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International Journal on New Trends in Education and Their Implications
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Dear IJONTE Readers,

IJONTE appears on your screen now as Volume 2, Number: 2. In this issue it publishes 11 articles. And this time, 17 authors from 7 different countries are placed. These are Czech Republic, India, Iran, Nigeria, Turkey, USA and Yemen.

The first article is from USA, "The Use of Spirituality In Training And Adult Education" written by Julie A. WOODBURN, Graduate Student University of Maryland, Baltimore County, ISD Training Systems Graduate Program and Zane L. BERGE, University of Maryland, Baltimore County, Department of Education, USA. Over the past decade or more, a surge of the idea of spirituality has overcome the population. This surge is apparent in our everyday lives as we watch TV, read books, surf the Internet and even in our work as companies advertise their 'spirited workplaces.' This paper explores the definitions of contemporary spirituality as it relates to training and the adult education field. One of the main goals addressed is to show a clear distinction between the terms spirituality and religion – that spirituality is not religion and vice versa. The paper discusses the discoveries of a spiritual consciousness at work and what society thinks of it. It also gives a clear understanding of why the field of training and development is moving towards spirituality, and what types of spiritually-infused training is taking place at work and in other adult education venues. Finally, the disadvantages of this emergent paradigm are discussed with cautions and suggestions on the future of spirituality in training and adult education.

The second article is on "Teachers in The Late Phase of Their Career", written by Bohumíra LAZAROVÁ, Department of Educational Sciences Faculty of Arts, Masaryk University, Brno, CZECH REPUBLIC. This study presents selected results of a questionnaire focused on identification of several factors in the work of basic school teachers aged over 50, particularly subjectively perceived changes in the selected factors forming self-concept – in the sense of security, responsibility, usefulness, success and satisfaction. Attention is paid also to the reflection of the changes in relationships and motivation for continuance in the profession from the point of view of the addressed teachers.

The third articles are from Yemen. The third one is on "Quality Assurance In German And Yemeni Higher Education: A Comparison", conducted by Taha A. AL-FOTIH English Department, Faculty of Education, Thamar University, YEMEN. This comparative study presents two different higher education accreditation systems which are carried out by the Yemeni Accreditation Council (YAC) and the German Accreditation Council (GAC) in the two countries, Yemen and Germany. After an examination of the Yemeni Accreditation Council and the German Accreditation Council's literature, their recently developmental accreditation systems and practical methods are subject to entirely detailed analysis. As a result, the findings of the two councils' literature analysis reveal that there is a large gap between the Yemeni and the German Higher Education Systems in the implementation of accreditation. Accordingly it is strongly recommended that the Yemeni Accreditation Council should benefit from the positive elements of the German Accreditation Council for example, appointments of accreditation agencies, expert groups and the German accreditation system procedures, the accreditation of accreditation agencies, the internal review and the external review which may help the YAC to create the necessary mechanisms for the quality assessment improvement within the Yemeni higher education institutions.

The fourth article arrived from NIGERIA, which is prepared on "Universal Basic Education (Ube) Policy Implementation In Facilities Provision: Ogun State As A Case Study", Written By Kayode AJAYI, Muyiwa ADEYEMI, Nigeria. This study attempts to assess the level of articulation by the Ogun State Government of its UBE policy within the general framework of the scheme in providing facilities to schools at the primary level. It shows that there is the need for a more deliberate and aggressive provision of these facilities with a view to influence positively on school performance. The study also looks at the level of funds commitment, as well as

the effective utilization of such funds by the State Government in providing these facilities with the aim of achieving the objective of providing 'education for all" by the year 2015.

The fifth article which is entitled as "Teachers' Instructional Beliefs About Student-Centered Pedagogy" is written by Vali MEHDINEZHAD, IRAN. The purpose of this study was to examine teachers' opinions about student-centered instructions, as well as to study effective factors in their instructional beliefs. Six important components of student-centered pedagogy examined in this study were, educational objectives, content, teaching strategies, and instructional assessment, educational technology and learning environment. The methodology of this study was a quantitative research. Results showed that the components of student-centered pedagogy have a high influence on their instructional beliefs and also there was relatively high positive correlation between components of student-centered pedagogy. The analysis of some variables such as gender, age, school level and teaching experience indicated, some those had an impact on student-centered beliefs. There was no significant difference between the male and female teachers' beliefs on overall student-centered pedagogy. The analysis also showed that overall means of the student-centered pedagogy was statistically significant for elementary, middle and secondary school teachers, age groups and teaching experience.

The sixth article titled as "Examining Student Teachers' Self-Efficacy For Implementing The Constructivist Approach In Terms Of The Variables Of Gender, Department And Grade Level" is written by Ertug EVREKLI, Fatma ŞAŞMAZ OREN, Celal Bayar University Faculty of Education and Didem İNEL, Usak University, Faculty of Education, Usak, TURKEY. This study aims to examine student teachers' self-efficacy for implementing the constructivist approach in terms of gender, department and grade variables. To achieve this purpose, the study was conducted using 160 student teachers studying in the third and fourth grades in the Departments of Classroom Teacher Education and Science Teacher Education in Celal Bayar University. As a result of assessing the data obtained from the implementations, a significant relationship between the levels of self-efficacy of female and male student teachers regarding lesson planning was found to be in favor of the female student teachers. In the examinations performed considering the department variable, it was observed that the scores of classroom student teachers are much higher than those of science student teachers for the aspects of self-efficacy belief for the assessment-evaluation process and for developing a learning environment. Additionally, as a result of the assessment made considering the grade variable, no significant relationship was found between the self-efficacy beliefs of student teachers studying at third and fourth grades based on subscales and total scores.

The seventh article comes from Nigeria. Article is titled as "Impact Of Globalization, Educational Branding And Innovative Technology on Development, Management And Quality Education In A Nigerian University", written by Sofowora, Olaniyi ALABA, NIGERIA. This study is an appraisal of the effort made by the management of Obafemi Awolowo University (OAU)), Ile-Ife at employing Educational Branding as a business strategy to re-brand itself to become the foremost University in Nigeria and the 53rd in Africa. It discussed various branding and Educational Marketing strategies used in spite of the challenges of depressed economy, globalization, desire to meet the MDGs and the achievement of Education for All. It examined students and staff disposition to the branding program and the impact on the image of the university, management and quality of teaching and learning.

The eighth article arrived again from USA and written by Anna Katherine DVORAK, Department of Geography, University of California, Los Angeles, USA on "The Positive Impacts of Using Data Visualization To Monitor Online Exams in Geography Education". This paper connects that online tests and classes are becoming widely adopted systems in academic institutions. This is quite a recent phenomenon whereby I have had the opportunity to experience the transition of using these online systems in geography classes. From teaching in a traditional classroom setting to using online systems such as ETUDES at the community college level (teaching

at two community colleges in the Los Angeles Community College District) or CLE (teaching classes at UCLA) for hybrid as well as online classes within a matter of a couple of years, I have been able to witness the advantages and disadvantages of both systems. Online classes and exams are becoming a prevailing practice in education. Because they are being used more widely, it is imperative to assess student learning behavior based on how they perform on varying test structures in order to improve the system of testing.

The article number 9, is again from TURKEY. Article is entitled as "The Effects Of The Computer Simulations On Students' Learning In Physics Education" is written by Tolga GOK, University of Dokuz Eylul, Torbali Technical School of Higher Education, Izmir, TURKEY. This study focuses on the technical and pedagogical benefits of more advanced-topics-related applets used in physics course. These applets emphasize the connection between real-life phenomena and the underlying science. Also, the effects of physics concept learning with computer simulations and traditional physics learning without computer simulations on students' achievement and attitude were compared. The study was performed on two groups (total 93 students) during one semester at a public university in the west of the Turkey. When the results obtained from the study were evaluated statistically, it was found that there was a significant difference in conceptual test between groups' scores in favor of the treatment group. Also, it could be concluded that the courses with computer based-activities have a positive effect on students' attitude. According to the results of this study carefully developed and tested educational applets in conjunction with real-equipments can be engaging and effective in students' understanding of the physics.

Article 10 "Why Should Not We Advocate Educational Science?" is written by Habibullah SHAH, Directorate of Distance Education, University of Kashmir Srinagar and Firdoos Ahmad SOFAL, Faculty of Education, University of Kashmir Srinagar, INDIA. Their article mentions that there should be a scientific discipline in nature which will study the educational system. We can't reshape our educational system if we don't deal with it professionally. No doubt there is a subject or discipline under the same name Education to look after the education as a field of study but it is so diluted that there is no uniformity and neutrality in its nomenclature and functions as a result, the subject Education has been confined to teacher training programmes only throughout the world. Subject Education, in common with other social sciences, suffers from a double lag: slow progress in fundamental research and delay in using research findings. Perhaps the disease is even more pronounced in the subject of Education than in the other social sciences. Certainly it is more devastating in its effects because malfunctioning of education endangers the health of the whole society.

The Last But Not Least Article From Turkey. It Entitled As "A Neglected Resource or an Overvalued Illusion: L1 Use in the Foreign Language Classroom", Written By Dr. Hüseyin KAFES, From Anadolu University, School of Foreign Languages, Eskişehir, TURKEY. He mention in his article that The role and use of L1 in instructed second/foreign language classroom, especially in intensive foreign language programs, has without any doubt been at the crux of a fair extent of controversy, debate, and discussion. Although some research has been conducted on the attitudes of both foreign language instructors and learners towards L1 in the L2 classroom, very few studies have aspired to investigate the impact of L1 use on the proficiency gains of learners and its purpose. In view of the limited research on this issue, this study aims to report the findings of a specific study on the purpose of L1 use by language instructors in the speaking course in an intensive English course at Anadolu University. The results of the study show a judicious and systematic use of L1 by instructors geared towards facilitating communication and relationship between the teacher.

Hope to stay in touch and meeting in our next issue on 1st of July 2011
Cordially,

Editors
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Dear IJONTE Readers,

IJONTE appears on your screen now as Volume 2, Number: 2. in these issue served 11 articles and 17 authors from 7 different countries are placed as Czech Republic, India, Iran, Nigeria, Turkey, USA and Yemen.

As we mentioned at the beginning publishing of IJONTE is planning to extend its readership by reaching every part of the world. It will focus on different regions by allocating much more space to contributors from the regions of North Africa (such as Morocco, Algeria, Tunisia and Egypt), the Middle East (such as Israel, Iran, Iraq, Pakistan and India), the Baltic Countries (as Estonia, Lithuania and Latvia) and Eastern European Countries (such as Poland, Romania, Hungary and Greece and Bulgaria). This strategy will be realized in the ways listed below;

By sharing experiences on effective use of education in both formal and non-formal education fields.

By providing communication amongst educators, education experts and by providing opportunities to share new strategies and ideas about at all aspect of education.

The Mission Statement of IJONTE is: "Never Too Late, And Read IJONTE Now and Please Inform Your Colleagues in soonest"

Values of the IJONTE Along with the Mission Statement it is important to list those values which the IJONTE holds as important philosophy of Online Journal publishing for Turkish Education life.

Such values are held in high esteem by all who practice them; and to violate them is violate the very foundation of the TOJDE and its Mission.

Reader Needs This value is placed at the head of the list when it comes to emphasizing what is important to the IJONTE. We will not forget who we serve.

Quality Articles The IJONTE will, at all times, strive to provide not just an adequate quality articles to readers, but one that strives to surpass the readers' expectations.

Quality Journal Staff The IJONTE will always value and prize those editors, reviewers and staff who have shown a willingness to provide the Quality publishing through their various levels of expertise.

Community Share Service The IJONTE must strive to show to the community its commitment by sharing to its overall betterment. By adhering to the previous three values, meeting this fourth value becomes a matter of record. In bringing quality post-secondary to the community this value is strategically met.

The IJONTE does not responsible from the grammatical structure of the articles. This responsibility belongs to the author(s).

IJONTE is crowning day by day with your valuable support, qualitative studies and your warm approaches…

Cordially
Prof. Dr. Zeki KAYA & Prof. Dr. Ugur DEMIRAY

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THE USE OF SPIRITUALITY IN TRAINING AND ADULT EDUCATION

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ABSTRACT

Over the past decade or more, a surge of the idea of spirituality has overcome the population. This surge is apparent in our everyday lives as we watch TV, read books, surf the Internet and even in our work as companies advertise their 'spirited workplaces.' This paper explores the definitions of contemporary spirituality as it relates to training and the adult education field. One of the main goals addressed is to show a clear distinction between the terms spirituality and religion – that spirituality is not religion and vice versa. The paper discusses the discoveries of a spiritual consciousness at work and what society thinks of it. It also give a clear understanding of why the field of training and development is moving towards spirituality, and what types of spiritually-infused training is taking place at work and in other adult education venues. Finally, the disadvantages of this emergent paradigm are discussed with cautions and suggestions on the future of spirituality in training and adult education.

