other disabilities (i.e., individuals with intellectual/developmental disabilities [IDD] considered higher functioning) have emerged internationally to allow persons with IDD to be successful in traditional college and university programs. However, there is limited data evaluating PSE program outcomes. One current program for students with IDD (> 18 years of age) is the BRIDGE program at Orange Community College, Middletown, NY, that just completed its initial year. This formative evaluation looks at the BRIDGE program’s first year using students’ end-of-year course assessments, including sections most liked (i.e., Vocational/Employment Preparation, Independent Living, Academics/Lifelong Learning, Personal Development/Life Strategies, and Social Participation/Civics), instructor quality, family engagement, learning experience, and proposed changes. This research can help to develop theories about factors resulting in successful program completion and future job opportunities for students with IDD. Study can also assist other educational institutions interested in developing a PSE program for persons with IDD.
Verification Of Improvement Based On Relationship Between Success Factors And Learning Outcomes In Project-Based Learning

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Hiroo Hirose, Tokyo University of Science, Japan
Hiroshi Ichikawa, Otsuma Women's University, Japan
oshito Yamamoto, Tokyo University of Science, Japan

ABSTRACT

This study verifies a method of improvement class on project/problem-based learning (PBL). We will summarize success factors and learning outcomes in PBL, and show the relationship between them. From this relationship, we implement two improvement of PBL class. We conduct a questionnaire survey to clarify changes in success factors and learning outcomes through PBL class improvement. Comparing scores of success factors and learning outcomes for different years, we will show that PBL class improvement based on the relationship between success factors and learning outcomes in PBL improve learning outcomes.

Keywords: PBL, Fundamental Competencies For Working Persons, Hard Skills, Soft Skills, Class Improvement

1 INTRODUCTION

Active learning is one of teaching methods that are paid attention. In active learning, by students to learn exercising thinking, it is possible to learn hard skills and soft skills through classes such as field work, discussion, and Project/Problem-Based Learning (PBL). Classes incorporating PBL have been practiced in various ways by many educational institutions and have been introduced for the following purposes [1]:

i) to enhance students’ abilities to self-learning in anticipation of their own future,
ii) to acquire firm foundational academic abilities in their specialty field,
iii) to make students motivate themselves and have the power to learn independently.

In PBL, students learn through a specific practical experience or a certain project, which is formulation and implementation of a plan to achieve a purpose within a period, by using the expert knowledge. From such as experience and learning, students improve the problem finding and resolution abilities, find shortcomings of their own knowledge, share knowledge mutually in team activities, and refine communication skills in the process. As a result, they can cultivate autonomy and a foundation to study themselves in the future. In other words, by acquiring these with PBL, they can acquire hard skills and soft skills to keep studying [2]. Hard skill refers to knowledge in specialized fields and the ability to utilize it is call soft skill. Although there are parts with different expressions and contents, these can be understood that bachelor’s literacy and fundamental competencies for working persons, which is proposed by Ministry of Economy, Trade and Industry Japan, can be said to be seeking the ability to use knowledge called soft skills [3,4].

PBL is often implemented depending on the experience and know-how of subject teachers. This know-how is summarized in various forms [5-8]. In addition, the operation and management method of PBL are not systematized at present. The relationship between PBL and learning outcomes is not clear, and it depends strongly on the ability of subject teachers at the start-up/planning stage. In response to above problems, we have studied the relationship
between the success factors and learning outcomes of PBL [1,9]. We have made a success factor structure diagram stratifying success factors of PBL and a learning outcome structure diagram stratifying learning outcomes. By creating the relationship matrix based on these, we have quantitatively clarified the relationship between success factors and learning outcomes of PBL. Hirose et al. show the appraisal method with Fuzziness to quantify learning outcomes in PBL using this relationship [10]. However, it has not been verify whether PBL class improvement based on this relationship is effective.

The purpose of this research is to verify the effectiveness of class improvement based on the relationship between success factors and learning outcomes on PBL. In particular, we prepare improvement plans for PBL class based on the relationship and implement them in PBL class of following fiscal year. We conduct a questionnaire survey on success factors and learning outcomes. We show that this improvement method is effective by comparing results of improvement plans and improvement of learning outcomes.

2 RELATIONSHIP MATRIX BETWEEN SUCCESS FACTORS AND LEARNING OUTCOMES ON PBL

2.1 Success Factors of PBL

In order to structure success factors of PBL, we refer to some operational manuals for PBL [6-8] and “the Project Management Body of Knowledge” [11-13]. In addition, we interviewed professors and students who have taken PBL course “Project and Management”. Summarizing these results using the nominal group method [14], success factors in PBL has been classified as shown in Table 2. Success factors in PBL can categorize eleven classifications within five categories. For later discussion, we add names \((x_1, x_2, \ldots, x_{11})\) to success factors.

“Students’ Effort” has factors related to individual and group. Elements related to the individual factor include (1) soft skills, (2) expert knowledge (hard skills), (3) past experiences and achievements and (4) existence of motivation. Elements related to group factor is needed for group activities. More specifically, these include such as composition of group members and information sharing.

“Teachers’ interaction” has factors related to individual and group as same as “Students’ effort”. Elements related to the individual factor include teacher’s capability of supporting the students to learn with their self-motivation. Teachers are also asked to act as an adviser with the capabilities of facilitating and coaching the students in learning activities. When more than one teacher to mentor a project in PBL class, it has to have the factor related to group. Such as cooperation and information sharing between teachers have been included in this factor.

“Cooperative framework of cooperator” has factors “Understanding” and “Communication”. “Understanding” means that cooperators and their company/organization have an understanding for PBL class. “Communication” means that cooperators get in contact with the teachers and students at short intervals. “Utilize resource” includes accompanying the environment: (1) On-campus Environment, (2) Off-campus Environment, (3) Information and Communication Technology (ICT), and (4) activity funds. “Course design” has “Contents” factor such as degree of difficulty, students’ interests, and planning of education.
In the aspect of education, success of PBL means that students learn hard skills and soft skills. Acquiring of soft skills is equivalent to acquiring of practical skills. So-called “practical skills” mean the students’ apply skills using knowledge that they obtained in classroom lectures of university when they go out into the world. The Ministry of Economy, Trade and Industry defined the practical skills as fundamental competencies for working persons and classified those into 3 items consisting of 12 elements [3,4]. Soft skills defined in this paper refer to fundamental competencies for working persons. Table 3 shows soft skills, which are required for learning, by applying to 12 elements of fundamental competencies for working persons. We add names \( y_1, y_2, \ldots, y_{12} \) to classifications and \( (Y_1, Y_2, \text{and } Y_3) \) to categories of learning outcomes as shown in Table 3. Students’ learning level for soft skills is quantitatively assessed from the incremental difference indicated by evaluating fundamental competencies for working persons before starting the project and after completing the class.

Success or failure of the project are determined by whether the project product achieved the goal. The assessment of project is independent of the type of project product. Expected learning knowledge is depending on the theme of project. It seems that the quantitative assessment of project is difficult. The competency required for each theme is investigated and a written examination is conducted for the students. This method can evaluate the students’ learning level. In other words, the method of quantitative assessment is different between themes. Therefore, this paper does not classify hard skills in detail.

### Table 2. Success factor structure diagram of PBL.

<table>
<thead>
<tr>
<th>Category</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ effort</td>
<td>A student ( x_1 )</td>
</tr>
<tr>
<td></td>
<td>Group ( x_2 )</td>
</tr>
<tr>
<td>Teachers’ interaction</td>
<td>A teacher ( x_3 )</td>
</tr>
<tr>
<td></td>
<td>Group ( x_4 )</td>
</tr>
<tr>
<td>Cooperative framework of cooperator</td>
<td>Understanding ( x_5 )</td>
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<tr>
<td></td>
<td>Communication ( x_6 )</td>
</tr>
<tr>
<td>Utilize resource</td>
<td>On-campus Environment ( x_7 )</td>
</tr>
<tr>
<td></td>
<td>Off-campus Environment ( x_8 )</td>
</tr>
<tr>
<td></td>
<td>ICT ( x_9 )</td>
</tr>
<tr>
<td></td>
<td>Fundamental Resource ( x_{10} )</td>
</tr>
<tr>
<td>Course design</td>
<td>Contents ( x_{11} )</td>
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</table>

### Table 3. Learning outcome structure diagram of PBL.

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<tr>
<th>Category</th>
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<tbody>
<tr>
<td>Soft skills</td>
<td>Initiative ( y_{1,1} )</td>
</tr>
<tr>
<td></td>
<td>Ability to influence ( y_{1,2} )</td>
</tr>
<tr>
<td></td>
<td>Execution skill ( y_{1,3} )</td>
</tr>
<tr>
<td>Ability to think through ( Y_2 )</td>
<td>Ability to detect issues ( y_{2,1} )</td>
</tr>
<tr>
<td></td>
<td>Planning skills ( y_{2,2} )</td>
</tr>
<tr>
<td></td>
<td>Creativity ( y_{2,3} )</td>
</tr>
<tr>
<td>Ability to work in a team ( Y_3 )</td>
<td>Ability to deliver message ( y_{3,1} )</td>
</tr>
<tr>
<td></td>
<td>Ability to listen closely and carefully ( y_{3,2} )</td>
</tr>
<tr>
<td></td>
<td>Flexibility ( y_{3,3} )</td>
</tr>
<tr>
<td></td>
<td>Ability to grasp situation ( y_{3,4} )</td>
</tr>
<tr>
<td></td>
<td>Ability to apply rules and regulations ( y_{3,5} )</td>
</tr>
<tr>
<td></td>
<td>Ability to control stress ( y_{3,6} )</td>
</tr>
<tr>
<td>Hard skills ( Y_4, y_{4,1} )</td>
<td></td>
</tr>
</tbody>
</table>

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2.3 Relationship Matrix and Survey Items

By creating the relationship matrix based on a success factor structure diagram and a learning outcome structure diagram, we quantitatively clarify the relationship between success factors and learning outcomes of PBL.

In order to clarify the relationship between success factors and learning outcomes, we carry out questionnaire survey subject to students of Tokyo University of Science, Suwa who take a PBL course “Project & Management”. The number of question items for success factors and for learning outcomes become 16 and 25, respectively. These questions are prepared based on references [6-8, 15] and summarized by three preliminary surveys. All questions are prepared in five choices (5 means the highest and 1 means the lowest), and we aggregate the number of choices as a score.

Table 4. Correlation matrix of success factors.

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<tr>
<th></th>
<th>x1</th>
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<th>x4</th>
<th>x5</th>
<th>x6</th>
<th>x7</th>
<th>x8</th>
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<td>0.43</td>
<td>0.40</td>
<td>0.63</td>
<td>1.00</td>
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</table>

Table 4 shows the correlation matrix of the questionnaire result for success factors. As the result, we find that multicollinearity is low and each item is independent. this means that questionnaire items for success factors are valid. Table 5 shows the result of principal component analysis of success factors. Since the first component C1 is negative in all items, it shows that it represents a comprehensive learning outcomes. These results show that learning outcomes structure diagram is a valid model for expressing learning outcomes of PBL.
Table 5. Principal component analysis of success factors.

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<tr>
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<th>C4</th>
<th>C5</th>
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<td>-0.243</td>
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<table>
<thead>
<tr>
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<th>standard deviation (σ)</th>
<th>1.879</th>
<th>1.112</th>
<th>0.712</th>
<th>0.705</th>
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<td></td>
<td>cumulative contribution ratio (R²)</td>
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<td>0.660</td>
<td>0.730</td>
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</table>

In order to clarify the relationship between success factors and learning outcomes, we use the multiple linear regression analysis with the forward selection method. In this analysis, learning outcomes are the objective variable and success factors are the explanatory variable. We employ success factors as explanatory variable to minimize AIC (Akaike’s Information Criterion) [17]. Table 6 shows the increment of contribution ratio when each factor added, the cumulative contribution ratio (R²), the mean value (µ), the standard deviation(σ), and a max variance inflation factor (VIF) of 46 valid answers. Effect value is defined as the sum of score of factor. The score is two point for factor with over 30% contribution ratio, and one point for the factor with less than 30% contribution ratio. It shows that success factors with high effect value have influence on learning outcomes of PBL. R² value of almost learning outcomes has over 0.4 and VIF of all of learning outcomes has smaller than 10.0. These show that learning outcomes structure diagram is a valid model for expressing learning outcomes of PBL.

Looking at the mean value, we find that success factors are generally satisfied in this class. Especially, the evaluation on factors of “Utilize resource/On-campus Environment (x7)”, “Utilize resource /ICT (x9)” and “Teachers’ interaction/Individual (x3)” are highly evaluated. As for the reason why these factors received high evaluations, our university has established a wireless LAN environment and many meeting spaces. In addition, teachers also participate in the project according to the operation manual. We find that learning outcomes are also generally improved as compared with before taking course. Especially, evaluations of ability of “Initiative (y1,1)”, “Flexibility (y3,3)”, and “Ability to apply rules and regulations (y3,5)” are high. These results mean that students acquire the fundamental competency for working persons through the PBL course.

The learning outcome “Initiative (y1,1)”, which is the highest degree of acquisition by this PBL class, is related to satisfaction degree of success factors “Students’ effort/group (x2)”, “Teachers’ interaction/group (x4)”, “Utilize resource/ICT (x9)”, and “Utilize resource/Fundamental Resource (x10)”. This means that it is possible to acquire higher level by sharing information among project members, collaboration among teachers, and utilization of ICT tools. Meanwhile, in order to raise the degree of acquisition of “Ability to deliver message (y3,1)”, which is the lowest acquisition level, it is necessary to operate to enrich the factors “Teachers’ interaction/group (x4)”, “Utilize resource/ICT (x9)”.

The success factor with highest effect value is “Students’ effort/a student (x1)”, and it is related to “Ability to work in a team (y3)”, “execution skill”, “planning skill”, and “hard skill”. In PBL, students acquire missing knowledge by
tackling tasks with no clear answer, and by utilizing knowledge and skills according to themselves and surrounding circumstances. As the results, students acquire the fundamental competencies for working persons, such as the “Ability to work in a team”.

3 Improvement PBL Class and Verify the Results

3.1 Improvement PBL Class and Questionnaire Survey

Based on these results, we improved the following two points in this PBL class in FY 2016: (i) ensure students’ effort can be sufficiently by clarifying the sharing roles and rule setting within the class, and (ii) make students utilize ICT tools in communication, information sharing, progress planning, etc.

After the PBL class, we have conducted a questionnaire survey on success factor and learning outcomes, and have compared them with results of FY 2015.

(1) Class: “Project and Management” as an optional course (2 modules per year) that is lectured to the freshman to senior students of Department of Business Administration and Information at Tokyo University of Science, Suwa.

---

### Table 6. Relationship matrix and statics values.

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<th>y2,2</th>
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(2) Subjects: students who are taking a course of “Project and Management” in Department of Business Administration and Information at Tokyo University of Science, Suwa (62 students for FY 2015 and 49 students for FY 2016). The number of valid responses are 46 in FY 2015 and 36 in FY 2016.
(3) Data collection method: Questionnaire form on Web.
(4) Survey date: 21 January, 2016, and 3 February, 2017 (at the end of each class).
(5) Outline of class: PBL class to acquire soft skills by tackling and solving the existing local problem with local people.
(6) Analysis method: R version 3.2.3.

3.2 Verification the Results of Success Factors

We compare the score of the success factors of PBL in FY 2015 and FY 2016. Table 7 shows results of t-test for the success factors. Symbols * and ** mean significance level of 5% and 1%, respectively, and effect size shows Cohen’s $d$ [*]. As for “Utilize Resource/ICT ($x_0$)”, the score has improved, and a significant difference is recognized at a significance level of 1%. Effect size is also large at 0.988. These results show that the utilization of ICT tools is actively carried out in FY 2016 compared to FY 2015. In addition, the score of “Utilize Resource/On-campus Environment ($x_7$)” is improved, and a significant difference is recognized at the 5% significance level. Although both score of factors in “students’ effort ($x_1$ and $x_2$)” improved, there are no significant difference. The scores of “Teacher interaction/Group ($x_4$)”, “Utilize Resource/Off-campus Environment ($x_8$)”, and “Utilize Resource/Fundamental Resource ($x_{10}$)” are lowering. The significant difference for “Teacher interaction/Group ($x_4$)” is recognized at a significance level of 1%, for “Utilize Resource/Off-campus Environment ($x_8$)” and “Utilize Resource/Fundamental Resource ($x_{10}$)” are recognized at a significance level of 5%. Effect sizes are -0.726, -0.447, and -0.516 respectively, which are moderate size.

These results show that improvement of the PBL class conducted in FY 2016 has improved success factors “Utilize Resource/ICT ($x_0$)” and “Utilize Resource/On-campus Environment ($x_7$)”. However, that has reduced the score of “Teacher interaction/Group ($x_4$)”, “Utilize Resource/Off-campus Environment ($x_8$)”, and “Utilize Resource/Fundamental Resource($x_{10}$)”. In addition, although the average scores of “Students’ effort ($x_1$ and $x_2$)” improved, it has been not possible to obtain a significant effect that significant difference is recognized.

Table 7. Results of t-test for success factors of PBL.

<table>
<thead>
<tr>
<th>Success factors</th>
<th>$x_1$</th>
<th>$x_2$</th>
<th>$x_3$</th>
<th>$x_4$</th>
<th>$x_5$</th>
<th>$x_6$</th>
<th>$x_7$</th>
<th>$x_8$</th>
<th>$x_9$</th>
<th>$x_{10}$</th>
<th>$x_{11}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>standard deviation</td>
<td>0.763</td>
<td>0.707</td>
<td>0.778</td>
<td>1.875</td>
<td>1.559</td>
<td>1.856</td>
<td>0.428</td>
<td>1.952</td>
<td>0.397</td>
<td>2.021</td>
<td>0.939</td>
</tr>
<tr>
<td>standard deviation</td>
<td>0.644</td>
<td>0.454</td>
<td>0.350</td>
<td>0.976</td>
<td>0.632</td>
<td>0.632</td>
<td>0.649</td>
<td>1.025</td>
<td>0.597</td>
<td>0.928</td>
<td>0.496</td>
</tr>
<tr>
<td>t value</td>
<td>1.610</td>
<td>0.409</td>
<td>-0.368</td>
<td>-3.260</td>
<td>0.011</td>
<td>-0.568</td>
<td>2.067</td>
<td>-2.010</td>
<td>4.441</td>
<td>-2.321</td>
<td>-1.257</td>
</tr>
<tr>
<td>p value</td>
<td>0.056</td>
<td>0.342</td>
<td>0.357</td>
<td>0.001</td>
<td>0.496</td>
<td>0.286</td>
<td>0.021</td>
<td>0.024</td>
<td>0.000</td>
<td>0.011</td>
<td>0.106</td>
</tr>
<tr>
<td>effect size</td>
<td>0.358</td>
<td>0.091</td>
<td>-0.082</td>
<td>-0.726</td>
<td>0.002</td>
<td>-0.126</td>
<td>0.460</td>
<td>-0.447</td>
<td>0.988</td>
<td>-0.516</td>
<td>-0.280</td>
</tr>
<tr>
<td>significance level</td>
<td>**</td>
<td>*</td>
<td>*</td>
<td>**</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

3.3 Verification the Results of Learning Outcomes

Table 8 shows results of t-test for learning outcomes. We found that learning outcomes in FY 2016 is improved in all ones compared to FY 2015. Especially, “Ability to deliver message ($y_{3,1}$)” has a significant difference at a significance level of 1%, effect size of it is 0.541. This means that it has moderate effect. In addition, “Ability to influence ($y_{1,2}$)”, “Ability to detect issues ($y_{2,1}$)”, “Ability to listen closely and carefully ($y_{3,2}$)”, “Ability to grasp situation ($y_{3,4}$)”, and “Ability to control stress ($y_{3,5}$)” have a significant difference at a significance level of 5%. Effect sizes of them are moderate size at 0.521, 0.511, 0.445, 0.437, and 0.384, respectively.
Table 8. Results of t-test for success factors of PBL.

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>FY 2016 (n=36)</th>
<th>FY 2015 (n=46)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean value</td>
<td>mean value</td>
</tr>
<tr>
<td></td>
<td>standard</td>
<td>standard</td>
</tr>
<tr>
<td></td>
<td>deviation</td>
<td>deviation</td>
</tr>
<tr>
<td></td>
<td>t value</td>
<td>t value</td>
</tr>
<tr>
<td></td>
<td>p value</td>
<td>p value</td>
</tr>
<tr>
<td></td>
<td>effect size</td>
<td>effect size</td>
</tr>
<tr>
<td></td>
<td>significance level</td>
<td>significance level</td>
</tr>
<tr>
<td></td>
<td>y_{1,1}</td>
<td>y_{1,2}</td>
</tr>
<tr>
<td>FY 2016</td>
<td>4.16</td>
<td>4.11</td>
</tr>
<tr>
<td>FY 2015</td>
<td>4.05</td>
<td>3.69</td>
</tr>
</tbody>
</table>

It can be considered that one of reasons for improvement of “Ability to influence (y_{1,2})”, “Ability to detect issues (y_{2,1})”, and “Ability to deliver message (y_{3,1})” is result of utilization of ICT tools in PBL class. However, “Initiative (y_{1,1})”, “Ability to detect issues (y_{2,1})”, and “Planning skills (y_{2,2})” which are expected leaning outcomes improvement by utilization of ICT tools do not have a significant difference. This is considered to be the influence of learning outcomes such as “Students’ effort/Group (x_{2})” and “Teacher interaction/Group (x_{4})”.

These results show that improvement of the PBL class conducted in FY 2016 shows improvement of learning outcomes as expected. We found that learning outcomes of PBL can be improved by designing and implementing class improvement methods from the relationship between success factors and learning outcomes of PBL.

4 CONCLUSIONS

We have studied the method of improvement learning outcomes of PBL class based on success factors and learning outcomes on PBL. We have considered success factors and learning outcomes in PBL, and have investigated the relationship between them. Based on the obtained relationship, it has found that students’ effort and utilization of ICT tools in PBL class contributed to improvement of learning outcomes. For this reason, we implemented improvement of PBL class on these two points.

We conducted a questionnaire survey to clarify changes in success factors and learning outcomes through PBL class improvement. For success factors, score of utilization of ICT tools was improved. On the other hand, it has been not to obtain a significant difference, although the average score of students’ effort is improved. Moreover, it has decreased score of teachers group interaction to students. Similarly comparing learning outcomes, the average scores have improved in all learning outcomes. Especially, there were statically significant difference for five learning outcomes with moderate effectiveness.

As the result, it has been clarified that PBL class improvement based on the relationship between success factors and learning outcomes in PBL improve learning outcomes. In the future, we will propose to construct a system to predict learning outcomes by PBL class.

This study was supported by JSPS KAKENHI Grant Number JP17K12953.
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[8] Ryukoku University Centre for Local Collaborations. (2012). Experimental Survey on Local Problem Solution Using University's Cultivation of Human Resources, Ryukoku University Centre for Local Collaborations, Kyoto. [Japanese]


Neurophysiological Changes During Auditory Categorical Language Training: An ERP Study

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Hua Shu, Beijing Normal University, China
Piia Astikainen, University of Jyväskylä, Finland

ABSTRACT

Listeners are highly sensitive to acoustic differences that distinguish phoneme contrasts in their native language. In contrast, it requires efforts to learn new phonemic categories from foreign languages, and perceptual abilities are increased after auditory categorical training. However, little is known about the neurophysiologic changes associated with perceptual learning and the mechanism of it. To address this issue, twenty-four normal-hearing monolingual Chinese-speaking adults were trained to identify the stop consonant (silent gap) length of Finnish non-words which are not used phonemically in Chinese language. Behavioral responses and event-related potentials (ERPs) were measured to these non-words before and after the auditory categorical language training. Auditory categorical training improved the subjects' ability to discriminate an unfamiliar Finnish contrast. However, no significant improvement in identification task was found. The training effects were reflected in an increase of LDN (Late discriminative negativity) component between pre- and post- training ($t=-2.4$, $p=.024$, Figure 1). The results suggest that the modification of categorical perception of novel phonetic contrasts in adulthood is effortful, but that auditory training can be useful in establishing categorical perception though altering the central auditory nervous system.

Keywords: Perceptual Learning, Second Language Learning, Speech Sound, Event-Related Potentials, Categorical Perception

![Graph showing differential responses before and after training](image-url)

Figure 1. Grand averaged waveforms of the differential responses (deviant - standard) in pre- and post- training group. Imaginary line represents the response before training and the black line presents the responses after training. Mean amplitude values are presented from frontal electrodes.
Estimation Of Optimal R&D Investment For Economy Growth: Empirical Evidences For OECD Countries

Chulwoo Baek, Duksung Women’s University, South Korea
Meansun Noh, Korea Small Business Institute, South Korea

ABSTRACT

Many countries are striving to continuously expand R & D investment with the belief that R & D investment contributes to economic growth. However, it is necessary to discuss the optimal R & D investment scale as the low growth trend is expanded and the financial burden of the government is increasing.

In this study, the applied Cobb-Douglas production model and the Quadratic equation model were applied to the OECD countries during 1981-2015 period to estimate the optimal R & D investment size maximizing economic growth. The analysis shows that a significant number of OECD countries are investing in excess of the optimal R & D investment.
Social Justice Issues Explored Through Theater Arts In The Classroom
Chelsea LeValley, Foundry10 Programs Development, USA

ABSTRACT

In a current cultural climate ripe with discussions of social ethics, how can we provide an emotionally safe and empathetically explorative context for students in our classrooms to engage with hot button social justice issues? How do we shape our curriculum to help students learn to answer questions about racism, homophobia, sexism, and other identity-based issues?

At foundry10, we’ve explored this idea through many iterations of a social justice theater arts program in several middle and high schools in the Seattle area. In each, we paired a teacher with a teaching artist to co-create tailored curriculum for their student populations and subject areas, respectively. For example, in a series of podcast classes, students analyzed classic plays like “Raisin in the Sun” and “Fences” that deal with issues of racism and classism, wrote new stories based off of a character with whom they identified from the play and developed a story that might have happened to that character outside of the scripted play. Students reported finding emotional connections to characters with whom they didn’t physically identify, and felt they had a platform or voice to speak about issues like race that they have previously felt afraid to address. In not only writing but playing these characters they were empathizing and elaborating on these stories, connecting them to real life and achieving the CORE standards in ELA for these writing exercises. After listening to each other’s recorded podcasts, students engaged in an empathetic and illuminating discussion that resulted in greater allyship amongst classmates.

Research has shown that providing students, both those unfamiliar and those familiar with theater arts, the opportunity to physically and emotionally engage with hot button issues from another’s point of view, has drastically improved not only student-reported understanding of topics but it has fostered cohesion among students in these classrooms. Throughout our research we have found many surprising themes, which in addition to exercises and curriculum developed for this program we are eager to share with other educators. Participants will also be introduced to resources to use in their own classrooms as well as ways to connect with us to further the discussion and possibly run similar programs within their schools.
Dramatic Arts Intervention For Improving Academic Performance
Chelsea Levalley, Foundry10 dramatic arts program development, USA

ABSTRACT

Students who excel get recognition for their successes and those who greatly struggle with academics receive attention for their hardship. What about the students in the middle of these two extremes? How can we think creatively about ways to approach traditional classroom curriculum to engage students testing at or just below state standards for their grade levels? How do we inspire students to get excited about math, science, and reading in the K-12 classroom? How can we creatively alter traditional classroom curriculum to present information in a new and exciting way for students?

At Foundry10, we have formulated an intervention model using dramatic arts in the classroom in conjunction with other necessary academic material to bolster student confidence and ultimately their academic performance. This model includes a pairing of traditional classroom teachers with teaching artists to co-create and co-teach curriculum using nontraditional ways of learning traditional subjects such as math, science, and reading. Our research has shown this intervention model to have positive outcomes not only in closing the student achievement gap but also improving student perception of skill and overall enjoyment of subject areas.

One model we have used, is a five-day intervention in reading, math and science for 3rd-6th grade students hosted over spring break at a low income (90% of students qualify for free/reduced lunch) suburban school in the Seattle Area. The program targeted students testing on the cusp of being able to pass the grade level standardized tests (SBAC) at the end of the year. These creative classrooms, led by both the teacher and teaching artists fostered engagement by capitalizing on play and empathy. Third grade students transformed their classroom into kelp forests and wrote rock songs about saving kelp that they performed on yardsticks and air guitars. Fourth grade students, donning magnifying glasses and disguises, played detectives at a crime scene, solving equations and using fractions to find the clues needed to rescue their classes’ stolen stuffed owl. Fifth graders used improvisation acting games and hip hop, bingo, and toy boat-making to understand fractions and article summaries. Sixth graders created characters who were astronauts and used fractions to make enough dehydrated foods to take on a trip to the moon.

Across the board, when students ranked how they felt about math and reading, enjoyment increased. Perception of the skills also increased in every subject. Attendance was almost at 100% for the entire week. Ultimately, the majority (90%) of students, whose scores put them at the cusp of failing, passed the SBAC after participating in the intervention. The majority of students also reported feeling more positively about math, science, and reading at the end of the five days both years.