Key Words: **Spirituality, training, adult education, personal growth, religion, development, consciousness.**

INTRODUCTION

A new age of spirituality has been brought to the awareness of individuals within the last 10 years or more, and it is not only affecting the personal growth of people, but also, it is affecting the adult learning and development environment in different corporations and firms across the nation. Many companies have sought to expand their employees' need for job satisfaction by seeking out training classes and techniques that explore spirituality, and there has been a surge of adult education and those in the higher education field to explore courses specifically addressing spirituality. This type of learning also directs employees to seek a proper work/life balance. But one of the most important goals spirituality has assisted people with is finding meaning and purpose in life. "If you look at what brings energy into a team, increasingly it's about the idea that we are people, not machines. You do that through a combination of values and high purpose - spiritual intelligence, for lack of a better term - coupled with the right sort of interactions and learning" (Rennie as cited in Kubicek, 2005, p. 1).

This paper explores the definitions of contemporary spirituality as it relates to training and the adult education field. One of the main goals addressed is to show a clear distinction between the terms spirituality and religion – that spirituality is not religion and vice versa. The paper speaks of the discoveries of a spiritual consciousness at work and what society thinks of it. It also attempts to give a clear understanding of why the

field of training and development is moving towards spirituality, and what types of spiritually-infused training is taking place at work and in other adult education realms. Finally, the disadvantages of this emergent paradigm are discussed with cautions and suggestions on the future of spirituality in training and adult education.

TODAY'S SPIRITUALITY

What is meant by the term spirituality? Is it a religion, or is it part of a religion? Not too long ago, the phrases spirituality and religion were almost synonymous – to be spiritual was to be religious and vice versa (Lauzon, 2007). Neither appeared in adult education or training curriculums or materials, and both were far from making it into business and education journals or the corporate environment. To be religious is to abide by a certain set of thoughts and principles where one is guided by a headship and established "laws" of morality, ethics, love, forgiveness, good and evil. In many cases, religion is not a choice, but a ritual, so to speak, passed on through family lineage. Religion was never spoken about in the workplace, as companies were afraid of crossing lines into discrimination. Today, religion is still not spoken of in the corporate setting and more specifically, in the field of training and development, but spirituality is. As Tisdell (2001) describes it, spirituality has become a hot topic. English (2001) reports, "After a long hibernation, spirituality is no longer a taboo word in adult education and training" (p. 2).

Definitions of Spirituality in Adult Education

There are several definitions of contemporary spirituality regarding adult education. Allan Lauzon (2007) describes spirituality as something that is not simply learned about but is something experiential, that humans make meaningful by being part of creation. Spirituality is a recognition of an individual's beliefs about who they are, what purpose they serve, what else is out there, where did they come from and where are they going. Even more, it is a feeling of oneness to the world, to all of humanity, to all that exists – that there is a supreme, higher being and that this life experience is a journey not made up of rules, but of exploration and learning. Spirituality breaks down the barriers of separateness that religion so adamantly prescribes. Its goal is to find the commonalities of every human being, to find a wholeness, so that individuals do not feel separated, but together as one. To be human is to feel the need to find a oneness, a feeling of unity with other humans and the world around us. Tisdell (2008) says that spirituality should be viewed as away to find wholeness, "because the whole is always greater than the sum of the parts, then spirituality itself is always greater than that which can be described in language" (p. 28).

For adults in the corporate environment, feelings of separateness are constant. Employees are asked to keep their personal lives separated from their professional ones. In the area of expansion, adults in higher education programs and in corporate environments are being asked daily to manage their own career needs and advancements. Literature being written on the topic of spirituality and adult learning today notes that a time of a great change in thinking is here, a transformation of evolution is upon us. Lauzon (2007) argues that the emergence of spirituality is an evolutionary transformation of consciousness – one that will challenge educators' understanding of the adult learner and how to apply such a concept to the practices of training and development.

In the training and development field, the definition of spirituality has become a focus. Tisdell (2001) recounts that within adult learning, a common theme has become a focus on making something meaningful which is specifically related to adults' search for spirituality. As adult educators, Vella claims that "attending to the spiritual dimension of adult learning is part of honoring the learner as 'subject,' and thus the author of her/his own life in the quest for meaning-making" (as cited in Tisdell, 2001, p. 1).

Although spirituality has become a more common-place term, and our culture is more open to its presence, trainers and adult educators have the option of not including the word in the vocabulary of their curriculums

and training materials. It does not mean that the word 'spirituality' should be discussed directly or that learning activities are to be built around it (Tisdell, 2001). It should, however, be considered that it is the adult educator's role to nurture the soul of the learner, to understand that spirituality is present in the teaching and learning environment, and that it brings with it something sacred (Dirkx cited in Tisdell, 2001, p. 1). Using the word spirituality can cause drawbacks in this emergent trend of helping people find meaning in their lives if educators are not sensitive to their students' feelings.

Spiritual Findings at Work

In order to understand what knowledge the corporate world had of the emergence of spirituality, Ian Mitroff and Elizabeth Denton completed more than 90 interviews with executives and high-level managers and reported their findings in *A Spiritual Audit of Corporate America: A Hard Look at Spirituality, Religion, and Values in the Workplace* (Salopek, 2000, p. 77). What Mitroff and Denton found were almost undisputed agreements regarding the definition of spirituality across several different industries. The overarching definition of spirituality found was that it is a search for ultimate meaning and purpose, and to live a life of wholeness and integration (Bloch, 2005, p. 196). Other findings included people not wanting to fragment their lives, but to be known as a whole person; that people have a strong sense of differentiation between religion and spirituality; and that employees who see their company as being spiritual consider them to be more profitable as they are open to creativity and emotions (Salopek, 2000, p. 77).

The question if work can be enjoyable and give meaning to peoples' lives is being asked daily. During regular check-ups, doctors and health professionals of all kinds are questioning people, 'Do you like what you do? Does your work give meaning to your life?' Human resources professionals, career counselors and mentors are on the same mission – to help promote a sense of self-fulfillment and meaning for people in their work. The fast-paced business world promotes consistent organizational change, high stress levels, competitiveness, higher productivity, unhealthy eating patterns, and a constant connection to technology. This is causing people to reevaluate the meaning of work – why are we there and what is the meaning behind it (Allerton, 1992, p. 80). Human beings are searching for "deeper meaning, for purpose, and for greater personal satisfaction" (Salopek, 2000, p. 77). J. Francis Stroud suggests that businesspeople need a new way of being, one that assists in healthier emotional, physical and spiritual lifestyles (Allerton, 1992).

Perhaps one of the best pieces of evidence that spirituality is becoming part of mainstream thought was noted by Salopek (2000) when she found that *Trend Letter* cites spirituality among its top 14 of trends shaping the 21st century. Spirituality is all around – on TV, on the Internet, in books and articles. It is helping individuals to become more relaxed and open about this part of their lives. Reality TV shows like *The Monastery* on BBC and *Spirituality Shopper* (Kubicek, 2005) and daily shows like *Oprah Winfrey* support viewers in remembering their spirit (Thompson, 2000). These people exemplify how their everyday work is essentially connected to their spirituality in all manners of life and crossing over into death. Spiritually-based best-selling books can be found in every store and have promoted an awareness of a different kind.

Authors such as Dan Brown and Neale Donald Walsch have assisted in raising the consciousness of humankind; they teach the everyday adult learner a new language, a consciousness and a connectedness that gives meaning to life in the smallest tasks or hardest life lessons. Other TV shows such as *Medium* and *Ghost Whisperer* aid in awakening human beings to the thought that life is more than what the eye can see.

Current Movement Towards Spirituality in Training and Adult Education

There is a long tradition and well-established history of the field of adult education and the practice of such. Social democracy and social gospel movements resulted in programs such as the Antigonish movement and the Farm Radio Forum, which inspired visions of democracy and social justice (Lauzon, 2007). In the 1950s and 1960s, a change began to occur in order to legitimize the field of adult education and learning. Professional existence in the field had to be practically research based. Only scientifically based educators

and practices would be accredited. The focus on separateness and individual successes were therefore engaged.

As humanity has progressed, so have the thoughts and ideals of adult education and its impact. Today, people are curious to know what divine intervention might be near and how they can tap into a greater knowledge and wholeness to make sense of their world. Trying times call for a deeper search for answers. Thoughts of the tragedy at Columbine High School and 9/11 still plague society today. A change of thought patterns might bring about a more holistic, collective consciousness – a new spirit of humanity. Thoughts of spirituality in adult education have become part of this new consciousness. As stated clearly by Lauzon (2007):

The fundamental purpose of a spiritually inspired adult education is to develop an educational process that creates opportunities for the development of autonomy and choice. It is only in having choice that individuals can name the world for themselves, and it is in naming the world for themselves that learners create the conditions and opportunities to create meaning – which is at the very heart of a spiritually inspired adult education (Lauzon, 2007, p. 42).

As described by Cooks, Hackney, Jackson, Stevens and Zumwalt (2002), the movement towards spiritual growth and development of the learner is a holistic and humanistic approach to the advancement in the field of adult education and training. A sense of spirituality comes along with being human, but not all know or feel this part of their humanity. Cooks et al. describe this aspect of knowing as an essential part of training - that there are three dimensions that assist informal learning and spiritual growth in adults. The three elements of spiritual development include: a strong sense of identity; mindfulness, concern and outreach to others; and a continuous creation of meaning and knowledge (Cooks et al, 2002, pp. 1-2). These qualities should be applied to both adult educator and adult learner alike.

Furthermore, spirituality in education simply refers to adult educators and learners reaching deep inside and finding a connection between teacher, student and subject (Jones, 2005). Making a connection, or having a 'wow' moment, is the place where the truest learning happens. There is no real time or space associated with it. Many people would argue that spirituality cannot be seen or heard and that it may not even exist. In that case, it cannot be measured, therefore, why educate on this basis. Longtime scholar of teaching and learning, Ernest Boyer, said that even if things cannot be measured, they can nevertheless be experienced. Emotions then, which also cannot be measured, are indescribably part of the human existence and cannot be refuted (Jones, 2005). Nevertheless, the definition of spirituality is not always clear and concise.

Spiritual Training at Work and in Higher Education

In a movement towards connection with others and in claiming wholeness, bringing aspects of spirituality into work is ever-present. Human resources offices hold events featuring speakers who help people connect employees with their inner-self to find what is truly important or what makes their souls move (Thompson, 2000). Forums have been created in order to spread knowledge informally to people who share similar interests and are inspired to progress in certain areas.

Trainers in the adult education field deal with spirituality on a daily basis. They are training on topics such as ethics, character and giving in order to benefit another (Thompson, 2000). Spirituality training uses several pseudonyms – ones that trainers are quite familiar with. Anytime a trainer teaches a manager supervisory skills and/or how to deal with difficult people, they are providing training in spirituality. Trainers are helping people discover who they are; they help lead them in certain directions, help them discover their purposes, values and what their relationships mean. "If senior managers understand how vital a spirited workplace is to corporate goals, then they will support efforts to develop the spiritedness of their workplace" (Thompson, 2000, p. 19). That being said, Thompson (2000) suggests that trainers be guided with certain ideals in mind.

First, they must ensure that senior management understands the value of spirit in the workplace. Second, trainers should find needs assessment tools to ensure enough attention is being given to the human spirit. Third, he suggests the training programs that are developed be looked at through spiritual eyes. Fourth, if there is ambiguity regarding ethical issues, a new targeted area of training should be developed. Finally, the trainer should get in touch with their own spirituality.

Leona English (2001) suggests examining training materials by asking some of the following questions: "Do I challenge learners to interpret meaning in their lives?; Does my teaching encourage learners to find the spiritual dimension of everyday life?; Do I spend time fostering my own spiritual life?" (English, 2001, p. 2).

Examples of Applied Spirituality in the Adult Education Classroom

Within the formalized classroom of learning and education, spirituality has begun to spring forward in order to advance different fields of knowledge, such as counseling, education for administrative leaders and phenomenological research. The American Counseling Association studied the effects of using spiritual genograms in a community counseling graduate course as a way to provide experiential learning to students with opportunities for exploration into spiritual and religious influences, the implications for counseling practices and opportunities for self-reflection (Willow, Tobin, Toner, 2009). As described by Hodge (cited in Willow et al., 2008), "a spiritual genogram is an assessment instrument specifically designed to identify and operationalize the spiritual and religious strengths that exist in clients' family systems" (p. 2). Results of the study showed that there were clear instances of student development in three different competencies: knowledge, skills and awareness (Willow et al, 2008).

A second example of spiritual training in the classroom took place in order to assist a phenomenological researcher. Phenomenology is a study of thought, based on ordinary reality. It is also the most advanced of several different communication theories. Phenomenology, as a study of communication theory, is the true embodiment of understanding. It is the purest form of knowing regarding everyday language and interactions, for example, knowing, understanding, feeling and communicating what love is. The definition of phenomenology as described by Olga Louchakova, is similar to the definition of spirituality as described by Tisdell (2008). She describes spirituality as a journey toward wholeness, and Louchakova (2005) describes phenomenology as a "demand for self-enquiry, thus involving the 'whole being' of the student" (p. 89). Therefore, the description of this training is spiritually based, for not only was it spiritual training, where graduate students in a psychology class studied this method, but the basis of the training – phenomenology – is itself spiritual.

In a third example, a graduate-level seminar based on the spiritual and moral dimensions of educational leadership, sought to provide information on whether or not spiritual transformation might be possible within a worldly establishment. The seminar focused on spirituality and its relationship to transformative learning. A spiritual transformation occurs when a shift of consciousness takes place surrounding a person's belief systems about themselves, about others, and about the world they live in (Groen & Jacob, 2006). Graduate students volunteered to be part of the classroom because they found an attraction to the thought of spirituality. Once in small groups, the facilitator would present a spiritual principle for problem solving exercises based on a case study. The most significant transformation occurred when one of the men in the class experienced a life changing event. When his fiancé decided to leave him, he did not know where else to turn. He pulled out his materials from the spirituality seminar and began to see where his missteps were and how to heal them. He learned that for most of his life, he had been self-centered and never recognized it. He was able to use his seminar experience to self-reflect and actually, start to heal his relationship with his fiancé.

DISADVANTAGES

As evidenced to the references in this paper, a clear drawback of the role of spirituality in training and development in adult education is that there is no concise definition of spirituality. Thus, empirical studies are limited. Regarding classes on spirituality, questions arise. If spiritually-based courses are moved into the public sector, should they only be reserved for those in the field of psychology and counseling? And could untrained, insensitive leaders be at risk for running a seminar if individuals with emotional conditions join the class? As suggested by Groen and Jacob (2006), more intense research and observation in these areas are required to answer the questions. Another caution to using spirituality in the classroom is that the highest ethical standards must be used.

HRFOCUS approaches the topic of spirituality in training with scrutiny. It suggests that if companies choose to offer training on spirituality and motivation, that reasonable accommodations are made so as to not offend the religious beliefs of others (2000). Attorneys suggest offering both spiritual and non-spiritual training sessions that achieve the same objectives. Employers addressing spirituality in the workplace should take caution as there is the potential for a religious-discrimination lawsuit if the sensitivity of the subject is not addressed appropriately.

CONCLUSION

Spirituality is a feeling of oneness to the world, to all of humanity, to all that exists – that there is a supreme, higher being and that this life experience is a journey not made up of rules, but of exploration and learning. It is clearly apparent that spirituality is effecting most aspects of our lives today, and specifically in the field of training. Spirituality is everywhere – on TV, on the Internet, in our books and magazines, in movies and in our corporate environments. Spirituality is intrinsically part of being human and training in this field can help people of all ages and work experience, gain a better awareness of what it means to them.

Trend Letter cites spirituality among its top 14 of trends shaping the 21st century. And a study by Ian Mitroff and Elizabeth Denton found that there were almost undisputed agreements regarding the definition of spirituality across several different industries. As companies look to expand their businesses and retain excellent staff, a focus on assisting personnel in finding meaning in their jobs and in life is being explored. Training classes and techniques exploring the topic are being used as a way to help. Soft skill training in the areas of managerial skills, learning to deal with difficult co-workers and how to be an effective team member, are all examples of spiritual training. If ethical training is taking place, spirituality presents itself.

More and more, using the basis of a spiritual practice to truly learn is becoming prevalent, as is seen in the three examples given earlier of spirituality in the training, care and advancement of knowledge in adults. In the future, spirituality could become a mainstream practice in the training departments of major corporations and in courses being taught in any field where adults crave a deep knowing of self and the world around them.

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TEACHERS IN THE LATE PHASE OF THEIR CAREER

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ABSTRACT

The text presents selected results of a questionnaire investigation focused on identification of several factors in the work of basic school teachers aged over 50, particularly subjectively perceived changes in the selected factors forming self-concept – in the sense of security, responsibility, usefulness, success and satisfaction. Attention is paid also to the reflection of the changes in relationships and motivation for continuance in the profession from the point of view of the addressed teachers.

Keywords: Older teachers, teacher self-concept, teacher satisfaction, teacher motivation.

INTRODUCTION

The nature of the teaching profession is associated with a number of demands and difficulties related particularly to coping with stress, handling relationships both in and out of school and increasingly more significantly these demands are related to the need of keeping up with innovations and adapting to changes. It certainly is not easy to become a true professional and maintain high quality of work and motivation for it throughout the whole career. Therefore, the teaching career and its transformation legitimately attract attention of a considerable number of experts in various research fields (Huberman 1989, Hansez a kol. 2005, Levin 2003, Steffy et al. 2000 and many others). Researchers are generally interested in problems of novice teachers and conditions for their professional development till the stage of teaching “mastery“ or “expertise“, while significantly less attention is paid to teachers in the late stage of their career, that is those who can represent an invaluable resource of knowledge and experience, however, on the other hand, their performance (often negatively affected by fatigue and many professional frustrations) is surrounded by myths and prejudice. The significance of the projects focusing on senior working population (between 55 and 65 years old) is growing especially over the last few years due to the frequently quoted phenomenon of social ageing. The consequences of gradual ageing of the population are reflected also in the demographic representation of workers in various professions and thus in teaching too. Both Czech and international statistics indicate a high percentage of elderly teachers at all levels of education (cp. Sledování 2008, Age 2008). The questions arising are: How do senior teachers perceive themselves in the professional context? How do they perceive the changes in their own performance of the job? What motivates them? What type of support do they perceive and expect? The questions are related primarily to the professional self-concept of teachers and their job performance. These and other aspects of professional performance of teachers over 50 were examined in the research project Teachers in the late stage of their career. In this text we present selected results of a questionnaire investigation conducted in 2009 where we looked at how lower secondary school teachers aged over 50 perceive their position in school and changes in job performance. We turn our attention to the question of change in professional self-concept, changes in relationships and other aspects of professional stability as seen by the addressed lower secondary school teachers.

SELF-CONCEPT AND TIME

Self-concept is a psychological concept present in many personality descriptions; it is defined differently depending on the construction of the given personality theory. Therefore, there are a number of definitions of

self-concept, they particularly stress the organisation of the conscious traits, expectations, attitudes and relationships, that is those that an individual attributes to oneself (Smékal 2002). Professional self-concept of a teacher then analogically includes e.g. opinion of oneself as a worker, feelings associated with one´s performance, the perceived professional position and role, personal experience and story related to work etc. Although it is a relatively permanent concept of oneself, still it is more or less significantly transformed due to life experience and age. Findings of developmental psychology provide convincing evidence that despite the nearly intimate nature of self-concept of each individual it is possible to generalize its transformation with age at least in some of its aspects.

An ageing individual experiences changes in self-concept or self-image, particularly as concerns **self-esteem** and **self-confidence;** an elderly person has lower self-confidence, is more cautious and often does not "dare" to start new projects or reject usual stereotypes (Stuart-Hamilton 1999, Ward 1977). A senior teacher is continually confronted with flexibility of younger colleagues, who enter the profession with a different knowledge and experiential basis. The changes in self-concept which are a consequence of "comparing what can not be compared" can even lead to negative self-presentation, learned helplessness and scepticism. Ageing and long-term employment bring about a tendency to an increase in subjective **health problems**, which can be both the cause and a consequence of changes in self-concept. Some authors refer to increasing doubts about oneself and loss of self-confidence in teachers with 20 to 30 years of practice (cp. Daniel, Sarmány-Schuller 2000, Huberman 1989). The social status of a teacher and their position in school play a significant role in the transformation of professional self-concept. Hansez et al. (2005) e.g. mention complaints especially of elder teachers about the problem of "devaluation of the profession", which is boosted, among others, by "the methods that the younger colleagues employ"and the changes in norms of behaviour. Owing to ageing the **relationship to the profession** changes as well as its subjective significance for a person. Elderly people usually do not care so much about ambitions although their work can take various forms, from excessive effort to the loss of the sense of meaningfulness of own work (cp. e.g. Alan, 1989). According to Huberman (1989) a typical feature of teachers in the late stage of their career is increased reflectiveness associated with lower ambitions and investments into the finishing career. Although it might seem that the expected changes in self-concept due to ageing hinder rather then improve performance, there are authors of empirical studies (as well as people in school practice) who agree that senior teachers **can not be regarded as second-class teachers** and empirically no clear relationship was found between the length of practice and pupils´ results or the level of educational work (e.g. Huberman 1989). Self-concept and professional self-concept are intertwined and intimate and unique to such extent that it is apparently more relevant to examine them by **autobiographical stories** without an ambition of generalizing knowledge. Nevertheless, we attempted to include several selected aspects forming the concept of professional self-concept into our questionnaire investigation which was broadly focused on some aspects of senior teachers´ work. Due to the complex nature of the concept and difficulties with transforming it into concrete items (for the purpose of a quantitative investigation) we selected for examination only closely defined categories (forming individual items in a questionnaire), which, in our opinion, can be principal for the performance of teaching.

QUESTIONNAIRE INVESTIGATION

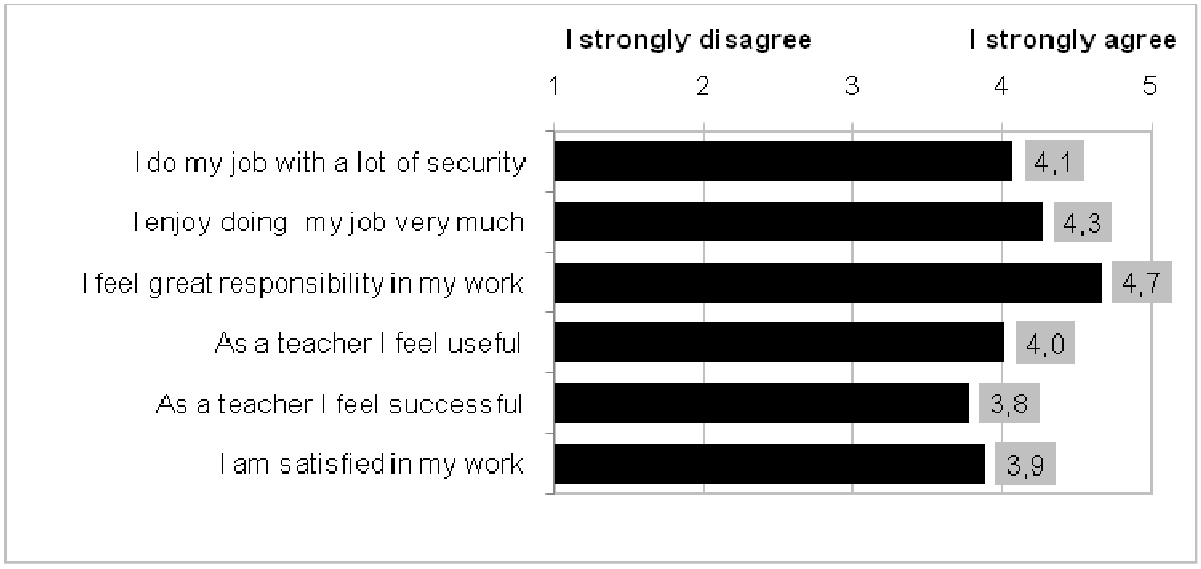
The respondents of our questionnaire investigation focused (not only) on professional self-concept were lower-secondary school teachers aged over 50. The items in the questionnaire were organised into the following areas: professional self-concept, profession and personal life, professional joys and troubles, cooperation with colleagues and school management and receiving support. In the part of the text dealing with professional self-concept we asked about the current situation as well as changes in the selected factors: professional security, responsibility, sense of joy, usefulness, success and satisfaction. The questionnaires were handed over to the representatives of 165 basic schools (in cooperation with the Association of Basic School Headmasters), questionnaires from 53 schools were sent back by mail. We processed in total 173 questionnaires from teachers over 50, out of those 34 were men (i.e. there were 19.8% of male teachers and 80.2% of women

teachers). This distribution approximately reflects common representation of men and women in basic schools in percentage term (Sledování 2008).