Our workshop will expose educators and administrators to the kind of work the teachers and teaching artists did in the classroom. It will be interactive and highly engaging. We will share the model for idea-generation behind the creation of this intervention curriculum as well as specific activities we used to reach students in an inventive way. We will also present graphs, quotes, and other research findings that support this model of intervention and resources for educators to get involved at their school. Foundry10 is in the process of expanding this programming and are looking forward to connecting with other interested educators.
A Field Study: An Examination Of Managers’ Situational Leadership Styles

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Debra Bourdeau, Embry-Riddle Aeronautical University, USA

ABSTRACT

The present study explored the applicable situational leadership styles of experienced managers attending a U.S. military advanced leadership program. These managers were requested to respond to a situational leadership self-assessment which is a useful framework to determine the styles associated with managers when working in their respective career fields. Descriptive statistics were conducted to determine the findings of the self-assessments. The research results revealed the students tended to have two predominate leadership styles. The findings of this study have significant implications for leadership behavior when leading individuals and teams for organizational success.
Motivating Students To Learn Control Engineering And Image Processing Using A Drone

Rahok Sam Ann, Oyama College, Japan
Hirohisa Oneda, Yuge College, Japan
Shigeji Osawa, Yuge College, Japan
Koichi Ozaki, Utsunomiya University, Japan

ABSTRACT

Our purpose is to motivate students to study control engineering and image processing. To do this, we designed a teaching material based on the ARCS model using a drone. The drone is used as a control object. The control process is done by capturing the images from the drone’s camera on a PC via Wi-Fi and detecting a target color with an image processing. The PC, then, sends the control inputs from a PID controller back to the drone to control it to keep the target color at the center of the images. With this teaching material, students can know as much about control engineering and image processing by tuning the parameters using in PID controlling and image processing, and observing the responses of the drone. In order to evaluate the effectiveness of our teaching material, firstly we allowed first-grade technical college students, who know nothing about control engineering and image processing, to take our lecture. And then, we did a questionnaire on their interests in the two techniques. The result showed that around 80% of them realized the interest of learning these two techniques.

I. Introduction

In recent years, not only control engineering but also image processing has been used in developing devices. For instance, collision avoidance function of a vehicle that can detect obstacles with cameras, than uses this information as control inputs to avoid collision [1][2]. Moreover, these techniques are also utilized in product transport robots [3] and product inspection apparatuses [4] in some manufacturing factories. Accordingly, human resources with knowledge of both control engineering and image processing are required. However, since these two techniques may take a long time to master, students who are interested in learning them are significantly dwindling. Therefore, it is necessary to introduce the interests of these two techniques to students to motivate them before they start learning. In this study, we aim to design an attractive teaching material, which can motivate students to learn control engineering and image processing.

The ARCS model developed by John M. Keller [5] has been reported as one of the most effective model in developing attractive teaching materials in the field of educational information media [6]. Besides this field, the ARCS model has also been applied in developing teaching materials for sequence control [7] and robot control [8]. However, none of them focuses on image processing. Moreover, the costs of development are reportedly high. In this study, we use low cost commercial products in our teaching material instead of developing them from zero for cost-savings. We then apply the ARCS model to it, and develop it into an attractive teaching material. For a control object, we focus on using a low cost small-scale helicopter, called “AR.Drone”. The drone is programmable, and it has a camera at the front, which can allow us to develop a control function using both control engineering and image processing. In the control process, the images captured from the drone’s frontal camera are sent to a control PC via Wi-Fi. The PC, then, detects the target color from the images, and sends the control inputs from PID controller back to the drone to control it in tracking the target color. In this paper, we report the effectiveness of our teaching material in motivating students to learn control engineering and image processing.
II. Our Teaching Material

A. ARCS Model

The ARCS model has four steps (A=attention, R=relevance, C=confidence, and S=satisfaction) for sustaining motivation in learning process. The step A is the first step to grab students’ attention, step R can tell them how the new learning will use their existing knowledge, step C can help them understand their likelihood for success, and step S can provide them a sense of achievement. The learning goal of our teaching material is to be able to properly set parameters using in both control engineering and image processing to make the drone autonomously track a target color.

B. Application of Step A

This section describes how our teaching material grabs students’ attention. First of all, we let students manually operate the drone with an airplane control joystick. During the operation, we relay the images from the frontal camera of the drone on the screen of the control PC, and let them track the target color by trying to keep the target color at the center of the screen. Since the drone is flying, manual tracking of the target color is extremely difficult, which we believe that this can make students realize the beauty of control engineering.

On the other hand, there is some concern about this operation difficulty, which may drop students’ interest in learning with our teaching material. However, by relaying the images from the frontal camera of the drone and the results of image processing on the screen of the control PC, it cannot only make students feel like they are enjoying pilot the drone, but it can also make them aware of learning image processing. In order to investigate whether our teaching material has reached the step A or not, we did an experiment by allowing 106 high school students to manually operate the drone during an open campus at Utsunomiya University. We then did a questionnaire, which focused on their interests in our teaching material. The result showed that 96% of them enjoyed operating. Based on this result, it is enough to say that the teaching material can grab students’ attention.

C. Application of Step R

After allowing students to manually operate the drone in the previous section, we use the both control and image-processing techniques to make drone autonomously track the target color. By doing this, students can realize that the tracking process can be easily done by the control and image-processing techniques. Moreover, they can also easily imagine how these techniques work, and how they can use their existing knowledge in learning with the teaching material. The details on the control function are described in section III.

C. Application of Step C

In this step, we allow students to slightly hold the drone as shown in Fig. 1. We then tune the control parameters to make them see and feel how the responses of the drone change. The importance of understanding with bodily sensation has been reported in a teaching material using a ridable segway-style robot [8]. After that, we change the parameters using in image processing to make the drone track the different target colors. By doing this, students can understand the relation between parameters and target colors. Furthermore, we reduce the number of parameters, and narrow the setting range of color diagram using in image processing to facilitate the parameters setting. Thus, students can easily set proper parameters, which can make them feel confident in learning with the teaching material. The details on parameters setting are described in section III-B and III-C.

D. Application of Step S

Finally, we let students choose the target color they like, and tune the parameters using in image processing to make drone detect that color. We then allow them to tune the proper control parameters to make drone autonomously track the target color. If they can succeed in tuning these parameters, they will feel a sense of achievement.
III. Autonomous Tracking Method of Target Color Using a Drone

A. Overview

Fig. 1. Bodily sensation of responses of the drone.

First of all, the drone uses its frontal camera to capture the images of the target color, which is moving in front of it, and sends these images to the control PC via Wi-Fi. The control PC then uses image processing to detect the center of the target color.
target color. Finally, it sends back the control input to the drone to possibly keep the center of the target color at the center of the images. The flowchart of the control process is shown in Fig. 2. For image processing, we use a very simple method, which performs based on three simple steps of binarizing, labeling, and filtering. The result from filtering is used to control the yaw angle and altitude of the drone with PID controller. The details on this control process are described in section III.

B. Extraction of color object

Using image processing to control a flying object is not a new idea. Erdinc et al. presented the control of a quadrotor helicopter using visual feedback [9]. Other examples are Watanabe et al. presented image-based visual PID control of a micro helicopter using a stationary camera [10], and Pedro et al. introduced towards vision-based safe landing for an autonomous helicopter [11]. For the teaching material in this work, we use image processing to detect the target color based on HS (H=Hue, S=Saturation) chromaticity diagram of the HSV color model instead of the RGB color model. The HS chromaticity diagram is known as one of the most common diagram to be used in color objects' detection, such as human skin [12][13], fruits [14], and road signs [15]. The conversion equations from RGB to HSV are shown in (1) to (3), and the HS chromaticity diagram is shown in Fig. 3.

As described in section II-D, in order to make students feel confident in learning with the teaching material, it is necessary to facilitate the parameters setting. To do this, we reduce the number of parameters from RGB to HS, and narrow the setting range of H from [0:360] to [-30:30] and S from [0:1] to [0:5:1].

\[
H = \begin{cases} 
60 \times \frac{(G - B)}{MAX - MIN}, & \text{if } MAX = R \\
60 \times \frac{(B - R)}{MAX - MIN} + 120, & \text{if } MAX = G \\
60 \times \frac{(G - B)}{MAX - MIN} + 240, & \text{if } MAX = B 
\end{cases} 
\]  

(1)

\[
S = \frac{MAX - MIN}{MAX} 
\]  

(2)

\[
V = MAX 
\]  

(3)
Fig. 3. HS chromaticity diagram of HSV color model

Fig. 4. Image captured from camera of AR.Drone.

Fig. 5. View in HS chromaticity diagram.
Fig. 6 Result of binarization

Fig. 7. Result of red object detection

Fig. 4 shows an image captured from AD.Drone’s frontal camera. Fig. 5 shows colors of the image after being transformed into HS chromaticity diagram and a range set by students to detect the red object. Fig. 6 shows a binary image, and Fig. 7 shows the result of the red color detection.

C. Control of yaw angle and altitude of the drone

In this work, we use PID controller to control the drone. If \( t \) is the control time, \( y(t) \) is the control output, and \( e(t) \) is error between reference input and control output, the PID control then can be expressed as follow:

\[
y(t) = K_p e(t) + K_i \int e(t) \, dt + K_d \frac{de(t)}{dt}
\]

where \( K_p \) is proportional gain, \( K_i \) is integral gain, and \( K_d \) is derivative gain. In our teaching material, students are required to properly set these parameters in order to obtain a desired response of the drone. Since the yaw angle and the altitude of the drone need to be controlled in order to track the target color, six parameters are required to be set during the learning process.
IV. Experiment

A. Drone

The drone used in the teaching material is shown in Fig. 8. It is a product of Parrot Company, and it costs around 300 USD. It is equipped with two cameras (one at the front and another at the bottom), an ultrasonic sensor, and an accelerometer. The cameras can allow user to screen the views, and the ultrasonic sensor and the accelerometer can provide user altitude, yaw, pitch, and roll during flying.

Basically, the drone only provides piloting capabilities via iOS devices. However, by setting ad hoc connection, and using the software library (AR.Drone SDK), it is possible to pilot it via a PC. For the operation, we use a plane control joystick as shown in Fig. 9. The movement of the drone and the joystick are programmed as shown in Fig. 9 to make students be able to intuitively pilot it.

B. Experimental setting

Fig. 8. AR.Drone

Fig. 9. Joystick for manual control of drone
In order to evaluate the effectiveness of the teaching material, we allowed 120 first-grade students in department of electronic and mechanical engineering of Yuge college, who knew nothing about control engineering and image processing, to take our lecture. The level of the lecture was adapted to an initial education. Therefore, the students could only manually pilot the drone, then observe and bodily sense the responses of the drone due to changes of the parameters. The procedure of the lecture was done as follow:

1. We showed students some examples that used control engineering and image processing. We then briefly explained them about the mechanism of those systems, since they knew nothing about these two techniques.
2. We explained them how to pilot the drone with the joystick, and allowed them to practice for about a minute.
3. We allowed them to manually track the red object by trying to keep it at the center of images captured from the frontal camera of the drone.
4. We used control engineering and image processing to make drone autonomously track the red object. We then allowed them to observe the responses of the drone.
5. We allowed them to slightly hold the drone, and change the parameters to make them bodily sense the responses of the drone.
6. Finally, we asked them to answer the questionnaire.

The questionnaire is shown in Table 1.

<table>
<thead>
<tr>
<th>Questionnaire on control engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the lecture</td>
</tr>
<tr>
<td>a1. Are you interested in control engineering?</td>
</tr>
<tr>
<td>After the lecture</td>
</tr>
<tr>
<td>a2. Did the teaching material increase your interest in control engineering?</td>
</tr>
<tr>
<td>a3. Do you want to know more about the control engineering?</td>
</tr>
<tr>
<td>a4. Do you want to make your own machines (vehicle, robot, and so on) using control engineering?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Questionnaire on image processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the lecture</td>
</tr>
<tr>
<td>b1. Are you interested in image processing?</td>
</tr>
<tr>
<td>After the lecture</td>
</tr>
<tr>
<td>b2. Did the teaching material increase your interest in image processing?</td>
</tr>
<tr>
<td>b3. Do you want to know more about image processing?</td>
</tr>
<tr>
<td>b4. Do you want to make your own machines (vehicle, robot, and so on) using the image-processing technique?</td>
</tr>
</tbody>
</table>

C. Result

A scene during the lecture is shown in Fig. 10, and the questionnaire results on both control engineering and image processing are shown in Fig. 11 and Fig. 12.

D. Discussion of the questionnaire result on control engineering

From the result in Fig. 11, we can see that even before taking our lecture, 66% of the students were interested in the control engineering. It is because of they are in department of electronic and mechanical engineering, which control engineering plays an important role. If we look at the result after the lecture, 80% of them felt that the teaching material increased their interests, 86% of them wanted to know more about control engineering. This showed that the teaching material has grabbed their attention. This means that the application of step A of the ARCS model works well. Moreover, 85% of them wanted to make their own control systems. This proved that students started to know about the relation between machines and control engineering. That was the reason that made them imagine about making their own control systems. This means that the application of step R of the ARCS model works fine too.
E. Discussion of the questionnaire result on image processing

From the result in Fig. 12, we can see that only 41% of students were interested in image processing before taking our lecture. However, if we look at the result after the lecture, 74% of them felt that the teaching material increased their interests, 71% of them wanted to know more about image processing, and 78% of them wanted to make their own systems using image processing. This result is not so different from the result of control engineering. Thus, we can say that the application of step A and R of the ARCS model works fine in the teaching material.

Fig. 10. Scene during lecture.

Fig. 11. Questionnaire result on control engineering.
Fig. 12. Questionnaire result on image processing.

V. Conclusion and Future Works

We have developed a teaching material based on the ARCS model that can motivate students to learn control engineering and image processing. In our teaching material, we used a low cost commercial AR.Drone as the control object, and developed it into an attractive teaching material using both control and image-processing techniques to make the drone autonomously track the target color. From the result of an evaluation experiment on effectiveness of the teaching material, which was conducted on 120 first-grade technical college students, around 80% of students realized that their interests in both techniques increased after taking our lecture. Moreover, over 80% of them wanted to make their own systems using the two techniques, which proved that the application of step A and R of the ARCS model works well in our method.

In the experiment, since the students were first-grade students, who knew nothing about the control engineering and image processing, we could not evaluate whether the teaching material has reached the step C and S of the ARCS model. As a future work, we plan to use the teaching material for lectures in higher grade class to verify whether it has reached step C and S. Furthermore, we also plan to observe how the students’ approaches and understanding levels in learning the both techniques will be improved.

VI. Acknowledgment

We would like to thank students of Utsunomiya University and Yuge College for their cooperation during the experiments.

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Socially Responsible Ratings And Financial Performance
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ABSTRACT
Companies included on a sustainability index meet several criteria based on an assessment of their economic, environmental and social practices. We assume that each of these companies satisfies a different number of criteria and these standards can be quite different in quality and rigor. In this sense, RobecoSAM provides a Corporate Sustainability Assessment of the companies included in the Dow Jones Sustainable Index. The three proposed classes (Gold, Silver and Bronze) can be considered as social responsible (SR) ratings. In this paper, we examine the financial performance of portfolios composed of stocks according these ratings. Does a highly conscious investor obtain a lower financial performance? The results show that SR investments not only have no cost for investors but also outperform the market and that there are no significant differences between portfolios depending on the SR rating.