ON THE CHANGES IN PROFESSIONAL SELF-CONCEPT

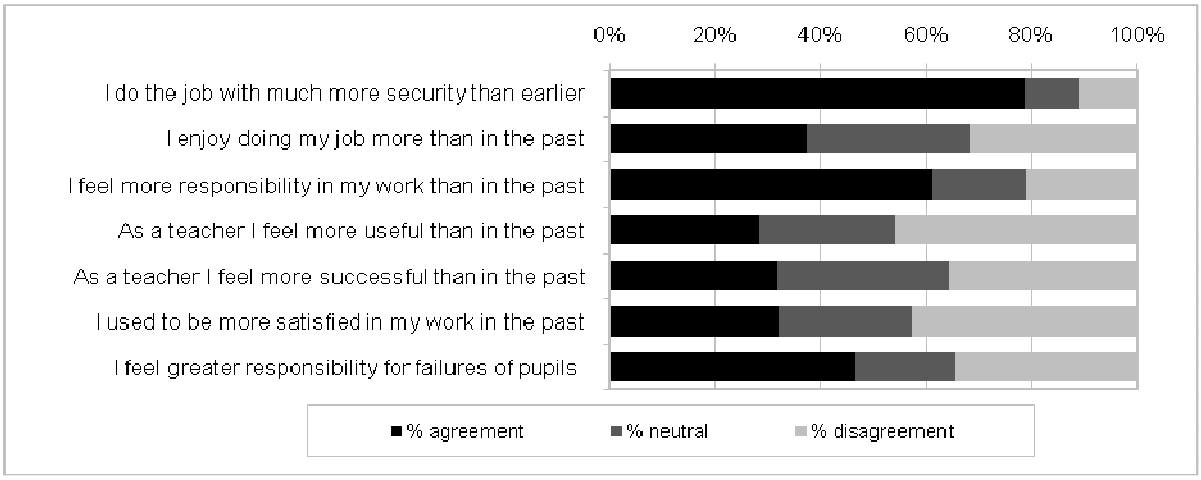
Comparing the individual factors of professional self-concept with each other, it is apparent that teachers feel above all **great responsibility** (the variance for this item was low), the lowest average value refers to the **feeling of success**, however on average it is above the middle scale value (Tab. 1). Fewer than 30% of teachers feel fully successful, nearly 40% of teachers feel completely satisfied, about 10% of them admit they are not satisfied at work.

Table 1
Professional self-concept (averages, scale 1-5)



When asked to evaluate their feelings and perception of themselves in the profession in the course of time, most often teachers incline to the statement that the time spent doing the profession and therefore also practice and experience bring higher security and perhaps also responsibility, but do not arouse a sense of usefulness, satisfaction or success. As far as the perception of changes caused by age is concerned, the averages of values are not representative as the feeling of change is given with a significantly higher variance than expression of current state. That means that teachers rather disagree when expressing the change in professional self-concept, with the exception of the perceived change in the items security and responsibility, where they reach fuller agreement.

Table 2
Changes in self-concept (in trichotomy of a five-point scale)



The questionnaire included a number of open questions as we intended to capture also some opinions and attitudes which we did not feel competent to predict and we did not want to "induce" our own ideas and expectations. The responses were categorised and we present them in nominal values (to make it apparent how many responses we received).

Teachers agree that what boosts their security is mainly: experience and practice (54 times), changes in personality associated with age (e.g. detached point of view, distance, wisdom, others – 20 times), the influence of continual self-education and thorough lesson planning (15 times), the influence of school background and and good work climate (7 times), relationship to children and love for the profession (5 times) etc. On the other hand, what diminishes their security is especially underachievement of pupils, their lack of interest and misbehaviour (38 times), the situation in the school system, constant changes and red tape (18 times), personal changes associated with ageing such as decrease in confidence, fatigue, problems with voice, memory and health in general (17 times), attitudes and "arrogance" of parents (14 times), the image of teachers in society in general, deterioration of morals (10 times), then the inability to keep up with the modern age and technology (8 times), intergenerational problems and relationships on the workplace, hypocrisy" (3 times), etc.

Responsibility is understood mainly as concern about pupils´ safety, children´s future and their achievement. The positive transformation of usefulness and success is then related chiefly to better methodological work ("...it is not easy to capture pupils attention nowadays...") and a better ability to adapt teaching for the needs of children with educational problems. Some of the respondents (13 times) openly point out the lacking sense of usefulness due to the problem that teachers and their work is undervalued. All the variables referring to self-concept were analysed by means of correlation analysis and additive indexes measuring the given concept were designed whereby three new concepts were developed, entailing variables with mutual dependency: the concept of self-realization entails three mutually dependent variables: enjoyment of work, responsibility, usefulness and satisfaction. The concept self-confidence entails mutually dependent variables: security and success. The concept change of self-concept entails mutually dependent variables: growing enjoyment of work, growing sense of usefulness and growing sense of success. While we identified relative agreement in the first two concepts, the third one expressing the feeling of change is characteristic by a greater variance of attitudes.

ON STRONG AND WEAK POINTS OF TEACHERS OVER 50

In the questionnaire we encouraged the teachers to write about the strong and weak points of senior teachers – the formulation of the question carried an assumption of projection. There was space to name three factors and rank them in order of importance. The mentioned factors were categorised, marked (3 points for the factor ranked first, 2 points for the factor given as second and 1 point for the factor ranked third) and we added the points for individual categories of factors. The respondents consider the strong points of senior teachers particularly those related to:

- experience and practice; these are broad concepts with unspecified content, nevertheless they were given in vast majority of cases in the first place and without any comment (420 points),
- personality competence; particularly judgement, wisdom, detached point of view, generosity, authority, dignity and other values (177 points),
- expert competence; particularly expertise, security, professionalism, knowledge, methodological skills (73 points),
- interpersonal competence; particularly the ability to act, foster relationships, empathy, patience (60 points).

The respondents consider the weak points of senior teachers particularly those related to:

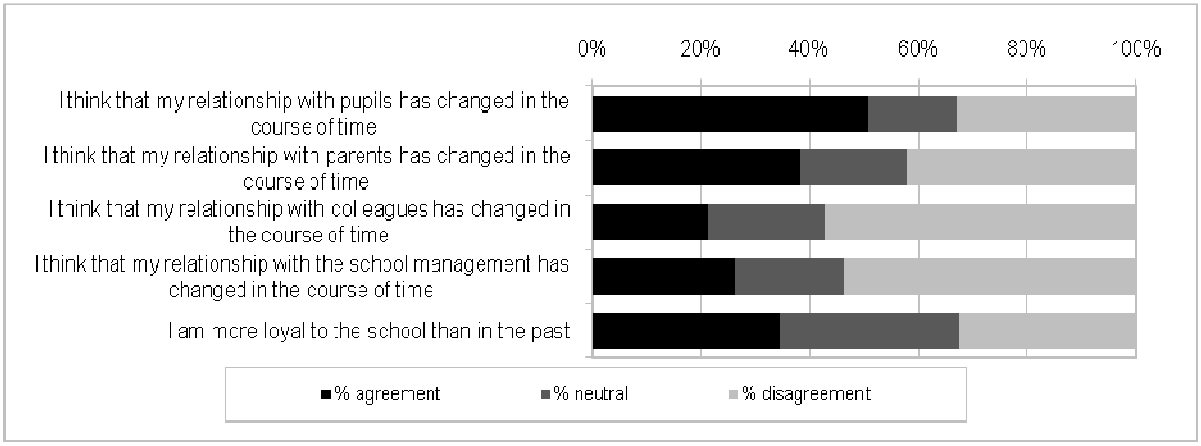
- physical health, sensory and cognitive functions; health, vision, hearing, voice, memory (306 points),
- the ability to adapt to changes and learn; technology skills, the inability to innovate, "...they can´t keep up with the trends..." etc. (124 points),
- psychological changes; heightened sensitivity, nerves, lacking self-confidence and sense of humour, cautiousness and heightened responsibility (93 points),
- flexibility and energy; indolence, stereotype, conservative opinions (does not concern skills but loss of energy and enthusiasm), burn-out (65 points),
- transformation of relationships and social transformation; generational gap, lack of understanding for young generations, different opinions from the young, the loss of illusions about values and behaviour of the young (50 points).

These findings merely illustrate general knowledge from developmental psychology and results of researches on teachers´ health and undoubtedly deserve closer explanation or understanding of specific context in qualitatively conceived research.

On the transformation of relationships

The teachers did not reach much agreement when judging transformation of relationships either; some state that they experience great transformation in relationships (especially with pupils and parents), others do not experience any changes or are not very sure (Tab. 3). The analyses showed great variance in responses, therefore the average values are not representative.

Table 3
Change of relationships (in trichotomy of a five-point scale)



We wanted to find out in which way primarily the relationship to pupils, parents, colleagues or the school management has changed. As the changes in relationship with pupils and parents are subjectively considered more obvious, in this text we will focus exclusively on them. The teachers mention transformation of relationships which can be organised around two bipolar criteria: leniency – strictness, understanding – misunderstanding:

- greater leniency; some of the teachers (actually the majority) consider themselves more lenient, tolerant in the course of time, they relax their requirements on pupils´ behaviour and achievement (30 times)
- greater strictness; on the other hand some mention more strictness and consistency towards pupils (6 times),
- greater understanding; some teachers consider a significant feature of the transformation in relationships with pupils greater knowledge of pupils´ personalities and thus also understanding (25 times),
- less understanding; on the other hand some teachers consider the relationship with pupils to be worse and mention problems with intergenerational misunderstanding "...I don´t understand them" (7 times).

Further, the teachers mention higher concern and worries about pupils, a greater sense of responsibility, higher sympathy etc. (15 times). It seems that concerning changes in relationships there is little agreement among the teachers, although most of them point out that there is more leniency and lower requirements on pupils. However, it is not absolutely clear whether that is due to "the pressure of the time" (schools compete for every pupil and therefore the standard is lower and more tolerance is necessary for the behaviour of pupils) or if it is because personal changes bring about a more detached point of view and tolerance, but maybe also resignation and loss of interest ("sparing one´s nerves"). The expressed better understanding prevails over the negative attitude; however, it is necessary to take into consideration the questions who actually are our respondents. We can assume that they are rather those active, open, willing and positively thinking teachers who were willing to share their experience. Thus, there might be more negativism, dissatisfaction and scepticism than we are able to reveal in a research conducted in this manner.

As far as the change in the relationship of teachers over 50 with parents is concerned, neither here is much agreement and they can be classified into several groups according to their responses:

- teachers who have developed understanding: "... we have more empathy, understanding, patience, generosity and helpfulness,.... we have/had children too..." (18 responses),
- teachers who have developed scepticism: "... they do not cooperate, are unwilling, are not authority for their children, unreliable, don´t respect school nor the teachers..." (11 times),
- teachers who have developed superiority: "... we are stricter, more critical, we are not afraid of them, I give them advice, teach them responsibility, treat them as pupils..." (10 times),
- teachers who have adopted tactics and strategies: "...you have to deal with them with care, I know how deal with them, I know what they are like...") (10 times),
- teachers who have developed optimism: "...we are striving for partnership, cooperation...." (4 times),

Some teachers (apparently mainly in small towns) point out that they know whole families – the parents were once their pupils and therefore the relationship is rather specific.

ON MOTIVATION AND CONTINUANCE IN THE PROFESSION

Motivation for work and high performance is closely associated primarily with professional satisfaction. Among the most important factors of professional satisfaction teachers rank the atmosphere at the workplace, good climate, cooperation with colleagues (62 times) and good relationships with the school management, "decent management", "personality of the headmaster" (23 times). Professional dissatisfaction often results in resignation from the profession. Research proves that there is a higher percentage of resignations among teachers within the first five or seven years after entering the profession, then in middle-age the situation is stabilised and at the end of the career the number of resignations increases again, however this is probably mainly due to early retirement (e.g. Ingersoll 2001). Out of our research sample 21.1% of teachers never changed their workplace, 20.5% changed a workplace once, 26.3% twice and 32.3% of teachers changed their workplace more times. 78% of the addressed teachers have never worked outside the school sector. The most frequent tendencies to change jobs are apparent in men, only 14% of men have never changed jobs and 47.1% of men changed jobs more than three times, 30.3% of men as compared to 20.1% of women have had a job outside the school sector.

The teachers were also asked if they ever in their career got a feeling that they had to give up the teaching profession. Nearly 45% of teachers disagree completely or partly (i.e. they never wanted to give up) while approximately 40% of the respondents fill in the opposite. We can get an insight into these tendencies by looking at the open questions. As reasons for the considered resignations the teachers mention firstly fatigue caused by the enormous amount of work and duties, health problems, the burn-out syndrome etc. (22 times), misbehaviour of pupils, their lack of interest etc. (14 times) and also conflicts with the school management and relationships among the staff (13 times). The presented reasons for continuance in the profession separate the teachers into two equal groups: those who continue because of the profession (they enjoy doing the job) and those who would leave immediately if they came across a better opportunity providing at least the same life security.

If the teachers were to choose once more whether to enter the same profession then nearly a half of them would choose teaching again (81 out of 166 responses) and the other half would either hesitate (i.e. would choose teaching under certain conditions or they do not know – 37 out of 166 responses) or would reject the possibility (48 out of 166 responses). Some of the rejections were very decisive and apparently entailed certain disillusion: "Certainly not! No, never!!! No way!" etc.

CONCLUSION

The results of the questionnaire investigation indicate that the pillar of professional self-concept of senior teachers is a sense of great responsibility and ageing brings about primarily higher security in the profession.

The sense of security is then closely linked with the sense of success. The teachers consider their strong points especially experience, personality changes such as "a detached point of view and distance" etc., on the other hand, what hinders their work is mainly health problems and fatigue together with misbehaviour and lack of interest of pupils. These findings in principle correspond with previous foreign and Czech researches conducted in this area. It is remarkable that the teachers repeatedly complain about the red tape, which worsens their fatigue. Questioning the teachers about the changes of self-concept involves relying on their memory and ability of self-reflection – their experience in this respect varies. If the teachers are able to reflect on some kind of change then it is in almost all the items. They notice changes particularly in better methodological work and regarding the relationship with pupils they take the role of more "understanding and lenient" teachers. The changes in the relationship with parents are not perceived so distinctly: the teachers admit superiority, critical attitude as well as the need of strategic conduct. Teachers are typically strongly attached to their profession and are motivated by good relationships among the staff rather than by work itself, an important role is played by the school management too. It seems that creating favourable climate in schools remains a great challenge for the school managements. A matter requiring attention is undoubtedly also the relatively high percentage of completely unsatisfied teachers (Is one tenth of completely unsatisfied teachers too much or little?) and those who consider their choice of the profession a life failure. A more detailed insight into the problem was enabled partly by the teachers´ responses to the open questions, greater understanding of some of the developmental changes will be gained from the case studies conducted within our research project.

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QUALITY ASSURANCE IN GERMAN AND YEMENI HIGHER EDUCATION: A Comparison

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ABSTRACT

This comparative study presents two different higher education accreditation systems, which are carried out by the Yemeni Accreditation Council (YAC) and the German Accreditation Council (GAC) in the two countries, Yemen and Germany. After an examination of the Yemeni Accreditation Council and the German Accreditation Council's literature, their recently developmental accreditation systems and practical methods are subject to entirely detailed analysis. As a result, the findings of the two councils' literature analysis reveal that there is a large gap between the Yemeni and the German Higher Education Systems in the implementation of accreditation.

Accordingly, it is strongly recommended that the Yemeni Accreditation Council should benefit from the positive elements of the German Accreditation Council for example, appointments of accreditation agencies, expert groups and the German accreditation system procedures, the accreditation of accreditation agencies, the internal review and the external review which may help the YAC to create the necessary mechanisms for the quality assessment improvement within the Yemeni higher education institutions.

Keywords: Quality assurance, accreditation system, higher education, institutions.

INTRODUCTION

Higher Education in Yemen

In Yemen, the Ministry of Higher Education and Scientific Research (MHESR) has attempted to establish the concepts of quality assurance and accreditation system in higher education institutions through organized workshops and/or seminars. The aim of these workshops and seminars is to make the higher education institutions and the academic staff aware of the concepts of quality assurance and accreditation standards because they mostly don't know what the quality assurance is.

In 2002, for instance a workshop was organized by the MHESR for the rectors, vice-rectors, academic staff, and officials from the institutions of higher education across Yemen. Another example, in 2006 two training workshops on quality assurance and accreditation system were performed in the Ministry of Higher Education and Scientific Research for the higher education officials, university rectors, and other academic staff. These two workshops were practical because the attendants, particularly, the universities' rectors as well as the academic staff endeavoured to discuss the foundation of an Accreditation Council for higher education and internal quality assurance processes implementation (NARIC 2007). Besides, the international organizations in Yemen, for instance the British NARIC and DAAD, the German Academic Exchange Service, have been officially asked to hold as well as to participate in all workshop and/or seminar activities through which they can help the Yemeni higher education institutions to establish quality assurance and accreditation system. On the project funded by the World Bank called 'the Higher Education Learning and Innovation Project' (2003-2006), the Ministry of Higher Education and Scientific Research (MHESR) has signed an agreement for consultant services with DAAD and NARIC to perform workshops and/or seminars on the systems of quality assurance and accreditation.

The main aim of the project presented in the following quotation:

Assistance to the two pilot universities (Sana'a University and University of Aden) in order to initiate a process of self-evaluation and improvement and to develop agreed standards, which could be applied by other public sector universities, as a basis for future accreditation; and to perform internal assessment of a selected private institution. In addition, the project will help the MHESR to prepare for the early extension of accreditation to Yemen's private universities, based on rigorous and transparent quality standards (World Bank, 2002 p.7).

Higher Education in Germany

In Germany, a two-tiered system of evaluation established in 1999 and widely applied to the higher education institutions in all sixteen states combines the internal and external evaluation. However, the Standing Conference of the Ministers of Education and Cultural Affairs held in 2005 resolved the indispensable main elements of the quality management system having the all forms of higher education institutions combining the various measures and procedures of quality assurance. These measures and procedures include an evaluation referring to some indicators and specifying individual tools, e.g. integration of internal and external evaluation, involvement of undergraduate and postgraduate students. The internal evaluation consists of a systematic inventory and analysis of teaching and studying taking care of research conducted by the department or the faculty that concludes with a written report. Consequently, an assessment is done by external experts who as well write down their finding and recommendation in a final report. External evaluation conducted by regional evaluation agencies is performed by a peer review (experts) from other higher education institutions, research establishment or business community and are repeated at various intervals. The evaluation measure's aim is to undergo academic standards in teaching and teaching methods and the success of teaching to regular assessment. Regarding the accreditation program, the Standing Conference (2004) resolves the following main responsibilities which the German accreditation council should carry out:

- Accreditation of agencies;
- structural requirements for binding guidelines for the agencies;
- definition of the minimum requirements for the accreditations procedures;
- monitoring the agencies responsibilities performances.

In 2005, the accreditation council was transferred to a public law foundation. Then the Foundation Accreditation Acts as a central documentation service for accreditation system that administers the database of the study courses accredited in Germany (German education system 2006).

BACKGROUND

Higher Education in European Countries

European Commission (1994) has encouraged Germany to launch a European pilot study on quality assessment in higher education in order to disseminate, evaluate and improve concepts applied so far in the Netherlands, UK, France and Denmark. Only a few German universities and other higher education institutions could participate in the experimental project. The main aim of this project is to make the academic staff familiar with the internal self-evaluation, and external peer's evaluation, which is based on site visits and a final assessment and report. The experimental project, mainly not based on comparison and ranking is estimated as successful and stimulating and raises the interest in further actions and detailed information about the approaches and experiences which are applied in other countries. The German Rectors' Conference and the Science Council recommend establishing a quality assurance system in German Higher Education (KMK, 2008).

The European Union Council (Lespinard, M.G. 1998) as well recommends that all states should support where necessary and establish transparent quality assurance objective systems, which are summarized in the following points:

- " protecting the higher education quality in the economic, social and cultural context of their countries while taking due account of the European dimension in a quickly shifting world;
- urging and assisting higher education institutions to use quality assurance as an instrument of teaching and learning; and
- encouraging mutual information exchanges on quality and quality assurance at community and world level and motivate cooperation between higher education institutions"

The UK Quality Assurance Agency (1998) for higher education introduces the quality assurance and states that" it is the totality of systems, resources, and information devoted to maintaining and improving the quality and standards of teaching, scholarship and research and of the students' learning experience". Quality assessment in the UK has been used since 1984 with external reviews of university research activities and later has been extended to teaching and learning in the Higher Education Funding Council Framework. Accordingly, HEQC (1991) has undertaken quality assurance audits in all higher education institutions. The HAQC was canceled in 1997 and replaced by QAA, the Quality Assurance Agency with a new mission and the responsibility for continuation audit based on "general question of how individual institutions discharge their obligations and responsibilities for academic standards and their programmes quality and awards together with the evidence that they usually apply for this purpose. The external quality assurance audits have been integrated with the quality assessment concerned with the quality of teaching and learning. Furthermore, universities may have their own internal quality assurance process assessed also by the external review in case the QAA report is good (QAA 1998).

In Germany and Austria, the higher education system of accreditation has been recently introduced in the context of Bologna Process and the introduction of new degree systems. Harvey (2004, p. 5) confirms that" Europe is rushing precipitously into accreditation and the approach taken is based on naïve views of what accreditation can be achieved". In some European countries, the institutional accreditation systems have been normally introduced by governmental and/or public/private agencies, for example, the private higher education institutions accreditation in Germany and Austria. Other systems are based on programme accreditation. Similar to that in the USA, the programme accreditation in Europe has to give a license to be practiced, but it is suspended from issuing licenses (Federkeil, G. 2008). Harvey (2004, p. 7) states that "accreditation system is more about minimum standards than about quality". Federkeil, G. 2008, p. 225) adds that "for decades, the German higher Education system has been cultivated by the myth saying that all universities are of equal quality. Coupled with a strong notion of university autonomy, this belief serves to delay the adoption of quality assessment in German higher education. Up to 1980s, notions of competition and quality assessment were opposed by many stakeholders within the higher education sector".

The Bologna Process is the main challenging factor in respect to quality mechanism steering. Only Germany, the Netherlands, Norway, and Spain have introduced the accreditation system on the Bologna –associated arguments. France has introduced a new master's degree argued on the same grounds which will be combined by some of the accreditation form although the programme is still being discussed. In England, a recent policy paper entitled" The Future of Higher Education", Bologna and European issues are probably avoided and/or concealed when referring to the institutional issues (Schwarz and Westerheijden, 2007).

In 1990s, an active borrowing of evaluation and of accreditation programmes largely took place (Robertson, and Waltman, 1992, Van Vught, 1996). Accordingly, positive and/or negative results could be expected from borrowing new policy instruments. However, the evaluation and/or accreditation models borrowed from other countries have to be adapted contextually to the new model which should be introduced. For example, Denmark and Portugal claim that they have used the Netherlands evaluation as a model, but they are different

from one another from the original (Schwarz and Westerheijden, 2007). The quality assurance programmes, evaluation and accreditation which describe how they are related to social problems to which they must respond to have been mentioned in this literature review. In general, the European countries should remember that quality of higher education is one of the major drivers of the Bologna Process (Reichert and Tauch 2003). Reichert and Tauch (2003, p. 100) agree with Schwarz, and Westerheijden (2007)'s claim and state the following statement related as well to the Bologna Process which must be carried out by both public/governmental and private higher education sectors in all European countries:

"together with the preparation of graduates for a European labour market, it is the improvement of academic quality which is seen as the most important driving force of the Bologna Process, not just at the institutional level but also at the level of governments and rectors conferences".

Higher Education in the Arab Region

All higher education systems and institutions should give a high priority to ensure the quality of prgrammes, teaching, and outcomes. Structures, procedures and standards for quality assurance should be developed in the Arab region to be commensurate with international guidelines while providing for a variety according to the specifities of each country, institution, or programme. Further higher education institutions need appropriate financial and human resources to choose higher quality of education (UNESCO, 1998).

Although individual universities may have internal processes for assuring quality, there is no national quality assurance process. Consequently, there are no incentives for either universities or the academic staff to secure higher quality and standards in what they supply. MHESR (2006) has a formal process which does not include a full evaluation of the quality of the higher education institutions input or processes. There is an example of good practice in quality assurance in Yemen. The private university of science and technology has quality assurance process that includes the evaluation of each professor twice a year, well structured and regular curricula review and formal reviews of programme impact and administration. Yemen which now has seven state and eight private universities in rethinking areas such as admission policy, quality assurance and curricula, which are responsive to market needs. Equity diversified financing and relevance will dominate a forthcoming evaluation of the sector (UNESCO, 2001).