Keywords: Socially Responsible Investments, Ethical Indices, Financial performance, Corporate governance, Corporate Social Responsibility, Risk, Return, Investment screening, ethical investing, shareholder activism, publicly listed companies, social investors, concerned investors
Integrating Entrepreneurial Mindset Concept in a Core Engineering Course

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ABSTRACT

The paper represents an instructional technique that teaches core engineering course (fluid mechanics) concepts within the context of class lectures and through an open-ended entrepreneurial mindset development class project assignment. The aim of this particular study was to introduce entrepreneurial mindset concepts among engineering students at their pre-professional engineering career start stage while they were studying core engineering courses. Most of the students pay full concentration while studying core engineering courses. So, introducing entrepreneurial mindset concepts during core engineering course study would produce the most significant outcomes in the long run concerning entrepreneurial mindset development since students carry core engineering concepts learned in the classroom instructions all the way through their entire professional engineering career. The course instructions were developed with real-world connection/application video representing each core concept introduced. The pre- and post-instructional survey results showed that real-world connection/application video with the core engineering concepts introduced in the class helped students to understand the core concept well. Statistical data analysis results show that students were able to develop or increase their knowledge of entrepreneurial mindset concepts significantly without diminishment of learning core engineering concepts. The results also showed that the open-ended entrepreneurship class project did grow students’ perceived entrepreneurial self-efficacy, as measured by students’ business skills development confidence survey, which can be a precursor to changing career intent from an employed engineer to start-up owner. The entrepreneurship class project study experience is also appealed to a broad spectrum of students who are interested in working for a start-up company as one of their future career goals.

1. INTRODUCTION

The traditional way of teaching core engineering courses rely on subject-based learning (SBL) approach which conveys a sequence of course materials as presented in a textbook [1-3]. This traditional model of teaching engineering students centered primarily on the classroom teachers and what they want students to learn and accomplish from class lectures. The career pathway for most engineering students overwhelmingly generally leads to industry – either private industry or business [4-6]. As the world experiencing 21st-century technological revolutions, societal as well as global challenges to meet the minimum needs such as food and water, energy, healthcare, housing, and mobility becoming even more acute issues and changes of supply-demand chains dramatically. These supply-demand changes are driven primarily by the emergence of a competitive, connected and entrepreneurial global economy, in which successful engineers increasingly need up-to-date technical competency and professional skills that differ significantly from what was taught in the traditional SBL approach in the past [7-10]. To accommodate the urgency of technical competency and professional skills on students learning the classroom instruction methods of engineering education must be redefined and innovative to cover a broad range of career-based skills - particularly business or entrepreneurial skills along with core engineering knowledge for innovative engineering talent and leadership [10-12].

The primary objectives or goals of an engineering instructor are [4-8]: (i) meaningful engagement of student at the most auspicious class lecture time to promote deep learning; (ii) provide or create students’ opportunities for reflection to connect thinking and doing; (iii) development of students’ metacognitive abilities to foster lifelong learning skills; and (iv) authentic experiential learning opportunities to put classroom knowledge learned into practice in the real world setting. To achieve these goals some educators used another model known as problem-based learning (PBL) approach which promotes critical thinking utilizing predefined real-life problems as a starting point [13-14]. Another widely used pedagogical concept known as entrepreneurial scenario-based learning (eSBL) used integrative thinking approach in teaching engineering courses [15]. As defined, integrative thinking is the ability to “constructively face the tensions of opposing choices” [12-15]. Hence instead of choosing one at the expense of the other to generate a
creative solution that contains elements of the individual choices is superior to each [14-15]. The eSBL approach challenges the student to make progress through integrative thinking by virtue of moving the problem space from the classroom and placing the student within the “social world” [13-15]. With the support of the instructor, the engineering content and other domain content help the student arrive at new models for understanding and ultimately solving problems [13-15]. Finally, the resolution of the scenario informs future course decision-making [12-15]. Both PBL and eSBL methods were employed in various disciplines such as medical field [13-14], education-related professions [10-15], engineering and applied sciences filed [13-14] in both course content reform and entire curriculum reform [8-15]. These methods helped students’ learning at higher levels regarding comprehension, application, analysis, synthesis of information, knowledge learned and evaluation known as Bloom’s taxonomy of learning [16].

In order to be successful in engineering practice in today’s workplace requires the integration of broad ranges of skills and abilities [4-7]. These include interpersonal skills such as teamwork, communication and persuasion, and business skills such as entrepreneurship, budget and project management, marketing and customer knowledge which are well beyond standard engineering curricula [7-10]. Integrating and nurturing these skills and interests early in engineering students’ academic life is important to learn about its beauty and wonder along with relevancies and opportunities in engineering career [4-12].

In this study, a core engineering course, fluid mechanics, contents were restructured to accommodate students’ interpersonal and entrepreneurship mindset skills development opportunities. Integration of interpersonal skill and the introduction of entrepreneurial mindset class project offer a holistic approach to learn core engineering course contents. In this approach, each concept was introduced in the classroom and connected with a real-life application video from which students learned first-hand how and where to apply the concept. Also, out of the box, thinking and problem recognition techniques were introduced through powerpoint and visual presentation in the classroom. Entrepreneurial mindset concept was discussed and presented in the class to ensure inclusive learning modalities. Details of the approach or method followed, classroom environment, assessment, evaluation, and results were discussed in the subsequent sections below. The implications of the entrepreneurial mindset class project study are also discussed in details in the context of theoretical lecture instructions and an open-ended class project assignment.

2. **RESEARCH HYPOTHESES**

The principal goal of the restructuring of core engineering course, fluid mechanics, is to introduce entrepreneurial concepts in the course contents and infuse real-world connection awareness among students’ in the hope that it would have a positive impact on the students’ classroom learning of core engineering concepts and entrepreneurial career intent in the long run. Hence, the research hypothesis is defined as:

*The integration of real-world connection of core engineering concepts and entrepreneurial mindset into core engineering course study will have a positive impact on engineering students’ classroom learning and future entrepreneurial career intent.*

This research also intends to look at other factors such as interest or attitude improvement toward an entrepreneurial concept that may contribute to changes in entrepreneurial career intent down the road among engineering students which may lead them to drive interest in entrepreneurship.

3. **OBJECTIVES AND METHODOLOGY**

This research was conducted to determine how entrepreneurial mindset concept in core engineering course appealed to different kinds of students and measure the effect or impact of educational experiences on engineering students. The key questions and objectives this research study hopes to address are:

(i) *How can engineering faculties/professors meet the dual challenge of preparing students with the rigor of engineering laws and rules in core engineering courses while simultaneously providing entrepreneurial mindset development information that will help engineering graduates for success in the workplace and may become a successful entrepreneur in future?*

(ii) *Does the introduction of entrepreneurial mindset concepts into a core engineering course study diminish the
learning of core engineering concepts?

(iii) **Determine whether open-ended entrepreneurship class project activities improve their self-confidence to use engineering laws and rules effectively whenever needed to bring a realistic solution to the problem/problems with appropriate business skills development.**

(iv) **Determine changes in entrepreneurial and engineering knowledge at the end of core engineering course study.**

To find answers to these questions, cognitive learning theory approach as well as hands-on and activity-based team class project approach was used. Firstly, entrepreneurship concept was presented and discussed in the class through both powerpoint and visual (video) means. Secondly, the criteria of entrepreneurship and innovation were presented and discussed in the class where students learned what the critical criteria for innovation and entrepreneurship are. Students also learned how to recognize a real-world problem by using or observing real-world device or phenomena. Thirdly, students were asked to find an innovation solution of a real-world problem by themselves. The entrepreneurial mindset concept workflow for student’s team class project is described below:

(i) Students’ form a group or team with three or four students in each team or group i.e. students were worked in a team or group.

(ii) Brainstorm individually and discuss their individual real-life idea or problem concept among own team members and come up with a unified real-world problem that can be solvable within the term (i.e. Winter 2017 term) periods.

(iii) Seek or find a realistic solution of the problem following the entrepreneurial mindset criteria: Need, Approach, Benefit and Competition (NABC) and using classroom knowledge learned in core engineering course.

(iv) Build the real-world working prototype using CAD software, show details calculations using classroom knowledge, perform cost estimation and build a business model.

(v) Compare the prototype performance with the available similar product in the marketplace.

(vi) Benchmark benefits and cost competition regarding business model.

(vii) Submit final class project report containing all components of entrepreneurial mindset concepts.

Students were assessed through survey questionnaire of pre- and post- entrepreneurship class project experience to determine changes in core engineering concepts and entrepreneurial content knowledge, entrepreneurial self-efficacy and engineering career intent. Survey questionnaire covered multiple instructions areas such as how effective the real-world connection classroom videos, basic knowledge about entrepreneurial mindset concept, course learning experience, etc.

4. **CLASSROOM ENVIRONMENT**

The classroom environment was designed based on the philosophy of “guided discovery” as described in the literature [10-15]. For the implementation of restructured fluid mechanics course materials, a number of tools or processes were used to facilitate students’ learning of core fluid mechanics concepts during Winter 2017 term at Kettering University such as:

(i) **Concept building:** Description of core engineering course, fluid mechanics, concepts: rules or laws or definition. Derive or form relevant equations or formulas. These formulas or equations first derived or generated by the instructor and then confirmed by the students. The instructor provides feedback on any misconception students may have concerning the formula or equations representing the rules or laws.

(ii) **Concept map:** Contained all important concepts introduced in the classroom including relevant equations or formulas within the each topic area. The instructor presented worked-out examples in the classroom blackboard – showed and discussed how to use the concept equations or formula to solve the real-world problem step by step. Once multiple in class worked-out examples are done by the instructor, then homework assignments were sent to students and asked to solve to reinforce the core concept they learned in the classroom. In class concept-based quizzes were taken to evaluate the performance of using the concept map which weight 10% of course grade. Homework was graded to evaluate the students’ performance on using concept map which weight 10% of course grade as well.
(iii) Real-world connection videos related to core concept: Real-world connection video related to each core concept were created and presented in the classroom. Students were able to see how the core concept they just learned in the classroom is connected or used in developing or designing the real-world working device. Visualization of the concept in action helped students to be focused and pay keen interest in the core concept learning.

(iv) Entrepreneurial concept presentation and visualization: Entrepreneurial mindset concept development presentation and videos were shown in the classroom periodically to build and enhance students’ interest in the topic areas. Videos of entrepreneurship work done by students at their level at other educational institution were also shown to ignite the intuition of students’ desire in entrepreneurial activities.

(v) E-learning resource: At the end of each class lecture and presentation, the files and slides containing the core concept introduction and discussion were posted online through Kettering University’s Blackboard system or depository. The core concepts were presented in a clear and concise manner leaving no room for ambiguity about how they should be applied or implemented and what they mean. Students’ are encouraged to download the lecture and presentation files from the online Blackboard depository. The online Blackboard system was also used to communicate with students’ in need of assistance or further help. The online blackboard system was also served as students’ grade tracing and performance improvement monitoring.

5. ASSESSMENT, EVALUATION, AND ACQUISITION OF COURSE CONTENT KNOWLEDGE

There are several assessment methods available in the published literature related to students’ classroom learning experiences where authors emphasized the need for compatibility between the assessment method and objectives of course learning process in core engineering subject [12-16]. Some resources that primarily focused on assessment tools and techniques were proposed in several studies [10-16], but they are not nearly compatible with the entrepreneurial mindset concepts instructional method. Hence, a number of widely used assessment tools such as objective and subjective, formative and summative were employed to make certain that the desired outcomes were being measured to evaluate the impact of entrepreneurship concept infusion along with real-world connection visualization on students’ learning, critical thinking skills enhancement and problem-solving skills improvements. The tools or materials used for assessment were as follows:

(i) Students’ performance on homework assignments, conceptual quizzes, midterm and final exams.
(ii) Students’ open-ended out of the box thinking based entrepreneurial team project report.
(iii) Examination of students’ concept maps.
(iv) Pre- and post-survey questionnaire answer filled by the participating students exposing entrepreneurial mindset concepts in core engineering course, fluid mechanics course during Winter 2017 term.
(v) Results of the end of the term course evaluation by participating students.

Some of the tools used for assessment focused on student’s independent learning experiences where the emphasis was placed on the ability to solve an unseen problem such as concept quizzes and homework assignments in which students must identify a solution approach and find the solution using concept maps. Students’ must also be able to use team-based skills to identify a real-world problem around them and produce a realistic solution satisfying the entrepreneurial mindset concepts criteria. Finally, students must produce a final open-ended entrepreneurship class project report detailing the entire thought processes with relevant documentations including an innovative business model for marketing their innovative solution.

Acquisition of core concept knowledge is a primary objective of a core engineering course study like fluid mechanics course. To achieve the objective, the instructor should use an effective strategy to balance between core engineering concepts and entrepreneurial mindset concepts while introducing course learning materials in the classroom by applying disciplinary concepts in multiple contexts.

6. RESULTS AND DISCUSSIONS

To assess the impact of the restructured lecture materials, in fluid mechanics course, on certain desired abilities of students’ learning outcomes and to determine students’ level of agreement with entrepreneurial mindset concepts infusion in the restructured lecture materials, an innovation to entrepreneurship (I2E) focused questionnaire was
prepared. The same sets of questionnaires were distributed among the participating classroom students both at the beginning and end of the term and responses were collected for the assessment and performance evaluation purpose. Figure 1 shows the students’ response on whether increased understanding of core concepts was achieved using real-world connection video presentation in the classroom or not. From Figure 1, we can see that at the beginning of the term almost all of the students’ had no idea about how the core concepts in core engineering class (Fluid mechanics course) can be related to the real-world scenario or working device. At the end of the term survey results clearly indicated that students’ understood the core concepts while connected it to the real-world scenario and hence the students’ end of the term response was overwhelmingly as strongly agree or agree on categories. It implies that real-world connection video presentation helped students to understand the core engineering concepts a lot.

![Figure 1: Students’ agreement on increased understanding of core concepts using real-world connection video presentation in the classroom.](image)

Figure 2 represents the knowledge of entrepreneurship skills among students at the beginning and end of the term. From Figure 2 it can be seen that at the beginning of the term most of the engineering students were unaware about the entrepreneurship skills whereas at the end of the term students awareness about entrepreneurship skills improved sharply. It seemed that the students’ awareness about entrepreneurship changes due to the open-ended entrepreneurship mindset concept class project team activities and hence changed their outlook at the end.
Figure 2: Students' knowledge about entrepreneurship skills at the beginning and end of the term.

Figure 3 represents students’ response concerning business model development for marketing the solution of their team project problem. From Figure 3 it can be seen that at the beginning of the term very few students (about 1~5%) have an idea of business plan or model development. After engaging in the entrepreneurship team project activities, students’ perception about the business model development of their product solution changed to about ten times (about 45~48%). It indicated that the entrepreneurial mindset concept team project increased engineering students’ business skills development greatly.

Figure 3: Students’ response concerning business skills development.

Figure 4 showed the students’ response regarding career intent in the future i.e. whether students’ were interested to change their attitude in the future for working towards start-up instead of their usual professional career. From Figure 4 it can be seen that at the start of the term few students, 5%~7%, were thinking to change their career in the future to work towards a start-up business. Surprisingly majority, more than 70%, of the students’ abstained from answering
the question, i.e. no response. It indicated that at the beginning of the term majority of the students’ either have no ideas about start-up business or they were not interested in it.