Only few countries have quality assurance committees or agencies working dependently, but they are still controlled by the ministry of the Higher Education and the prime minister as in Egypt, Jordon, Oman, Palestine, Saudi Arabia, Sudan and UAE. There is a high political influence on quality assurance in the Arab countries which have different quality assurance systems in higher education systems. All national quality assurance bodies are governmental (ANQAHE, 2008). Few institutions of higher education have founded units for quality assurance. Nearly about 30% of member states have founded a national body for quality assurance (UNESCO, 2006).

Beirut conference resolution (1998) of the ministers of higher education calls for establishing a regional mechanism for quality assurance and accreditation under the au-spices of the association of the Arab Universities and calls also to Member states of the region to establish a similar mechanism at the national level.

Accordingly, several Arab countries have responded to establish mechanisms for quality assurance which have been performed by only private institutions. However, other countries, for example, Egypt, Lebanon, Morocco, Oman, Saudi Arabia, the united Arab Emirates, Yemen and the Palestinian authority have founded or are contemplating the establishment of similar bodies and the adoption of procedures and mechanisms for quality assurance. Additionally, in these countries, through their own initiative, some universities have started a self-assessment process, whereas others are seeking to be accredited by international accreditation bodies (UNISCO, 2003).

In their conferences held between 2000 and 2003, the Ministers of higher education in the Arab region issued a series of resolutions which call both the Arab States to find national agencies for quality assurance and higher education institutions and to find institutional systemic rules for quality assurance. Consequently, an expert committee that the Arab universities association resolved has developed self-assessment and accreditation of higher education guidelines sent to all members of association. The quality assurance ideas and projects in higher education in the Arab region have not been realized so far because the institutions do not have highly qualified human resources to conduct them. In a word, it seems very clear that the Arab regional higher education systems and institutions still have to go a long way in implementing higher education systems for quality assurance (UNESCO/OED, 2005).

Based on the external reviewers' results of 19 universities, the United Nations Development Programme (UNDP) project conducted in 2007-2008 on the quality of engineering programmes in 10 Arab countries (Algeria; Bahrain; Egypt; Jordan; Lebanon; Morocco; Palestine; Sudan; Syria; Yemen) reveals that the quality assessment and enhancement are judged to be good in 4 universities and satisfactory in 6 and unsatisfactory in 9. The academic standards are judged to be good in only 5 universities, satisfactory in 10 and unsatisfactory in 4. Additionally, the UNDP project highlights the common regional weaknesses and needed reform, for example, the higher education engineering sector in the Arab Region. The regional weaknesses are:

- academic standards (intended teaching outcomes; curriculum; student assessment; student achievement);
- quality of learning opportunities (teaching and learning student progress, learning resources); and
- quality assurance and enhancement which are not implemented.

Consequently, the Arabic region has to recognize the main mechanisms of a quality assurance system and to develop and implement suitable systems as quickly as possible. Irrespective of the adopted system, it has to be internally and externally reviewed at regular intervals in line with good international practice.
In order to improve the quality of, for instance, higher education engineering programmes across the Arab region, the UNDP Project (2007-2008) suggests the following important steps which should be performed in a collaborative and coordinated approach between universities, Ministries of Higher Education and other concerned stakeholders as well as looking for common implementation policy. The vital steps are:

- programme's points of reference;
- an academic programme and curricula,
- academic autonomy and control;
- cognitive skills development,
- teaching, learning and assessment, (6) student support,
- Language
- learning resources,
- quality assurance and enhancement.

Some studies on external quality assurance purposes demonstrating considerable commonality in the form of national QA frameworks conducted by Neave (1991), Kells (1995), Vroeijenstijn (1995) and Frazer (1997) are summarized by Billing, D. (2004) as follows:

- Improvement of quality; Publically available information on quality and standards;
- Accreditation, for example, legitimization of certifications of students;
- Public accountability for standards achieved and for use of money; and
- To contribute to the HE sector planning processes.

On his comparative studies of national quality assurance frameworks, besides western Europe, Harman (1998) has covered Australasia, Brazil, Chilly, China, Colombia, Hong Kong, Japan, Korea, Philippines, South Africa, Taiwan, Thailand and USA. The Harman's comparative studies have been constructed differences in organizing the following key features:

- Purpose;
- National agency;
- Body responsible for QA within the institutions;
- Whether participation is voluntary or compulsory;
- Methodology (self-study, external peer review, site visits, references to statistics, surveys of students, graduates, employees, and professional bodies or testing of students);
- Focus (teaching, research, institution, national system); and
- Reporting and follow up.

The study Rationale

According to the researcher's knowledge, there is no study on quality accreditation conducted between developed and developing countries particularly of the Arab region. This current comparative study of Yemen and Germany bridges this vital gap in higher education literature.

The study hypothesis

It is hypothesized that both the Yemeni Accreditation Council (YAC, in Yemen) and the German Accreditation Council (GAC in Germany) have similar regulations and methods in quality accreditation implementation.

The Study Objective is To Help

The Yemeni Accreditation Council (YAC) to:

- know the German higher education quality assurance and accreditation systems; and (ii) know the positive elements probably found in the German higher quality assurance and accreditation systems and their practical methods which the YAC can benefit from in the development and improvement of the higher education institutions' outputs in Yemen.
- The study significance.

The findings of this comparative study will assist the Yemeni Accreditation Council (YAC) to:

- know closely the negative and positive elements which are likely found in the German higher education quality assurance and accreditation systems and its practical methods; and
- to know how to make use of the positive points in the implementation of the quality assurance and accreditation systems within the Yemeni higher education institutions.

Data collection methodology

The data on which this research draws are derived from documents of the Yemen Accreditation Council (YAC, in Yemen) and the German Accreditation Council (GAC, in Germany) including their nomination and appointments, materials of committees responsible for quality assessment and quality accreditation, reports and descriptions of the YAC and GAC, the authorized power for each council and accounts of the YAC and GAC's systems for quality assessment and quality accreditation implementation in the higher education institutions of the two countries, Yemen and Germany. The quality assurance and quality accreditation systems applied by the two councils. The YAC and GAC are subjected to the comparative analysis on the following points:

- The nominations and appointments of the two councils
- The authorized power for each council;
- The YAC and GAC's systems; and
- The YAC and GAC's methods.

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A COMPARATIVE ANALYSIS OF THE YEMEN ACCREDITATION COUNCIL (YAC) AND GERMAN

Accreditation Council (GAC)

It seems very clear that the two councils, the German accreditation council and the Yemeni accreditation council are different in many ways. The German council's members' composed of 17 are appointed by the Standing Conference of the Ministers of Education and Cultural Affairs of the 16 German states (the lander) as well as the Rectors' Conference (KMK & HRK) where the Yemeni council's members composed of 9 are appointed by the Prime Minister based on the nomination of the Minister of Higher Education and Scientific Research (Item (a-3), Article (iii), [1]cp 2). The chairman of the German council could be one of the 17 members whereas the Yemeni council's chairman who is one of the nine council members is appointed by the Presidential Act with the degree of ministry deputy (Item (a-5), Article (iii), cp 2) which is relied upon the three ministers' selection and nomination, Minister of Higher Education and Scientific Research, Minister of Education, and Minister of Technical and vocational Education.

The German council members are divided into five groups which represent likely the whole stakeholders. They are presented here in the following points:

- Four academic representatives;
- Four lander representatives;
- Four professional practitioner representatives, one of whom from lander Ministers is responsible for legislation governing services and wages;
- Two-student representatives with accreditation experience; and
- Accreditation agencies' representatives in an advisory capacity.

In contrast, the Yemeni accreditation council's members don't represent all the stakeholders. They represent only one group of stakeholders, the academic staff. More clearly the Yemeni accreditation council does not have the representatives of these stakeholders: the professional practitioners representing the public and private universities that can get an easy and quick overview on how to organize the system of the Yemeni accreditation council (YAC) which will play a major effective role in the development and improvement of the higher education institutions' accreditation system in Yemen; the student's representatives in their study programmes, and the representatives of specialized agencies of accreditation from whom the YAC can benefit in the accreditation methods and procedures implementation.

The German accreditation Council's members are appointed by the Standing Conference of State Ministers of Education, and Cultural Affairs (KMK) as well as the German Rectors' Conference (HRK). On the other hand, the Yemeni Accreditation Council's members and
the chairman of the council is designated by the Prime Minister and the President of the country respectively which is based on the nomination of the Prime Minister. Besides, the YAC is not financially included in the budget of the Ministry of Higher Education, and Scientific Research MHESR. It is financed by the state's public budget. Therefore, it is inferred that the YAC will not be effectively cooperative at all with the Ministry of Higher Education and Scientific Research because the YAC's members and chairman believe that they are above the MHESR. In other words, since they are designated by the prime Minister and the President of the country respectively, they think that they are not responsible to either the MHESR or to universities; they are actually responsible for the high- decision's makers in the state. As a result, the accreditation system and its procedures will be ineffective as well as negative.

The appointment of the members and the chairman of the accreditation council in Yemen contracts with the key strategic objective of the MHESR (2006) stating that universities should have a Board of Trustees, (which could be similar to the accreditation Council) which should include the academic community members

conditionally not representing majority, local business members, local authority members and other beneficial stakeholders. Besides, the Board of Trustees (the accreditation Council) should have responsibility for appointing senior officers including the rectors following open competition and transparent selection criteria which are absolutely essential for the best possible appointed people for the job within universities.

Accordingly, there is a huge gap of unclearness and/or lack of clarity about where ultimate responsibility for universities is located. The rectors of universities are completely subjected to the political appointment in the Arab region. Generally speaking, in the Arab countries rectors and vice rectors are designated by the President and/or the King of the country and the Prime Minister respectively. In European countries, however, university rectors, firstly, should be professors and secondly should be elected (Rhoads and Sporn, 2002).

The objective of the German Accreditation Council is to contribute to the development of the quality of teaching and learning in Germany and to take special care of the higher qualified accreditation agencies accredited and certified to perform accreditation procedures which are based on the highest degree of quality, comparability and transparency. Before practicing their authority, all accreditation agencies should be accredited and subjected to the council's accreditation. Similarly, within the two years of its transitional period, the Yemeni accreditation council should help higher education institutions to adopt the quality assurance systems and the use of academic standards to improve teaching and learning. It shall hold training courses and workshops for the council's members, consultants, and employees and rectors as well as vice rectors of universities. The Yemeni Accreditation Council also has to train the higher education institutions to conduct self-evaluation studies at an experimental stage in order to help to develop quality systems and to test the effectiveness and efficiency of evidence and reports used in these systems, and then select the qualified higher education institutions which are eligible for accreditation, as well as to provide technical support for the preparation of self-study to use for accreditation (Item (b), article (xii), (cp 3).

The German Accreditation Council's objective is specific whereas the Yemeni Accreditation Council's objective is wordy. The German Council is based on highly specialized accreditation agencies to carry out the methods, instruments and procedures of the accreditation system. In contrast, the Yemeni Council does not mention any committee and/or agency that may perform the accreditation systems on behalf of the council.

Moreover, the tasks of each council which have to be performed are different in numbers. The German Council's tasks are seven:

- Accreditation and reaccreditation of Accreditation agencies which are required to award study programmes the Accreditation Council's Seal;
- Collecting all the common and specific structural guidelines of the Lander and publishing them in binding guidelines for the Agencies;
- The requirement regulations for accreditation procedures which include the prerequisites and limits of bundled accreditations;
- Accreditation monitoring which the Agencies performed;
- Ensuring a fair competition among the Agencies;
- Prerequisite definition for the recognition of foreign institution accreditation;
- International cooperation promotion in the field of accreditation and quality assurance.

Although the Yemeni Council's tasks are seventeen (Article (iv), cp 2), they meaningfully correspond to those tasks of the German Council. The immense difference between the German Accreditation Council (GAC) and the Yemeni Accreditation Council (YAC) is that the Yemeni Council does not have any highly specialized accreditation agencies accredited and certified to carry out the procedures of accreditation systems. On the contrary, the German Council does have seven highly specialized, accredited and certified agencies which can perform the procedures of accreditation systems in various subject fields. These accreditation agencies are

presented alphabetically in the following table with their starting dates, functions and membership with international agencies.