![Figure 4](image)

**Figure 4:** Students’ response on career intent: whether students’ were interested to work toward start-up in the future or not.

At the end of the term majority (about 77~80%) of the students’ expressed their strong desire towards start-up business career. It implied that majoring of engineering students’ seriously lack vital information of entrepreneurship skills as can be seen from Figure 4.

Figure 5 represents the students’ response on entrepreneurship mindset concept based teaching method in core engineering course. From Figure 5 it can be seen that at the beginning of the term majority of the students’, about 70%, were preferred not to express their opinion on this issue as they filled no response option. It is due to the fact that may be all these students’ were not sure what is meant by an entrepreneurship mindset focused core engineering class or they may be not interested in it. Survey results at the end of the term showed that most of the students were able to understand the real-world connected entrepreneurial mindset concept based restructured fluid mechanics class and enjoy the most as indicative of their overwhelmingly positive response at the end of the term. More than 90% of the students’ population in the class gave a favorable response, either strongly agree or agree, about the restructured classroom teaching method.
7. CONCLUSIONS

In this study, a real-world connection of core engineering concept based entrepreneurial mindset infusion instructional technique was discussed in detail. The assessment tools, students’ response results and implementation of instructional materials were discussed and presented. Based on the results of the pre- and post- survey questionnaire and instructors experiences in implementing the restructured fluid mechanics class lecture materials the following conclusions and observations were made.

- The real-world connection/application video consisting of core engineering concepts presented in the class helped students significantly to understand the core engineering concept well.
- Pre- and post-survey results showed that participating students were able to develop or increase their knowledge of entrepreneurial mindset concepts greatly without diminishing learning of core engineering concepts in the subject matter.
- The results also showed that, as measured by students’ business skills development survey question responses, the open-ended entrepreneurship mindset class project helped to grow students’ perceived entrepreneurial self-efficacy.
- Students’ business skills development awareness could be a precursor to changing career intent from an employed engineer to a start-up owner as indicated through the students’ survey response results.
- The restructured real-world connection videos along with entrepreneurship mindset team class project activities were able to appeal a broad spectrum of students who are interested to work for a start-up owner as one of their future career goals.

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Integration Of Security And Privacy Into Project- And Process Management

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ABSTRACT

The last few months have shown that the number of threats - such as ransomware and denial of service attacks (DoS) – to our ICT systems is constantly growing and will steadily gain more and more importance for our daily life and of course for most of the companies worldwide. Beside this, mobile devices and the Internet of things (IoT) generate massive data which raise more and more privacy concerns from citizens. As a consequence the European Commission started an initiative to boost the overall level of cybersecurity and foster digital privacy in Europe. As part of these activities they passed new directives and regulations, such as the General Data Protection Regulation, that will have deep impact on the handling of security and privacy by companies inside and outside of the EU. It will require them to strengthen their security controls and when handling personal data to ensure an appropriate level of privacy as well as estimate the impact of their products and services on the privacy of people (perform privacy impact analysis).

To ensure that objectives of internal as well as external requirements to security and privacy are fulfilled, companies must refine and monitor their targets continuously. Objectives and controls for security and privacy are usually derived from a risk based approach. Therefore companies practice risk assessment and risk management for information security – if at all - on enterprise level. However, particularly in projects new systems or services are created which are in many cases generates or processes new data. Unfortunately according to definitions of project management and practical experience only general risks threatening the achievement of the project goals are handled by risk management on project level. For an appropriate level of security and to ensure compliance with legal requirements companies will have to integrate security and privacy objectives and controls also into the management of projects and processes. This will lead to implement “security and privacy by design” on process and project management level.

The paper provides basic insights on core elements of the new EU legislation and their impact on companies. It describes a framework for the integration of security and privacy into process management and project management as well as shows the need of a new role within the project and process management of a company and describes the characteristics of this role.

Keywords: Security, Privacy, Security & Privacy by default, Project Management, EU GDPR

Introduction

The last few month have shown, that the number of threats - such as ransomware and denial of service attacks (DoS) – to our ICT systems is constantly growing and will steadily gain more and more importance for our daily life and of course for most of the companies worldwide. In their Internet Security Report Symantec reports a constant high number of vulnerabilities and cyber threats [1].

Beside this, mobile devices and the Internet of things (IoT) generate massive data which raise more and more privacy concerns from citizens. Reports done in Europe (e.g. [2]) and the United States (e.g. see [3]) show that a big majority of citizens dislike the increasing disclosure of personal information and say that it is important that personal information is only accessed with their permission.
As a consequence the European Commission started an initiative to boost the overall level of cyber security and foster digital privacy in Europe. As part of these activities they passed new directives and regulations that will have deep impact on the handling of security and privacy by companies inside and outside of the EU.

Security and privacy should be a major concern of every company but the new regulations will even more require them to strengthen their security controls and when handling personal data to ensure an appropriate level of privacy as well as estimate the impact of their products and services on the privacy of people (perform privacy impact analysis).

Objectives

To ensure that objectives of internal as well as external requirements to security and privacy are fulfilled, companies must refine and monitor their targets continuously. Objectives and controls for security and privacy are usually derived from a risk based approach. Therefore companies practice risk assessment and risk management for information security – if at all - on enterprise level.

However, particularly in projects new systems or services are created which are in many cases generate or process new data. Unfortunately according to definitions of project management and practical experience only general risks threatening the achievement of the project goals are handled by risk management on project level.

For an appropriate level of security and to ensure compliance with legal requirements companies will have to integrate security and privacy objectives and controls also into the management of projects and processes. This will lead to the requirement of implementing “security and privacy by design” on process and project management level. Related to this there will be also a need for a new organizational role within project and process management.

Therefore this paper aims to describe a framework for the integration of security and privacy into process management and project management as well as to define the characteristics of the new role.

New EU Regulations

European Union’s “Digital Single Market” strategy aims to overcome geographic borders and different regulations regarding electronic communication within the union by implementing one set of rules across the EU and to “open up digital opportunities for people and business and enhance Europe's position as a world leader in the digital economy” [4]. One of its key objectives is “Strengthening trust and security”, meaning to boost the level of cyber-security by improving security while using digital media and applications, enhancing trust and inclusion and fostering digital privacy in Europe [4].

Following this strategy European legislative has passed two major regulations and is expected to follow a proposal of the European Commission for further rules to ensure stronger privacy in electronic communications [5], while opening up new business opportunities. [https://ec.europa.eu/digital-single-market/en/news/commission-proposes-high-level-privacy-rules-all-electronic-communications-and-updates-data]

NIS Directive

It’s a matter of fact that the number of cyber-attacks will not decrease in the near future. Therefore the Directive on security of network and information systems ([6]) was adopted on European level and must be transposed into national law by the member states of the EU by May 2018. Primarily the directive applies to operators of essential services (include enterprises in the energy, transport, banking, financial market infrastructures, health, drinking water supply and distribution, and digital infrastructure sectors) and digital service providers (DSPs) but also affects other companies. It does not only affect EU companies but all companies whose services are available within the European Union. Some of the core requirements are:

- **Member State Preparedness**
  States must implement a national cyber-security strategy and are required to set up a national Computer Security Incident Response Team (CSIRT) and a national NIS authority (e.g. for incident reporting)

- **EU Security Network**
Member states have to setup a cooperation group as well as a CSIRT network for effective operational cooperation on specific cybersecurity incidents and sharing information about risks

- **Incident Reporting**
  DSPs must implement technical and operational risk management measures and must follow the incident reporting protocol requiring reporting of any significant security incidents encountered “without undue delay”.

**GDPR**

The “General Data Protection Regulation” shall apply from May, 25th 2018 and aims to protect all EU citizens from privacy and data breaches in the digital world. It defines personal data as “any information relating to an identified or identifiable natural person (‘data subject’); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person”. [8]

The GDPR “lays down rules relating to the protection of natural persons with regard to the processing of personal data and rules relating to the free movement of personal data.” [8, p.32]. It is a single set of rules for all countries of the European Union implementing a “one-stop shop” for all organizations and companies within the Union which defines several obligations for data controllers accountable to demonstrate compliance and thus, setting a framework for accountability.

Some of the core aspects are [8]:

- **Data breach notification**
  Breach notification is mandatory and has to be done within 72 hours.

- **Data protection by design and by default**
  Data controller is required, both at the time of the determination of the means for processing and at the time of the processing itself, to implement appropriate technical and organizational measures which are designed to implement data-protection principles (this also include a privacy impact assessment). Also the controller shall implement appropriate measures for ensuring that, by default only personal data which are necessary for each specific purpose of the processing are processed.

- **Unambiguous consent**
  Data controllers must get and store a person’s explicit consent for processing and storing of personal data. It must be freely given, specific, informed and unambiguous.

- **Right to Access**
  On request of data subject data controller is required to provide information about whether or not personal data concerning the data subject is being processed, where and for what purpose.

- **Right to be forgotten – notification requirement**
  Data subjects have the right to have the data controller erase his/her personal data.

- **Right to restriction of processing**
  Data subject has the right to request the restriction of the processing of his or her personal data. In case of request of a data subject for erasure or restriction the data controller must inform all partners to which data was forwarded about the request.

- **Data protection officer**
  In certain circumstances (for details see [8] section 4) data controllers and processors must designate a Data Protection Officer (the DPO), who has to be appointed on the basis of professional qualities (especially expert knowledge on data protection practices and law).

- **Data portability**
  Data controller is required to provide personal data, which was previously provided by data subjects in a “commonly use and machine readable format”

Violation of the GDPR rules may lead to penalties for breaching organizations up to a maximum of 4% of annual global turnover or 20 Million Euro, whichever is greater!
At the beginning of 2017 the European Commission published a proposal ([9]) for an update of the “Directive on Privacy and Electronic Communications” (Directive 2002/58/EC [10] and the 2009 update, Directive 2009/136 [11]). This proposal includes all new forms of electronic communications and (e.g. Messenger Services, IoT). This new “ePrivacy” framework intends to complement the GDPR (see above) and therefore also going from a Directive (to be implemented in national laws) to a Regulation on EU level across the “single digital market”.

Some of the core aspects are [11][12]:

- **New players**
  Privacy rules also apply to messengers (like WhatsApp, Skype) and the Internet of Things (IoT)

- **Communications content and metadata**
  Privacy is guaranteed for communications content itself and for the metadata of the content, where metadata needs to be anonymized.

- **Simpler rules on cookies**
  The proposal expresses that no consent is needed for non-privacy intrusive cookies. Former cookie provision is streamlined and will be more user-friendly.

- **Protection against spam**
  Unsolicited electronic communications by emails, SMS and automated calling machines will be forbidden.

Security & Privacy by design

The term “Security by Design” was originally defined in the context of software application development and means that security measures have to be an integrated part of the software development lifecycle starting in the planning and design phase. Security controls are developed and tested together with all the other components. This approach ensures that security is fully integrated into the product and not provided as an “add-on”, which consequently means more trustworthy and secure software.

One of the first methodologies following this approach was Microsoft’s Security Development Lifecycle [14]. First published in 2004 the concept focused firstly on security. During the last years the privacy (data protection) components have been added. The current version defines the Secure by Design, Secure by Default, Secure in Deployment, and Communications (SD3+C) [15] which is accordingly defined for privacy. Figure 1 shows the SDL.

![Figure 1: Microsoft's SDL](image)

Following this approach “Privacy by Design” can be defined accordingly to the security definition, including data protection from the beginning over the whole life-cycle. It is important to mention that protecting privacy always requires appropriate security controls!

Another methodology was defined by the PRIPARE (“PReparing Industry to Privacy-by-design by supporting its Application in Research”) Project which was founded by the European Union’s Seventh Framework Program for research, technological development and demonstration. As a result the published the “Privacy- and Security-by-Design Methodology Handbook” describing in detail how to integrate privacy (and security) into system engineering. PRIPARE processes and phases are shown in Figure 2.
Integration of Security & Privacy

All found methodological approaches for “Security and Privacy by Design” are primarily focused on system development. But in practice in companies there are several projects without having its main focus on system development. As security and data protection is not limited to system development compliance needs for internal and external data protection and information security requirements have also been met in such projects. Thus, the integration of security and privacy also for “non-development” projects often has to play a major role. Though, in reality usually these projects face the challenges, that project teams and project leaders are not aware of any possible security risk or privacy impact of the project. In many cases the necessity for security and privacy or the potential impact is recognized just during project progress or even not until project results are to be implemented as new process or to be integrated into other business processes. The consequences are among others time delay, additional costs and inappropriate security and data protection controls because security and privacy has to be added on top.

To ensure appropriate integration of security and privacy following actions have to be taken:

1. Provide organizational Environment and infrastructure
2. Implement security and privacy analysis as part of starting phase in any project
3. Implement a security & privacy staff position as part of the project management

Provide organizational Environment and infrastructure

“Privacy is not an emerging feature within organizations, privacy requires a high-level support accompanied with the fostering of a privacy culture.” [16, p20] First of all it is inevitable to get comprehensive management support, to implement an organizational security and privacy architecture and foster security and privacy awareness throughout the company. [16]

There are multiple factors and relevant technical areas that influence a framework for security and privacy. For most of them there are international standards, frameworks or best practices that provide guidance and should be reviewed and taken into account to be used to formalize processes and therefore enhance quality. Areas and standards to be taken into consideration are for instance Information Security (e.g. ISO 27001, 27002), Risk Management (e.g. 27005) or quality management (e.g. ISO 9001).

Implement security and privacy analysis as part of starting phase in any project

For any system development project it should be clear to follow one of the well known approaches for secure system development. For all other projects it is necessary to clarify the security and privacy risks and impact. Therefore for each project a responsible “Security & Privacy Officer (SPO)” is assigned, who is responsible for performing a Security Risk and Privacy Impact Analysis in cooperation with the project leader. Based on the result it is decided
whether the project needs to be supported by a security & data protection expert. In case a project does not have any severe security or privacy impact project goes on “as usual”. If there are security & privacy implications then a security&privacy project management will be implemented to design security & data protection controls and monitor their implementation. Figure 3 shows the process and the steps.

![Security & Privacy by Design as part of the project starting phase](image)

**Figure 3: Security & Privacy by Design as part of the project starting phase**

Figure 4 shows the tasks the responsibilities for the startup phase, which can be considered consisting of an analysis and a design phase separated by the security/privacy impact decision.

![Tasks and roles in the analysis and design phase of a project (modified from [18])](image)

**Figure 4: Tasks and roles in the analysis and design phase of a project (modified from [18])**

As part of the design phase security & privacy controls to be implemented are specified. To ensure appropriate implementation ISO 9001 ([20]) demands the definition of quality objectives for relevant functions and processes. Quality gates are meant to ensure the quality requirements and have to be defined for the security and privacy controls by the project leader in coordination with the Security and privacy project officer.

**Implement a security & privacy staff position as part of the project management**

The security and privacy project officer described above shall be implemented as a staff position within the project to ensure appropriate influence and severity. Decisions and changes for the project have to be always reviewed by the SPM and evaluated for security and privacy impacts. In case of a conflict between the project leader and the SPM general management have to be involved to assess the situation and make a decision.
Security & Privacy Project Officer

The described integration framework requires an additional new role – an security and privacy project manager which ensures the implementation of the “security and privacy by design” approach in relevant project and processes. While the Data Protection Officer (required by the GDPR) is the designated interface regarding “data protection” between the “outside” world and the company, the Security and privacy project officer has to manage the processes to ensure the implementation of appropriate security and privacy controls within a company and the objectives of the security guidelines are fulfilled.

This position needs a set of appropriate qualifications. The new role always operates with a focus on information security and data privacy. Therefore it is necessary to know relevant standards as well as how to apply and implement them into projects and the process management within the specific company. The new role requires appropriate knowledge to manage a project or process regarding data and information security. To understand the backgrounds, interfaces, requirements and requests, the following skills are required:

- Data privacy
- Information security
- Project management
- Process management
- Quality management
- Requirements engineering
- Software engineering

While performing the new tasks, numerous non-technical challenges will occur. Thus, the following skills are extremely helpful:

- Communication skills
- Conflict management
- Cooperation capability and Assertiveness
- Moderation techniques

From Project to Process
Within a project the team has to ensure, that project results are sustainable. According to [21] each project results in a process (see Figure 5). These processes have to be monitored and evaluated according to the same security and privacy requirements.

Conclusion

Compliance with external and internal security and privacy requirements is essential for companies today. Therefore security and privacy has to be integrated in the whole organization. “Security and Privacy by Design” seems successful approach if implemented as part of all projects and processes as shown in this paper.

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References


Accounting For Brands: Imprecise Reality Or Precise Fiction?
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ABSTRACT

Recognizing brands on the company’s statements of financial positions (balance sheets) as an identifiable intangible asset is a relatively recent development in corporate financial reporting. The debate over whether we should capitalize the value of brands and include them as fixed assets has become a great controversy.

Unlike the marketing domain, the epistemological basis within the financial accounting domain is dominated by rules. Those rules are supposedly grounded on overarching conceptual frameworks (IASB 2010) and the results of institutionally led external consultation processes that legitimatise the conceptual frameworks and rules, and the accounting regulatory bodies creating them, in the ‘eyes’ of society. However, the reality is somewhat different - brands are the most valuable assets of most major companies, and it is argued that the exclusion of the value of these assets from company financial reports questions the usefulness of current financial reports for decision-making.

The main rules governing the accounting treatment of intangible assets is given by the international accounting standard IAS38 (IASB 1998), which states that “brands, mastheads, publishing titles, customer lists and items similar in substance that are internally generated should not be recognised as assets” (IAS38, para 63).

This paper seeks to explore the nature of this rule, and more, by reference to asset recognition criteria in the IASB’s Conceptual Framework for financial reporting (IASB 2010). The study also evaluates the methodologies used by marketing companies in brand valuations.

Whilst the paper is inevitably accounting biased, the subject matter is nevertheless of interest to marketers and other managers with a growing realization that brands are one of the most valuable intangible assets that firms have.

Keywords: Intangible assets, Brand assets, Brand equity, Accounting Standard-Setting, Value-Relevance.
Democracy And Critical Aesthetic Education Of Everyday Life
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ABSTRACT

On the theoretical background of the “society of the spectacle” (Debord), the culture industry and the theory of half-Bildung (Adorno) the paper’s aim is to identify aspects of (social) perception constituted by contemporary societal processes everydayness. The narrow focus on education to wage-labor and the musealization of culture neglects moments of education that are inevitable concerning processes of human formation and development.

These anti-educational conditions give new meaning and importance to the dimension of aesthetic education. Aesthetics used to be a fundamental part of the classical concept of education opposing the loss of the self in modernity; it was meant to be a counterpart to the threat of the fragmentation of human existence. Following the one-sided understanding of educational training as accumulation knowledge, creating technical innovation serving the needs of the labor market as well as the musealization of culture, the paper is to show how to overcome the reification of consciousness. It is the disaccord of everyday and everydayness (Lefebvre) hidden in the orchestra of social actions and (historical) products showing dissonances. The task of critical aesthetic education is to sense everydayness in its societal dissonances and to create perceptual disturbances in order to de-garbage the alienated mind and to struggle against cultural illiteracy.

Keywords: Democratic Education, Citizenship Education, Critical Aesthetic Education, Cultural And Educational Dissonances
Information And Communications Technology In Africa: Enabling Big Data, To Enable Development

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ABSTRACT

In 2009, United Nations (UN) established The Global Pulse, an innovation lab where big data from around the globe is analyzed. The Global Pulse works with universities, corporations, and other UN programs including the World Health Organization, the United Nations Development Program (UNDP), the World Food Program (WFP), The United Nations Children’s Emergency Fund (UNICEF), and the Joint United Nations Programme on HIV/AIDS (UNAIDS).

To implement and reap the benefits of big data projects, there must be a robust Information and Communications Technology (ICT) infrastructure. This paper examines the infrastructure on the African continent, which is home to 34 of the world’s least developed countries (LDCs) according to the United Nations (UN). Over the past few decades, there has been much investment in projects such as Africa One, an undersea fiber optic cable around the continent and those initiated by the Regional African Satellite Communication Organization (RASCO). These projects should provide the necessary infrastructure for countries in Africa to move forward in big data, and the existence of a solid infrastructure should mitigate the costs for countries, companies, or organizations to start big data projects.

In this paper, we examine the impact of ICT infrastructure projects on big data efforts in two African countries that are classified as “least developed.” The findings can be used to compare ICT infrastructure readiness for big data projects in other areas of the world.
The Use Of E-Learning In Social Work Education With Native Communities

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ABSTRACT

Since 2013, University of Quebec in Chicoutimi’s First Nations Centre Nikanite defined an e-learning program for Social Work, aimed at students in the native communities and social workers intervening with natives living in urban environments. This program includes four compulsory courses and one optional course. The main focus is the development of intervention skills to help with deviant, dependant, and delinquent behaviors or offenders, and provide accurate social care for children, youth, and elderly people.

For the design and development team, this was a real challenge. The program must be delivered in French - the second or third language of the target audience. Students are geographically distributed throughout Quebec where electronic services and equipment vary. Levels of experience are different, in the field of social work as well as in using technologies. Students are not available at the same time. The needs are enormous and a trained workforce is expected quickly. Since this program must help develop competencies in a social work context, students need to collaborate and interact in an authentic environment.

These limitations required team members think in terms of optimizing learning within a virtual context, based on imagination, experience and reinvestment instead of interactive technology. The purpose of this poster is to present the learning methodologies and hypotheses on which were built a mixed learning approach based on cognitive psychology in a socio-constructivist environment. The student is invited to resolve native social issues and problems in an asynchronous, collaborative, virtual context including both imaginative characters and real people case studies. Students meet the characters, develop their knowledge in a flipped classroom approach and reinvest their newly acquired knowledge in the next learning experience. We believe this mixed approach can lead students to better intervene in their future profession.
High Citizenship Through Experiential Learning, Cultural Empathy And Affective Reflection

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ABSTRACT

High Citizenship Model through Experiential Learning, Cultural Empathy and Affective Reflection is an emergent model have its place on a macro model entitled “Playing History,” that is a comprehensive program that combines history, the arts and affective reflection as a tool to improve academic achievement, social justice empathy, and artistic development. As an emergent model, it is expected to promote academic achievement, multicultural arts development and social justice empathy. Situated as a study proposal for Teachers’ Preparation Programs, a pilot course of 1.5 hours per week will support the curricular content for the humanities courses, which have a general description in several institutions as follows: Critical study of human cultural evolution from the origin of the cities and the urban life, until modern society. Special attention is given to critical cultural events promoting understanding of the moral, social and cultural aspects of the society in the global context.

This study is structured on an intertwined conceptual framework that combines three similar and unique educational theories: Bentz & Shapiro’s Mindful Inquiry (1942), Harris & Girard’s Instructional Significance (2014) and Maxine Greene’s Aesthetic Education Philosophy (1995 - 2001). The three concepts focus on curricular interconnectivity, relevant significance and the relationship of these aspects with the self, others and the whole. As stated by Peraza & Gonzalez (2016), knowing, knowing how to do and consequently know how to act is the transition from the intra or individual discipline level to the multi or various level of learning, continuing to the inter or connectivity between topics or disciplines and finally to the trans level or the concept beyond disciplines which are all aspects simultaneously focused on the human condition.

Mindful Inquiry promotes that researcher/educators should be familiar with the language, culture, intent, and purposes of research in their disciplines reflecting the connection of the investigation to the awareness of self within his/her own context (integrating personal, professional, and intellectual competence). Thus, mindfully means to pursue the individuality as a researcher/educator and to reach a place in the inquiry community.

Instructional Significance describes pedagogical knowledge that serves as a lens through which teachers view the content they teach across historical considerations, teaching considerations (interconnectivity across the curriculum), and students & community considerations (how it molds their cultural perception and practices in order to leverage the teaching/learning process).

The aesthetic education philosophy indicates how the works of art we encounter through the approach known as aesthetic education or aesthetic encounters, are “situations.” Meaning that the perceivers of a given work of art apprehend that work in the light of their backgrounds, biographies, and experiences. This opens aesthetic educators to the likelihood of more than one interpretation to the artistic work and the empathy to those backgrounds and experiences.

Scientific based evidence will provide the structure for the High Citizenship Model in educational scenarios as a synergistic approach to excel ground-breaking alternatives to freshen up the human being consciousness. As illustrated in the figure the below, the synergy for this new kind of citizenship consciousness develops from the interconnectivity of the human inquiry nature, but with contextual significance enhanced by the aesthetic experience.
Conceptual Framework
High Citizenship: A Justice Enactment Through Experiential Learning, Cultural Understanding & Affective Reflection

Mindful Inquiry
Investigation is connected with the awareness of self and the own context

Instructional Significance
Pedagogical knowledge through teachers lens from content to historical/cultural considerations

Experiential Learning

Cultural Understanding

Aesthetic Education Philosophy
To apprehend art in the light of the perceivers’ backgrounds, biographies and experiences

Affective Reflection
Trends Safety And Security Impacts For The Internet Of Things (IoT)
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ABSTRACT
With all the connected devices with the Internet of Things (IoT) and so much data to be collected the creators need to develop safe and secure devices that will keep the consumer and the data safe, secure and private. There is not a day that goes by when one cannot think about the idea of not being connected and using devices that make the tasks of daily life simpler. This paper will describe the growing trends behind the Internet of Things and how to ensure safety and security when using connected devices. The paper will also discuss the importance of how to develop safely and securely new devices as well as how consumers need to be made aware of the consequences of using IoT devices. It will also discuss the impact of the Internet of Things and measures that have been taken to deal with security and privacy. Additionally it will discuss how Internet of Things can be taught in a course.
Fluency Strategies For Beginning Readers
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ABSTRACT

Fluency in reading is crucial for comprehension of the written word. Traditionally we concentrate on fluency once a child is a proficient reader. However, fluency is a skill than can be successfully addressed with beginning readers. This article presents practical strategies to help beginning readers become fluent readers. Of course, these strategies may be used with proficient readers, however, the earlier we begin to use them, the sooner children will internalize the concept of fluency and begin practicing it. These strategies may be used with English readers as well as second language learners.

Keywords: Fluency, Strategies, Beginning Readers, Comprehension

INTRODUCTION

Learning to read is one of the most difficult tasks we accomplish. While other tasks we learn such as walking, talking, and eating on our own come naturally and are essential to our normal physical development, learning to read is a skill which is required of us, yet is foreign to our normal growth. Today’s society, however, is a literate society, dependent on the written word. Therefore, a person who is unable to read fluently is at a disadvantage, one which severely impact their life. While most children receive instruction in decoding, in unlocking the connection between what is spoken and what is written, in 1999 the United States (US) Department of Education reported that 71% of students in fourth grade were not proficient readers (U.S. Department of Education,1999). In 2013, the Annie E. Casey Foundation’s “Kids Count Data Book” reported that 66% of fourth graders were not proficiently reading material written for them at their grade (The Annie E. Casey Foundation, 2015).

HISTORICAL BACKGROUND

Long recognized as a component skill of reading, fluency was considered to come naturally as children practiced their reading. Early reading instruction in the US was characterized by the use of spellers in which children were expected to learn to spell a word before they could read it, syllabaries in which they practiced reading and memorizing syllables, and elocution in which children were required to read aloud, memorize stories, and recite them to demonstrate reading proficiency (Rogers, 2001; Wolf, 2017). Fluency was expected to “happen” as the child read more and learned the more complex aspects of reading. The crucial position that fluency holds today as related to comprehension was not recognized until the National Reading Panel listed it as one of the pivotal skills necessary for becoming a successful reader, along with phonemic awareness, phonics, vocabulary and comprehension (National Reading Panel, 2000).

THE IMPORTANCE OF FLUENCY

At its most basic level, reading fluency is the ability to read accurately and with sufficient speed that allows you not only to decipher what the word says but be able to understand what the word itself means and how it relates to the whole passage. Without fluency, children are simply decoders, word callers who are able to decipher what the letters in the word say, letter by letter, or syllable by syllable, and can then possibly recognize what the word means individually, but are unable to understand how the word is related to and/or influences all the words they had read previously. Without fluency, comprehension is at the most minimal level compromised and at its furthest ramification unattainable.

Traditionally, children are expected to learn to read in first through third grades, acquiring all the skills related to the different letter combinations, consonants, digraphs, diphthongs, vowels and their differing sounds dependent on position within the word and syllable. Then in fourth grade and above they are expected to use these skills to read
textbooks on science and history and math, understand what they read, and be able to use and apply this knowledge. As data cited above indicates, this is not possible because most children are not proficient readers in fourth grade. Without fluency, children are unable to read those textbooks and understand and learn from them. Fluency, therefore, is crucial, and there is a growing realization that fluency must be addressed much earlier than third or even second grade (Bashir & Hook, 2009; Miller & Schwanenflugel, 2008; Rasinski, 2014; Schwanenflugel, Meisinger, Wisenbaker, Kuhn, Strauss & Morris, 2006).

Based on extensive experience as a teacher of record, reading specialist, principal of various schools, and an observant researcher, the author suggests that as soon as children are phonemically aware, have made the connection between spoken sounds and the written symbols (letters) for those sounds, and have acquired the concept that letters can be combined in order to make words which can be read, then children should be engaged in fluency activities. Since reading is a developmental process, this convergence of understandings and knowledge (phonemic awareness, sound-symbol correspondence, and letter blending and segmentation) can occur early for children who attended preschool and have a rich home literacy life and later for children who rely on school for these foundational skills, the timing for the incorporation and frequency of fluency activities into classroom instruction will rely on the teacher’s observation of student acquisition of skills.