Table 1
Description of the agencies' functions and relationship with international accreditation agencies

AGENCY	FUNCTION	RELATIONSHIP
ACQUIN (2001)	Accreditation and Quality Assurance Institute	NON
AHPGS (.....)	Accreditation Agency for Study Programmes in Health and Social Science	ENQA(2009)
AKAST (.....)	Agency for Quality Assurance and Accreditation of Canonical Study Programmes	NON
AQAS (2002)	Agency for Study Programmes Accreditation and Quality Assurance	ENQA(2002)
ASIIN(1999)	Accreditation Agency for Degree Programmes in Engineering, Informatics/Computer Science, the Natural Sciences and Mathematics	ENQA(2007)
FIBAA(1994)	Foundation for International Administration Accreditation	ENQA(2001)
ZEVA(1995)	Central Evaluation and Accreditation Agency	ENQA(2001)

Unlike the German Council, the Yemeni Council's accreditation is ineffective because the rules, regulations and instructions issued by the council should be submitted to the Minister of Higher Education and Scientific Research to complete their legal procedures (Item (11), Article (iv), cp 2). Besides the Yemeni Council is based completely on the MHESR to issue a warning to any higher education institution in case it violates the principles and accredited standards (Item (12), Article (iv), cp 2) whereas the study programme accreditation and the system accreditation are awarded by the German Accreditation Council's Seal lasting for either five or eight years.

Furthermore, the Yemeni Accreditation Council is authorized by some articles of the Presidential Act issued in 2009 to form different accreditation committees and/or agencies, such as advisory committees, accreditation evaluation and follow up committees working under the council's chairman (Article (ix), cp 2) to conduct the accreditation tasks that the council has resolved (Item (3), Article (iv), Item (c), Article (vi), Items (5,7), Article (vii), cp 2). However, the Yemeni Accreditation Council is directed by the chairman that is appointed by the Presidential Act with the degree of ministry deputy (Item (a-5) Article (iii), cp 2), and who also has been given many tasks to do in the council (Article (viii), cp 2). In other words, other words the Yemeni council is less independent and more centralized than the German council.

Conversely, it is inferred that the German Accreditation Council's members work as one team, and it is entirely relied upon the highly specialized accreditation agencies performing the whole procedures of accreditation systems contributing to improve and to develop teaching and learning at the Bachelor and Master degree programmes in Germany.

The Higher Education Programmes and Accreditation Procedures Systems in YAC and GAC

The Yemeni Accreditation Council (YAC) does not have clear and effective methods, instruments and procedures for either higher education programmes accreditation and internal quality assurance systems of higher education institutions, particularly in the field of teaching and learning. The Yemeni Council is based on an appointed specialized experienced ad hoc committee composed of no less than five and no more than eleven members, including representatives of Ministry of Higher Education and Scientific Research to:

- establish accreditation standards and review them every five years; and
- seek the assistance of any experts and specialists in the performance of its accreditation work.

Additionally, the Yemeni Accreditation Council states that all public and private higher education institutions are obliged to conduct the following required educational factors which will lead higher education institutions gradually towards international accepted criteria.

The institutions should establish a well recognized effective quality assurance system in their various administrative units and use its results to:

- improve their performance;
- assess periodically, objectively and scientifically themselves and their programmes in the light of their mission and policy as an effective means to review the academic programmess that they offer;
- allow the evaluation committees to carry out the tasks of evaluations resolved by the council, and
- apply for accreditation certificate in accordance with the rules and conditions determined by the council (Items (b,c,d,e) Article (xiii), cp 3).

The council concludes that evaluation and accreditation should be conducted objectively and fully transparently in accordance with the principles of evaluation and academic standards (Item (a), Article (xiv), cp 3). On the contrary, the German Accreditation Council does have extremely good methods, instruments and procedures for academic programmes accreditation and quality assurance systems' accreditation, in particular, the teaching and learning fields. To conduct the accreditation which is based on the peer review principles, the German council has to do the following steps:

- Submission of an application to a relevant agency accreditation by the institution
- An expert group appointed by the agency consists of:
- Teachers;
- Students; and
- The professional representatives
- Implementation of the programmes of accreditation criteria;
- Performance of a site-visit of the institution; and
- The assessment report of the expert group.

On the basis of the expert reports and the German Accreditation Council's decisions, the responsible commission from the relevant study programmes can:

- grant an accreditation for the relevant study programmes;
- grant an accreditation with conditions; and
- either give up the accreditation process or refuse entirely the accreditation.

External Review Process

The external review process is mentioned without details' in the Yemeni Accreditation Council's tasks. Items (a, d) of the Article (xi) cp 3) authorize the major academic committee appointed by the Yemeni council to seek the assistance of any experts and specialists in the performance of its accreditation work, to establish the accreditation criteria for the council and to review the accreditation criteria every five years, or at any time it needed, or at the request of the concerned ministries, parties and beneficiaries. Article (xxiv), cp 3) also gives the Yemeni accreditation council a complete authority to perform an external evaluation in order to assess its achievement every three years. Accordingly, although the Yemeni Council has to achieve two kinds of evaluation, the internal and external reviews, they actually lack the clear steps of procedures. In other words, the internal and external reviews are not perfectly described as how effectively they should be conducted.

In contrast, the German Accreditation Council and its agencies for accreditation are subject to internal and external panels of reviewers for system and programme accreditation every five years. In fact, it is relied upon the main regulations set by the KMK and internal standards. The methods of evaluation for quality assurance

system and programmes accreditation which the GAC conducts in its accreditation work are probably similar to those applied and/or carried out in the European countries.

On the basis of the Accreditation-Foundation Act, the essential regulations for accreditation set by the KMK (the Standing Conference of the State Ministers of Education and Culture) and international criteria prepared by ENQA and ECA, the German Accreditation Council has to carry out an external review every five years.

This external review based on an internal review is presented in the points below:

- The appointment of a review panel by the KMK;
- A self-evaluation report set by the GAC includes;
- A site visit; and
- A review report by the panels of reviewers.
- A review report by the panel of reviewers is sent to the respective boards, the KMK and HRK, ENQA and ECA;
- A draft of a plan with commitment done by the GAC for implementing the reviewer's recommendations; and
- Publication of the review report.

External Review Process Schedule

In reference to either the internal or to the external reviews' achievement, the Yemeni accreditation council (YAC) does not have any evaluation methods' timetable through which it can perform its accreditation work. The two Items (a,d), Article (xi) and Article (xxiv) state that the internal review for accreditation criteria should be done by external evaluation teams to assess the YAC's performance every three years without mentioning what evaluation procedures that the YAC can perform effectively and properly on both quality assurance system accreditation and academic study programmes accreditation. On the other hand, the instruments, methods and procedures of the internal and external quality assurance used by the German accreditation council (GAC) are clearer and easier to follow and to apply than those of the Yemeni accreditation council. The German Accreditation Council can carry out both the internal, and the external reviews process at the same time. They are conducted respectively according to the following timetable:

- After the review panel is appointed by the KMK, the site visit tasks usually take place in early September;
- The draft review report is submitted four weeks after the site vistit to the GAC for comments within three weeks;
- The final report is submitted to KMK and HRK, ENQA and ECA together with the comments of the GAC; and
- The German Accreditation Council has to submit a report with the in-depth-follow-up procedures usually in February to the KMK and HRK, ENQA and ECA.

CONCLUSION AND RECOMMENDATIONS

It seems clear that the two councils, the Yemeni Accreditation Council (YAC) and the German Accreditation Council (GAC) are likely similar in a way, in which they are appointed. The Yemeni Accreditation Council's members and chairman are designated by the Prime Minister and the President of the country (Yemen) respectively, whereas the German accreditation council's members are appointed by the Standing Conference of State Ministers of Education and Cultural Affairs of the 16 states (KMK) as well as the German Rectors' Conference (HRK). The members of each council are completely appointed from people who work in the field of higher education institutions. The YAC, however, does not have the representatives of stakeholders, practitioners and students, having an important role in the system and the system procedures of accreditation. Additionally, the two councils, the YAC and GAC have the right to establish and/or to appoint accreditation agencies to help them to perform their accreditation work. The YAC has not appointed any accreditation agencies so far. In contrast, the GAC has seven specialized agencies of accreditation (see p.9). The YAC's

authorized so many tasks mentioned mostly by all Items of article (iv) cp 2 of the Presidential Act No. 210 of 2009 in order to perform the higher education institutions' accreditation, but they, to some extent, correspond to the GAC's which are only seven. In fact, the two councils could be convergent in academic rules, regulations and instructions but different in procedures of quality assessment implementation.

Increasingly, the Yemeni Accreditation Council has no transparent system of accreditation of higher education institutions which is mostly used in Germany, European countries and in USA. Accordingly, it is greatly recommended that the Yemeni Accreditation Council (YAC) has to make use of the German accreditation system of higher education institutions which is based on these two steps:

- the internal review (self-evaluation followed by a site visit); and
- the external review (external evaluation) through which the Yemeni Accreditation Council can develop and improve the system of the Yemeni higher education accreditation which in turn will factually play a major and effective role in serving the necessary demands of the local and regional markets in Yemen and the Middle East Area.

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UNIVERSAL BASIC EDUCATION (UBE) POLICY IMPLEMENTATION IN FACILITIES PROVISION: Ogun State as a Case Study

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ABSTRACT

The Universal Basic Education Programme (UBE) which encompasses primary and junior secondary education for all children (covering the first nine years of schooling), nomadic education and literacy and non-formal education in Nigeria have adopted the "collaborative/partnership approach".

In Ogun State, the UBE Act was passed into law in 2005 after that of the Federal government in 2004, hence, the demonstration of the intention to make the UBE free, compulsory and universal. The aspects of the policy which is capital intensive require the government to provide adequately for basic education in the area of organization, funding, staff development, facilities, among others. With the commencement of the scheme in 1999/2000 until-date, Ogun State, especially in the area of facility provision, has joined in the collaborative effort with the Federal government through counter-part funding to provide some facilities to schools in the State, especially at the Primary level. These facilities include textbooks (in core subjects' areas- Mathematics, English, Social Studies and Primary Science), blocks of classrooms, furniture, laboratories/library, teachers, etc.

This study attempts to assess the level of articulation by the Ogun State Government of its UBE policy within the general framework of the scheme in providing facilities to schools at the primary level. It shows that there is the need for a more deliberate and aggressive provision of these facilities with a view to influencing positively on school performance. The study also looks at the level of fund commitment, as well as the effective utilization of such funds by the State Government in providing these facilities with the aim of achieving the objective of providing 'education for all" by the year 2015.

Keywords: UBE, Policy implementation, Facilities provision.

INTRODUCTION

Nigeria has come to appreciate the focal position of education as an instrument par excellence for achieving individual and societal development. This is demonstrated in the provision of basic education as evident in the formulation of a National Policy on.

Education (FRN, 2004). All successive governments, therefore, have been emphasizing the provision of basic education since 1977.

The UNESCO (2002), Ofoegbu (2002), Obanya (2002), Arikewuyo (2005) and Adeyemi (2007) conceptualize Basic Education as all forms of organized education and training, including access to information to equip the individual to cope better with work and family responsibilities and change his/her image of him/her. In like manner, the Jomtien Declaration and Framework of Action on Education for All (1990) defines Basic Education as a process which encourages close articulation of formal, non-formal and informal approaches to education

and structures for the awakening of all round developments of human and capital potentials. Basic Education, therefore, is a "life-long" form of education. This involves "learning to learn", "continuing education", "mass literacy" and "Adult Education". The Federal Government of Nigeria (2004) in the National Policy on Education is very clear on the importance of basic education. The new idea of basic education is expected to cover primary and junior secondary education for all children (encompassing the first nine years of schooling), nomadic education, and literacy and non-formal education.

To achieve this strong educational foundation, the Nigerian primary education system therefore, needs adequate facilities such as blocks of classrooms, furniture, teachers, instructional materials, libraries and other school equipment. These are expected to be provided for effective teaching – learning to take place, as well as for adequate classroom population, effective classroom climate, standard pupil-teacher classroom ratio and pupils academic achievement to be attained among others. Achieving these will undoubtedly require sound planning, statistics and adequate funding.