**FLUENCY STRATEGIES**

The follow strategies represent a few fluency activities which may be used with beginning readers in order to highlight the concept of automaticity that once a child is able to decode (read) a word they should learn it so they can read it automatically upon seeing the letter combination without the need to decode it, and can then devote their brain capacity to comprehension.

**Double Time Word Lists**

The objective of the “Double Time Word Lists” is to have children read words quickly from a list without decoding them. Double Time Lists are lists of single words, usually sorted by difficulty of skill (such as Dolch words) written on a chart in column format, 3 columns to a page. Children read the lists as a group, reading each word twice. This double reading allows the child who does not know the word the opportunity to listen while the word is read the first time by those who know it and then to read it with the group the second time it is read aloud. The individual words are also discussed separately, providing the opportunity for the children to learn the meaning of the words before encountering them in their books. These lists should be read daily, if only for five or ten minutes, and the children can be challenged to read the lists “quicker today than they did yesterday,” challenging themselves to read faster. These “Double Time Lists” can also be converted into “Individual Student Double Time Lists” which children can have at their desks or take home for practice.

**Flash Cards**

The objective in using “old fashioned flash cards” is to expose the students repeatedly to the words so they get accustomed to seeing them and can read them automatically without decoding. A blank card could be included with the flash cards on which the children record when they read the words with an assigned buddy or a parent and also note how long it took them to read through the words. Once the child has read the cards for a specified number of time or to a degree of pre-determined mastery, the child will make an appointment with the teacher to read through the cards so the teacher can identify which cards are mastered and can be replaced with new words. The words which are mastered can be moved to “Word Banks.”

**Word Banks**

The objective of the “Word Banks” is to show the student the amount of words they have learned and to continue to practice reading them and using them in every day writing. Flash cards that are mastered are moved to a child’s “Word Bank.” A Word Bank can be as simple as a white envelope which the child decorates or as fancy as boxes small enough to fit into the child’s desk. Word Bank words need to be re-read on a regular basis (once a month or a grading period) with a child in a higher group, an upper grade teacher or even a parent helper. Word Bank words that are not
recognized on sight need to be returned to the flash card pile. Children should be encouraged to use the words in the Word Banks when they write. They can practice alphabetization skills once a large enough set of words have been deposited into the Bank.

Words in a Box

The objective of “Words in a Box” is to reinforce the idea that once a child has decoded a word he should then learn to read it “on sight,” automatically. This is a small group activity. In this task, words are written on slips of paper which are then deposited into a box large enough so children can reach in and retrieve one of the words. These words can be taken from the Double Time Word Lists or the books the children are reading. A timer is set and children take turns pulling one slip of paper out of the box. The teacher then begins with one child who needs to read the word aloud correctly, without decoding. If the child needs to decode a word, then he is encouraged to “decode in his head.” If the child reads the word correctly and fluently, he receives a point and can pick another word from the box. If the child hesitates or begins to decode aloud, the teacher should allow him more time and proceed to the next child, reminding him to decode in his head. If the child is unable to read the word the next time around, the teacher is to say the word for him and let him choose a different word. He does not get a point for that word and the unread word is returned to the box – perhaps the child may choose that word the next time! If the child is having tremendous difficulty reading the word, the teacher is to tell him the word and let him choose a different word, returning the unread word to the box. When the timer goes off, children and teacher celebrate how many points they received, noting if they read more words this time than the last time they played.

Phrases in a Box

Sentences in a Box

These are both variations of “Words in a Box” except that either phrases or complete sentences are placed in the box.

Choral Reading

Choral Reading is an activity in which children read aloud in unison from a chart, either with the whole class or a small group. Though choral reading can be used at any grade with different types of reading, when used with beginning readers it is recommended that you use familiar poems, nursery rhymes, or even songs to which the children have already been exposed. If songs are used, the children are not to sing the song, simply read it aloud. This provides a familiar foundation from which to practice since the children will already know some of the words from having sung them or heard the poems and can them match the words they speak to the words written on the chart.

Radio Reading/TV Reading

In this activity, children are informed that announcers on the radio and reporters on the TV are not simply just talking the news, they are actually reading it. Children are then encouraged to write their own news stories (these could center around class activities, school, community or even world events) which they then report during a structured time during the week.

Writing Your Own Commercial

Children hear commercials all the time. Children are encouraged to write their own commercials about a favorite toy, food, place and then read them aloud to the class. These can be video-recorded and then shared with others.

CONCLUSION

This paper presented activities which can be used with beginning readers first to impress them with the importance of reading fluently and then to provide practical activities to engage in which would allow them to practice reading words so that they progress from decoding to the point of automaticity. Fluency is a vital skill which children need to develop in order to enhance their comprehension of written content and engage in meaningful thinking tasks.
REFERENCES


Socio-Cultural Approach Of E-Learning As The Media For Learning In Universitas Padjadjaran, Indonesia

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ABSTRACT

The socioeconomic and political situations in Indonesia as a developing country is considerably dynamic. Since 1998 Indonesia is having a more open, democratic political atmosphere. Also, the surge of Income per capita raises the need for higher education among the middle class in Indonesia. However, this relatively decent situation may encounter some challenges. Currently, there is massive interest to obtain a degree at the state university with high-quality education and low-cost tuition fee. However, there are barriers to entry such as the lecturers’ shortage, low number of the decent facilities, like the libraries, and low motivation on self-learning attitude among students in Indonesia. Hence, it is crucial to address a way to harness technology as a media for learning within the socio-cultural approach. This study explores the issue of E-learning as the media for learning in Universitas Padjadjaran. This study used the descriptive method with some interviews, observation, and literature study. The results suggest that E-Learning enables the students to acquire learning materials from the experts in their field but. E-Learning demands active participation and independence from students in term of studying. Nevertheless, e-learning developers should take into account the infrastructure facilities, the applied learning system, the motivation of lectures to design online lectures, and students’ communication pattern. Hence, the technological, social and cultural approach should be accounted for a further development of E-Learning model.

Keywords: Socio-Cultural, E-Learning, Media For Learning, Indonesia.

INTRODUCTION

Indonesia is a country with a relatively large population, approximately 262 million in 2016. Stretching from east to west, this archipelago covers three time zones measuring 5,120 km (3,181 miles) and 1,760 kilometers (1,094 miles) from its northern to its southern borders

Economic development is growing at a pleasantly surprising pace and encourage the sustainable industries to thrive. Economic growth also supports the middle class in Indonesia. The developments of these two sectors has undoubtedly contributed to the business opportunities among the upper class and small entrepreneur groups progression which also encouraged the emergence of higher education needs in various fields. The greater interest to pursue a higher study is also related to the priyayi (Dutch-era class of the Nobles of the Robe) culture in Indonesian society which considers a university degree to be respected more in a social status rather than the practical skill. Nevertheless, the desire to pursue an academic qualification at the state universities must encounter the lecturers’ shortage problem.

Meanwhile, the Internet development continues to grow, yet it is concentrated in the major cities around Java Island. Surveys conducted by the Association of Internet Network Providers Indonesia (APJII) in 2016 found that there are as many as 132.7 million people in Indonesia who have access to the Internet of the total 256.2 million. According to APJII, as reported by Kompas.com, this indicates an increase in internet users for about 51.8 percent compared to the 2014’s number. The same survey conducted in 2014 found that there are 88 million Internet users in Indonesia.
Universitas Padjadjaran is one of the state universities located in Bandung and Sumedang, West Java. This university has an outstanding reputation which often lures prospective students in Indonesia. Currently, Universitas Padjadjaran has the largest number of students (31,342 active students in 2016). Albeit it is not well-distributed, most courses have a quite large number of students, particularly the social sciences course. In consequence, the higher number of students requires higher teaching workload. Besides, the lecturers' competencies do not thrive as much as the number of prospective students.

However, a state university cannot hold the all year-round recruitment of prospective lecturers as well as determine the number of lecturers hired. It is due to the government policy that the University and the Faculty only have the authority in the academic qualification selection. Therefore, the number of qualified lecturers cannot meet the demand of increased student enrollment.

To exemplifies, the university also encounters the problem of the lack of qualified lecturers, particularly in the natural science courses. Most lecturers do not have further understanding in the related field, and there are just a few who masters the specialization in cognate fields. There are some classes administered by the lecturers who have no competency on certain subjects. As a result, some courses cannot accommodate students’ need in the primary subject.

However, the university has done everything possible to tackle this problem. Firstly, it hired the non-civil servant lecturers to fill the needs in the academic staff. The recruitment policy for these lecturers is entirely determined by the university as well as its budgets. Secondly, The University and the Faculty also provide the opportunity for some lecturers to further their study. Thirdly, the university enables the lecturers to explore their fields comprehensively through research, seminars, and the community development. It means that all activities are integrated and have focused on a particular field. It is expected to improve the quality of teaching expertise in certain subjects.

Unfortunately, all the development programs and training take a relatively long time and cannot quickly grow the lecturers’ quality to fill the needs of appropriate learning condition. Hence, the optimization of technology is becoming an important strategy in the learning process. The E-Learning working units in the University is an opportunity to harness the potential of communications technology in responding the problems faced.

Nevertheless, the use of E-learning is not optimal yet and encounters various constraints. Obstacles encountered involve many aspects, not specifically related to technological problems. Henceforth, this research tries to explore the efforts to improve the use of e-learning as a media for learning from a socio-cultural approach.

**LITERATURE REVIEW**

There are various challenges in hosting the higher education in the university. They are mainly related to efforts to improve the quality of education for the students continuously. University graduates are expected be the agent of change in the extent to contribute to the community.

Higher education must confront ten areas of concern. According to the American Association of State Colleges and Universities (AASCU) State Relations and Policy Analysis Team (2010), among the variety of factors projected consists of internal and external factors. Institutional operation, quality and accountability programs are among the internal factors. Whereas external factors includes the structure economic concerns, competition for profit institutions, particularly, and globalization affecting the structure and composition of higher education system in the future. (Davidson-Shivers; 2002; Friedman; 2005; in Surry Stefurak and Gray, 2011; 327). The described issues require learning strategies that can diminish some problems existed within the learning process.

Related to the technological-based learning, Haughey (1998), in his theory, reveals three internet-based learning models, namely Web Course, Web-Centric Course, and Web Enhanced Course. Web Course is a learning model that fully uses the internet without face-to-face encounters. The Internet provides materials, discussion, consultation, assignment, training, and assessment. Web-Centric Course is a model that combines the distance learning system by using the internet (online) with the traditional face-to-face encounters. The web-enhanced course is a model that uses the Internet to improve the quality of learning in the classroom. Through this model, the internet becomes a
source to provide the enrichment of materials and communication tools for lecturers, students or other sources respectively (Triluqman & Sukirman, 2009; 26).

E-Learning is a media that is prepared with the purpose to support the learning process (Michael, 2013: 27). It also can be described that E-Learning is a media that utilizes communication and information technology. The use of E-Learning is to optimize the communication and information technology related to the effectiveness, efficiency, and quality of learning.

METHODS

This research uses a qualitative approach to explore the use of E-Learning as a media for learning at Universitas Padjadjaran. Qualitative research is an interpretive method using triangulation in studying the research problem to get a holistic understanding related to the studies (Mulyana, 2007; 5); As a qualitative study, this research uses various sources to grasp the case. For this reason, the study commonly uses some data collection techniques (Denzin & Lincoln; 1998; 3, Creswell, 2007; 44). In this research, the data collection technique used are some in-depth interviews, observations, and literature studies.

The people referred to in in-depth interviews are the managers of E-Learning, Lecturers, students, Managers and staff in the Study Program and Faculty, the Quality Assurance Unit of the University and the education observer. Observations conducted were through facilities, conventional learning condition, and E-Learning. Furthermore, literature study is also used to add the secondary data, concepts, and theories related to the phenomenon.

RESULTS

Internet usage in Indonesia increases every year supported by infrastructures that allow internet access in various places, whether homes, schools, campuses, in public places such as stations, airports, or commercial places such as cafes, restaurants or malls. Universitas Padjadjaran as one of the state universities in West Java facilitates its campus environment with internet access. Through this access all students and lecturers can access the internet on campus for 24 hours. In addition to the existence of online academic system the whole process of administration is done online. Thus the process of selecting subjects, consulting students with lecturers and contact lecturers with students, and the final assessment is conducted online. However, direct consultation meetings between students and lecturers are still common.

Higher Education Policy and Conditions in Higher Education

There is a policy of university admission that is determined not only by study programs or faculty but also by universities and even the central government in charge of higher education (DIKTI). Quotas are often set according to the large number of enthusiasts but sometimes the ability of institutions, related facilities, facilities and the availability of human resources are less taken into account. As an example of social science courses in Universitas Padjadjaran, problems arise in the Social Studies programs that have a relatively large number of applicants. Based on the data obtained, the Communication Science program became the program that has the highest interest, with 7,496 applicants. Followed by Management 6,491 with people, Accounting 5,100 people, 4,993 Pharmaceutical people, Legal Sciences 4,704 people. With that large amount of interest the quota of communication science courses is set to about 200-300. The quota is considered to produce a very high competition rate for those who aim to attend public universities.

In reference to the data, it appears that the policy of determining the quota was forced to consider the number of enthusiasts. Limited facilities and human resources, in this case the number of available teachers, is somewhat rather ignored. According to one of the managers in communication science courses, ideally for one academic year they receive only two classes or a maximum of 80 students. The large number of students received in each academic year received resulted in a lop sided number of lecturers and students, which is not ideal. Currently in the Indonesian education system the ratio of the number and lecturer to the ideal student is 1: 35.

The number of credits required for undergraduate education in Indonesia is also relatively high, which is generally at least about 144 credits and it can cover about 50 courses with an average of 2-3 credits per course.
Therefore the burden of the teachers in some of the courses that are in great demand and have a large number of students in one semester of their teaching load is relatively high. On the average lecturers have to manage 4-8 classes a week for each semester.

The Credit Semester Unit System (SKS) applied in the curriculum of higher education in Indonesia also allows students from different academic year/class to study in one course. This is possible because the study load plan taken by the students is determined by each student with the guidance of his counselors so that the number of credits taken by students in one academic year may vary, depending on the plan for personal reasons or related to the student's cumulative grade point average (GPA) concerned. Students with a high GPA (> GPA of 3.5) can take more credits/SKS than their average colleagues, so they can take other courses with their seniors or students whose GPA is low or is repeating a course must take that class with their junior. So a course can be followed by students from several class of students who take the course with their classmates or students their senior or their junior.

If a program has 100-200 students then students from one class can be divided into 3 to 6 classes with a maximum number of 40 students in one class according to the regulations. The number of classes can increase if there are students from other classes that also attend the lecture. This condition adds to the burden of lecturers in each course he manages. In other words, if in the program there is only one lecturer specialized in the field then in other classes for that particular subject the students will have to learn from others with different competencies. As a result, many lecturers have to teach several classes on the same subject or other lecturers with different level of competence on the subject are forced to cover those classes.

Lecture schedules for parallel classes are also often a problem due to space constraints or lecturer time availability. Those who manage the schedules often find it difficult in arranging lecture schedules to avoid clashes or overlaps. Such situations happen when in one schedule there are lecturers or students who have to teach or take courses in two different classes at the same time. Therefore, generally during the first or second weeks of college, the time schedule is still uncertain.

Learning Methods and Communication Cultural Barriers in the Learning Process

Learning methods applied by teachers, in general, are still conventionally designed emphasizing on actual attendance and assignments in the learning process. Each teacher in one course has 14 lectures and two meetings for mid-semester and semester evaluation. Generally, the lectures are still designed face-to-face for classes and assignments for outside the classroom. According to one manager of E-Learning Unit at Universitas Padjadjaran, until now the availability of online lectures that can be carried out is still very rare. Lecturers who are interested and take advantage of online lecture system are also still very few and usually consist of young lecturers who had followed online lectures when they studied abroad.

For classroom face-to-face classes, the presence of students in the class becomes very important. They cannot get the material directly from their professor if they do not attend the class. Furthermore, the presentation in the classroom is given as at a glance overview because there is no audiovisual documentation system related to lectures in the classroom. However, there are only a few lecturers involved in online lecturing. According to one E-Learning manager "motivating the lecturer is very difficult, because the online course must be built first, before the lecture begins. But once it has succeeded in preparing the RPS and lecture materials are already made in audiovisual form, the next lectures will be easy, and can even be used over and over for the years to come. Motivating lecturers also becomes difficult because Universitas Padjadjaran does not have a standard of appreciation (for calculating KKI) for lecturers conducting online lectures yet".

The problems behind the demotivation of making materials online according to observations and interviews are related to the technical competence of some lecturers who claim to know about e-learning and program online courses but until now have never tried to find out more technical and detailed information let alone to try to and create online lecture materials. There are also lecturers who argue that they are not sure students will listen to the lecture materials online because even with face to face courses there are still many students who are not disciplined enough to attend the lecture promptly and some do not to sincerely listen to the lectures. At face-to-face meetings, according to the lecturer, the control of discipline and student's activity can still be conducted throughout the course but this is not possible with online lectures. Adding to this point of view, one of the managers of e-learning said that it is easier
for them to motivate students to use online lectures than to motivate lecturers to create materials for online lectures.

These differences in point of view lead us to consider what Don Tapscott discloses about the net generation. Young college students referred in Tapscott’s view is described as “the Internet Generation that have a tremendous familiarity with technology or the internet” (Tapscott, 2002; 15). Naturally, they have become part of the digital natives. As digital natives, it can be expected, they are more comfortable and interested in online lectures. However, it is hard to prove if the existence of online lectures held at the Universitas Padjadjaran are still very scarce and have not become a part of the policy-related academic learning system that is applied in each semester.

E-Learning as a Learning Media

Conceptually, e-learning is one way to integrate the use of internet technology as optimal as possible in the learning process. In addition to the needs of regular learning, e-learning process can also be used for students who live remotely in other cities. Universitas Padjadjaran’s campus to date consists of the old campus in Bandung and the new campus which became the main campus located in the Sumedang regency. In addition, there are long-distance classes and this is the result of cooperations between the Universitas Padjadjaran with the local government in the Pangandaran Regency. The Pangandaran campus is 173.4 km from the Main Campus and can be reached by land with a car in about 6 hours.

In the general exposure of the live.unpad.ac.id website, e-learning management writes that "live.unpad.ac.id is a virtual learning service portal through a learning management system designed for regular learning needs for the Universitas Padjadjaran regular students and long distance program students. As a learning media e-learning managers believe e-learning is a learning process that can facilitate the implementation of interesting and interactive learning methods and activities. It can be achieved by maximizing the utilization of communication and information technology in this variety of applications and internet network.

Through portal live.unpad.ac.id e-learning management seeks to provide services so that lecturers get the opportunity to serve a convergence learning system, which is a combination of face-to-face learning activities as well as the online and interactive course. The combined learning system is assumed to make the learning process easier as well as interesting also to overcome some obstacles such as time, distance, limited lecturers and classrooms for face-to-face meetings.

Variations in the learning process are conducted to make face-to-face meetings less than 14 meetings. It can be taught in 6-8 face-to-face meetings and the rest can be done by providing learning materials through online lectures that are facilitated by e-learning management. After providing learning materials, the teaching process can also be given through a variety of tasks; that is to perform activities offline or online. Offline activities can take the form of writing assignments, collecting on the field (community) data, producing something or group discussions in the classroom. Whereas online activities consist of searching references related to learning materials, collecting data or research on virtual reality or forming group discussions among participants of online learning.

Meanwhile, through online lectures, the teaching participants can achieve a more diverse learning outcomes tailored to their learning style and learning speed. Through online lectures students can enjoy learning in the places they choose and is comfortable for them. In addition, each student can utilize the delivery of virtual materials according to their needs. This is very different from the face-to-face lecture that requires students to adjust to the conditions of the place and time and the average speed of learning with colleagues and classmates. If he can not adjust to these things and was forced to accept conditions, then the success of learning achievement will not be optimal. One of the students revealed that in class meetings, his classmates’ attitude is very influential. Sometimes a student wants to ask questions to the lecturer who delivers the materials, but often he or she is embarrassed or overly concerned about other students judging his questions. According to the student, if the lecturer teaches online and provide an interactive question and answer session then maybe the student will not be too embarrassed to ask.

Generally, students welcome the existence of online lectures that can facilitate e-learning, but until now information about the existence of e-learning portal has not been widely known by students. One reason is that there are still very limited lecturers who utilize the existence of e-learning in the learning process. Also, the information on the existence of e-learning and portals have not been socialized properly. For students, information about the existence
The new e-learning was delivered during the orientation of new students in 2016. While lecturers who also knew of e-learning were less motivated to arrange online lectures. According to one of the e-learning management, the Technical Implementation Unit (or UPT) e-learning is facing several important constraints including things such as low input, the motivation of lecturers and students, the staff of non-lecturers who works in UPT e-learning, as well as available facilities and infrastructure.

In addition to facilitating the process of learning for students through live.unpad.ac.id portal e-learning management Padjadjaran University also presents a variety of short duration videos that can be accessed by the public. The video features university lecturers teaching in several areas including health, fisheries and gender issues. It is aimed to give wider access for all students to the experts on campus, the presentation of this video is also a means of dissemination of knowledge of higher education to the community. In other words, people's access to know or utilize experts in various fields of social, law, economics, health, agriculture and also existing techniques in the University of Padjadjaran is expected to improve.

DISCUSSION

Based on research findings, e-learning as a medium for learning face various problems that touches on the socio-cultural aspects of the learning process at Universitas Padjadjaran.

There is a culture in our society that deems higher education as a prestige that will ultimately lead to a great interest in college that influences the new admissions quota policy at Universitas Padjadjaran. The limited number of lecturer and the learning method used resulted in a very time-consuming learning process for the lecturer and requires plenty of classrooms. A large number of students still rely heavily on lecturers as the biggest source of information in the learning process.

The communication culture between lecturers and students is also one of the obstacles that must be addressed. The relationship between lecturers and students in the education system also reflects the Indonesian culture which is not very egalitarian. Thus conventional lectures tend to be less open, not so egalitarian nor democratic academic atmosphere. Online lectures can be an alternative to conservative face-to-face lectures to overcome cultural barriers in the interaction of faculty and students. In addition, online lectures also provide students the opportunity to achieve learning objectives by their learning capacity without being overwhelmed with the collective culture in the society. In technical aspect, there are still limited facilities and infrastructure and management of academic access to communication and information technology that can support the learning process and communication culture between lecturers and students that do not support optimal learning achievement. Lectures in the form of face-to-face attendance are still needed because culturally student learning independently is generally still relatively low. Therefore, face-to-face lectures can control student learning process and still consider the cultural values associated with the relationship between lecturers and students that are similar to parents to children relationships. As an Eastern society, the existence of lecturers substituting the role of parents is still intensely important to the psychological condition of the students.

As to the high interest in various study programs in the universities and government policies in relation to the high quota of new admissions, there should be more subsidies with higher investment in technology. Support in the form of facilities, communication technology, and information technology can be the basis for the development of technology or internet based learning process that can overcome the limitations of lecturers, time and classroom availability. The existence of e-learning is very important and strategic for universities in the field. Therefore, the existence of e-learning should enable room for further development and the ability of e-learning to optimize the benefits of its existence.

E-learning is currently a Technical Implementation Unit (UPT) at the university level under the authority of the vice-chancellor of academic and student affairs. As UPT e-learning does not have a formal coordination structure with academic and student affairs at faculty level nor is there a mechanism or working relationship with study programs responsible for managing curriculum and teaching-learning process in each program. The utilization of e-learning as a learning media is not optimal due to the fact that e-learning is not integrated with those who implement the learning process. In addition to being a large university with many faculties and courses, the number of human resources placed in UPT e-learning both at the management level of lecturers and the administratives and technical
staff is still very limited in terms of both quality and quantity. If the management and technical aspects of e-learning are not developed according to demands that need implementing, then the utilization of e-learning as a learning media will not be optimal or even less than its expectations.

CONCLUSION

Based on the analysis of the research findings, conclusions found are as follow:

- The role of e-learning as a learning media is really needed to face the problems of carrying out the learning process and optimizing learning achievements in the Universitas Padjadjaran.
- The development of e-learning in various aspects is a high investment that must be done as a substitution to the new admissions policy. That policy tends to be more lenient to the high interest of the community who want to study at Universitas Padjadjaran than to consider the actual capacity of the number of lecturers, the facilities and infrastructure of the available learning space .
- E-learning as a learning media must be integrated and have a mechanism for cooperation with the faculty and study programs that manage the curriculum and the teaching and learning process in each program.
- E-learning as a learning medium should still be integrated with face-to-face learning process because on the one hand it can overcome the cultural barriers, this can improve learning achievement, but on the other hand, it should not eliminate positive social relations between lecturers and students in eastern culture.

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Organizational Culture Risk – Abstract
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ABSTRACT

Every day organizations face a variety of risks that could impact their strategic goals and objectives. Organizations like Enron, Siemens, and Wells Fargo saw their reputations damaged due to unethical behavior. Other organizations including IBM, Polaroid, Coca-Cola, Ford, and Macy’s have seen their competitive positions deteriorate as innovation and changes in customer preferences disrupted their business models. Many more organizations face risks that spread the gamut from employee turnover to data breaches or operational inefficiencies. To identify and manage these risks, organizations are turning to formalized enterprise risk management programs and risk-based internal audits.

The one risk that often goes unnoticed within organizations is organizational culture risk. Organizational culture risk is the risk that an organization’s culture or subcultures pose to the entire organization. This paper intends to not only introduce the concept of organizational culture risk, but also to explore the relationship between this risk and its impact on organizational objectives. This research draws upon primary and secondary sources including interviews with organizational leaders, published articles and research, and topical books.

Current review and analysis indicates that organizational culture risk is one of the few, pervasive risks that can impact every unit, function, department, and person within an organization. In addition, organizational culture can lead to multiple downstream risks. To reduce this risk, leaders must establish alignment between the organization’s vision and mission, stated values and behaviors, strategic goals and objectives, and its web of culture and subcultures. By implementing and managing this alignment, an organization and its stakeholders can increase value and recognize greater potential while mitigating potential negative surprises to management and owners.
Visualization Of Cost Variances In The Strategic Analysis Of Changes In Operating Income

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ABSTRACT

College level Cost Accounting texts and classes usually include standard costing and variance analysis topics, at varying levels of detail. Normally, the texts present the analysis in a manufacturing context and utilize a mathematical and formulaic approach to calculating the detailed price and efficiency variances. As a result, many students develop only a superficial understanding of the basic meaning of these variances and, therefore, these students may not be able to extend their analysis to more complex scenarios. In particular, the higher-level strategic analysis of changes in operating income (and the growth, price recovery, and productivity component variances) can prove quite challenging (if not incomprehensible) to students.

This paper first presents a 2-dimensional graphical approach to basic price and efficiency variances that allows students to more fully comprehend the structure and meaning behind the variance calculations. This simple XY graphical approach allows the student to visualize price and efficiency variances in a simple and straightforward manner. The graphical approach is then extended to a 3-dimensional XYZ graph that allows for the visual presentation of growth, price recovery, and productivity component analysis in the more complex strategic analysis context.

Graphical presentation can allow many students to more readily grasp the construction, deconstruction, and meaning underlying variance analysis. Accordingly, the authors recommend routinely including these graphical and visualization graphs in cost accounting pedagogy in order to improve student comprehension.
Analysis Of Open-Book Exams: A Case Study And Possible Relevance For Meaningful Learning
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ABSTRACT
The current research analyzes some cases of open book exams based on understanding questions, among college students and middle-class pupils, in Israel. The objective of the study was to get indication how learners cope with understanding tasks under conditions of abundant, readily-accessible information; (conditions associated with "information age"). In this context, throughout the course of study, emphasis was placed on understanding, rather than on memorization and repetition, and accordingly, the exams were open-book, with no limitation of reference material.

The research hypothesis assumed an intelligent application of the auxiliary information available to the examinees. But the findings pointed to a poor use of various thinking skill and an exaggerated reliance on quotes and copying of various texts from the material learnt, often with absolutely no relevance. Also, our findings hint at reading comprehension problems, difficulties in disciplined logical thinking, difficulties in the ability to deduce independent, logical conclusions, and a problem in selecting the essence or principle from the subordinate or of secondary importance (a problem in dealing with “information overload”).

The phenomena under investigation in this article were found both with the middle-school students and with the college students, and thus may reflect ongoing phenomena. These findings and conclusions are likely to be relevant to attempts understanding the role of learners' exposure to unlimited and diverse information resources, in promoting or inhibiting learning processes.

Keywords: Open-Book Exams; Meaningful Learning; Information Age
Importance Of Consistency In IUPAC Rules For Classifying Amides In CHEBI-Like Ontologies

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ABSTRACT

Ontologies are structures that capture terminological knowledge for some target domain. Typically large in size and high in complexity, ontologies have become fundamental fixtures of health and biological information processing environments. The Chemical Entities of Biological Interest (ChEBI) ontology is a structure that houses terminological knowledge concerning chemicals in biological contexts. It serves as an important electronic reference for software systems needing such knowledge. For example, ChEBI has been used in many annotation, text-mining, and chemical-analysis applications. Also, ChEBI’s structural hierarchy has been integrated into the Gene Ontology (GO) to support the integration of data across the biology and chemistry domains. Hence, it is critical that CHEBI contains correct ontology for chemical entities. The International Union of Pure and Applied Chemistry, IUPAC, is the authority for classifying functional groups including amides that is used in CHEBI ontology. There are, however, inconsistencies for classifying amides, when chemistry textbooks compared to IUPAC reference books. Inconsistencies effect accuracy of life science databases such as CHEBI.

Our research is unfolding these inconsistencies and pointing out the importance of proper amide classification in Chemistry text books and IUPAC guideline books. In this study, we case studied accuracy of classification of randomly chosen CHEBI concepts that contain amide functional groups.