The recent introduction of "Basic Education" and "Education For All" is not entirely new in the history of education in Nigeria. It is important to point out that the 1976 Universal Primary Education (UPE) programme was not even the first attempt at providing free Universal Basic Education for the citizens. It should be noted that the former Western Regional government had mounted one in 1955 followed by the former Eastern Regional government in 1956. However, the UPE of 1976 was the first to be organized by the Federal government to cover the entire country. Suffice to mention that just as the basic education schemes of the former Western and Eastern Regional governments of 1955 and 1956 respectively were hampered by a number of factors, the 1976 UPE scheme that gave Nigerians hope of a literate society was equally besieged with lots of problems. Nwagwu (1976), noted that the implementation process of the UPE scheme became hampered by the surprising and hasty reduction in the funding of the programme by the federal government which affected the provision of facilities such as classrooms, furniture, instructional materials, teachers, etc. needed to make the programme work as expected. There was a shortage of everything except pupils. The new initiative UBE was majorly triggered by the World Conference on Education For All which was held in Jomtien, Thailand between 5th - 9th March 1990 and organized by the World Bank, UNDP, UNESCO and UNICEF. This was launched on 30 September, 1999 in Sokoto, Sokoto State by President Olusegun Obasanjo, who, by coincidence, was the one who launched that of 1976 when he was the military Head of State.

Current situation in the area of facilities provision, academic achievement of the primary school system speaks a volume of the decadent state of primary education in Nigeria. Ogun State might not be entirely absolved from this apparent situation and decline (Dike, 2000; 2002 and Ajayi and Adeyemi, 2007).

Since the start of the UBE scheme in Nigeria and Ogun State in particular, the Nigerian government has been providing facilities to enhance the operation of the programme at the primary school level.

There is also the claim that so far, the programme has focused on and made progress in the development of infrastructure, the supply of teachers, and the improvement of curricula. The programme has also been acclaimed to have succeeded in building partnership for educational development (Mobolaji, 2002; www.nigeriafirst.org2003 & Abu, 2004). In the area of quality education, a committee has been set up to review and enrich basic education curricula to meet individual and national needs. The World Bank is among the group of institutions that the Federal Government has entered into partnership within the implementation of its UBE scheme. One may ask; how valid are these claims and how pervading are these efforts in Ogun State?

A report of the African Regional Studies Programme of the World Bank presents a sorry picture of the conditions in African primary schools - Nigeria inclusive. It points out that most schools in Sub-Saharan Africa suffer from very poor conditions of learning in dilapidated or half-completed buildings, insufficient desks, overcrowded classrooms, inadequate learning materials, poorly educated and motivated teachers and the use

of recitation as the dominant vehicle for learning (World Bank, 1998). It was also observed that in Nigeria the total enrolment as a percentage of total school age population had been declining since 1983 from 93% in that year to date (Chinsman, 1998 cited in Gbadamosi & Adeyemi, 2003).

Ogun State might not be entirely absolved from this apparent situation and decline in enrollment. This was despite the various government policies and encouragement. These suggest that there are fundamental problems, which extremely, are connected with deplorable facilities.

Ajayi (2005) posits that the probability of the success of any curriculum innovation is very low without the provision of the necessary facilities and other materials such as textbooks, and audio-visual aids. In Ogun the State Education Handbook (1976-1999), it was indicated that the state strived to provide facilities and other instructional materials and equipment for the use of primary schools.

Despite this effort, Ajayi (2001) felt seriously concerned that as much as a total of 276, 854 classrooms (1999/2000 session) in our schools were dilapidated. He also notes that the obvious inadequacy of this number had resulted in severe overcrowding with pupils sitting on a bare floor.

FACILITIES PROVISION AND PROGRAMME SUPPORT STRATEGIES UNDER UBE

A 15-year deadline has been set for the achievement of the objectives of the UBE scheme. Thus, in the past five years, a massive programme support in the area of funding and provision of school facilities are required from the State governments in line with the implementation policy of the Universal Basic Education scheme in Nigeria. These include:

- Rehabilitation of schools and the construction of new schools and classroom blocks
- Special programmes targeted at girls and hard-to-reach groups such as children of fishermen and nomadic communities.
- Reduction of high pupil -teacher ratio
- Formation of partnerships with local governments and communities on education.

The building programme of the UBE programme involves three components:

- The provision of additional classrooms/offices/stores/toilets/special rooms to existing schools that are short of such facilities.
- The renovation of existing structures in bad condition. This involves a number of minor works on floors, walls, openings and most importantly, the repairs of old/poor furniture.
- It also involves the construction of new schools for which a new layout plan has been made. An alternative design is also included in this plan for urban schools that are tight on the availability of land. The designs in both cases have been made fairly flexible to fit into different sites while growing by simple linear additions of classrooms.

The programme equally requires the construction and supply of furniture for classrooms, office and special rooms, that is, laboratories, workshops and libraries.

Other programme strategies include: Expansion of early childhood care education; Improvement of teacher training; Provision of teaching-learning materials and; Provision of other forms of teacher support programme Funding UBE.

In order to achieve the UBE programme support strategies in the area of facility provision, the Federal Government Intervention (in collaboration with the States) is to be funded through:

- Not less than 2% of the Consolidated Revenue Fund (CRF) of the Federal Government;
- Funds/contributions in the form of Federal Government Guaranteed credits;
- Local/international donor grants.

The federal intervention fund to States is to be utilized for the purpose of broadening access, improving quality and ensuring equity in basic education, but not for teachers' emoluments and overhead costs.

The components are as follows: (a) Substantial part of the CRF will be disbursed to States as matching grants; (b) Part of it will be disbursed to States for special intervention support:

- Initiatives by States to correct educational imbalance up to 2010.
- Efforts by States to provide special education for the physically and mentally challenged.
- Efforts by States to implement school feeding programmes.

Other aspects relating to the issue of funding include that:

- Disbursement of funds to States will be through SUBEBs.
- Disbursement of grants to States will be dependent on the provision of 50% counterpart funds by states.
- UBEC may withhold further disbursement to a State if it is not satisfied that funds earlier disbursed had been judiciously utilized.

To access the fund, States are expected to:

- Present acceptable annual implementation plans based on EFA/MDGS and those projects and programmes that address their peculiar educational problems;
- Show evidence of State UBE law or a strong commitment to enacting it;
- Show evidence of lodgment of the State's 50% counterpart fund in a separate SUBEB account for specific UBE programme;
- Set up an appropriate mechanism that ensures transparency for the procurement of goods and services.

Monitoring of a fund utilization will be multi-sectoral involving the Universal Basic Education Commission, Federal Ministry of Education, National Assembly, Budget Office of the Federation, Budget Monitoring (Presidency), Accountant General of the Federal and Auditor General of the Federal. Providing adequate fund for the provision of facilities is expected to help the States achieve the objectives of the UBE by the year 2015 taking consideration of the sequential plan of the programme in the country. Appendix 1 presents a table showing the amount to be spent by the Federal Government on the UBE programme over a ten (10) year period (2000-2010).

UBE SEQUENTIAL IMPLEMENTATION PLAN

The Federal Government of Nigeria provided a sequential implementation plan. It pointed out that strategic planning is needed to ensure the unqualified success of the UBE programme. One sure way of ensuring this is a process of sequential implementation that starts by focusing on the primary one cohort of 2000/2001 and progressively ensuring qualitative education for them over a nine-year basic (formal) education cycle (i.e. 2000/2001 to 2008/2009). According to Obanya (2000), the progressive and cumulative nature of this approach will be as follows:

- UBE year I……..primary 1 class of 2000/2001
- UBE year II…….primary 1 and 2 classes of 2001/2002
- UBE year III……primary 1,2, and 3 classes of 2002/2003
- UBE year IV……primary 1,2,3, and 4 classes of 2003/2004
- UBE year V…….primary 1-5 classes of 2004/2005
- UBE year VI……primary 1-6 classes of 2005/2006

- UBE year VII……primary 1-6/JSS I classes of 2006/2007
- UBE year VIII….primary 1-6/JSS I-II classes of 2007/2008
- UBE year IX……primary 1-6/JSS I-III classes of 2008/2009

During the 9-year "gestation period" states and local governments will progressively improve the conditions of teaching and learning in schools through:

- teacher quality improvement;
- up-dating of infrastructural facilities;
- enhanced availability of instructional material.

The first six years of the nine-year "gestation period" will be devoted to revitalizing junior secondary education through improved access, relevance, and efficiency. With the ultimate goal of eventually ensuring universal access to junior secondary education, the sequential, improved access will be undertaken in the following manner:

- 2000/2001……..55%
- 2001/2002……..65%
- 2002/2003……..75%
- 2003/2004……..…85%
- 2004/2005……..90%
- 2005/2006……100%

This process of 10% expanded access per annum, from 2000/2001 to 2005/2006 will ensure 100% transition rate from primary to junior secondary education of the first year primary cohort of 2000/01. It also allows a 9-year period of sequential, cumulative action leading to a full fledge UBE programme in 2008/09.

State of Facilities Provision in Ogun State under the UBE Programme

As pointed out in the introduction of this paper, the new UBE initiative is particularly expected to follow a collaborative model involving collaborative efforts of stakeholders – Ogun state inclusive. In addressing the problems highlighted in the survey of situations report in primary schools particularly in the area of facilities, the programme in Ogun State has focused on the provision of school building (that included three blocks of classrooms, head-teachers office, store and toilet), furniture, instructional materials and textbooks in four (4) core subject areas (English, Mathematics, Social Studies and Primary Science) in selected public primary schools.

Table 1
Percentage Analysis of Adequacy of UBE Facilities in Ogun State Public Primary Schools Across Local Government Areas

S/N	Local Government Area	No Of Primary Schools Per L.G.A.	No Of Schools Provided With UBE classroom blocks (including head teachers offices, stores & toilets), furniture, instructional & reading materials	% Distribution
1.	Abeokuta North	78	5	6.41
2.	Abeokuta South	46	5	10.86
3.	Ado-Odo/Ota	108	5	4.62

4.	Ewekoro	52	4	7.69
5.	Ifo	73	4	5.47
6.	Ijebu East	56	5	8.92
7.	Ijebu North	101	5	4.95
8.	Ijebu North-East	33	4	12.12
9.	Ijebu-Ode	39	5	12.82
10.	Ikenne	20	4	20.00
11.	Imeko-Afon	43	4	9.30
12.	Ipokia	74	4	5.40
13.	Obafemi/Owode	161	6	3.72
14.	Odeda	100	4	4.00
15.	Odogbolu	51	4	7.84
16.	Ogun Waterside	61	4	6.55
17.	Remo North	21	4	19.04
18.	Sagamu	51	5	9.80
19.	Yewa North	99	5	5.05
20.	Yewa South	69	4	5.79
Total		1336	90	6.73%

Table 1 below presents the findings of the study relating to the percentage adequacy of UBE facilities in the State.

The Federal Government has supplemented the effort of States by building 3,096 three-classroom blocks with head teachers' offices, ventilated and improved toilets and stores in all the 774 local council areas in the country (by selecting 4 schools per Local Government) The classrooms can accommodate no fewer than 371,520 pupils at the rate of 40 pupils per classroom (www.nigeria.gov.ng and www.2ncsu.ed, 2002). In Ogun State for example, at the start of the programme the Federal Government selected 80 public primary schools from the 20 Local Government areas that make up the State for the provision of these facilities. In addition to this, the State Government provided 10 schools also selected from the Local Government area with the UBE facilities. In all 90 schools were selected for the provision of these facilities by the Federal and Ogun State Governments. These facilities are

A study conducted was by Ajayi and Adeyemi in 2007 to measure the percentage adequacy of the provision of UBE facilities in the area of school building (which comprise blocks of classrooms, head teachers offices, store and toilets), furniture, instructional and reading materials to Ogun State public primary schools. The assessment of the percentage adequacy was done using all the schools in the 20 Local Government of the State where these facilities were provided. Furthermore, the impact of these facilities on some school performance variables was assessed using a sample of 916 respondents (308 teachers and 608 primary five pupils) to justify the relevance of providing these facilities and more importantly making them adequate. From the table, the percentage (%) total of all Ogun State Public Primary Schools provided with UBE facilities is just 6.73. Only one (1) Local Government Area had 20% of its schools provided with these facilities. This was the highest. Four (4) LGAs had between 10-19% of their schools provided and fifteen (15) local government areas had below 10% of their schools provided with UBE facilities. Indeed, some LGAs had below 5% of their schools so far provided with UBE facilities. All in all, the percentage distribution ranges from 3.72 to 20.00, a range of 16.28.

Key	Local Government Area
1.	Abeokuta North
2.	Abeokuta South
3.	Ado-Odo/Ota
4.	Ewekoro
5.	Ifo
6.	Ijebu East
7.	Ijebu North
8.	Ijebu North-East
9.	Ijebu-Ode
10.	Ikenne

Key	Local Government Area
11.	Imeko-Afon
12.	Ipokia
13.	Obafemi/Owode
14.	Odeda
15.	Odogbolu
16.	Ogun Waterside
17.	Remo North
18.	Sagamu
19.	Yewa North
20.	Yewa South

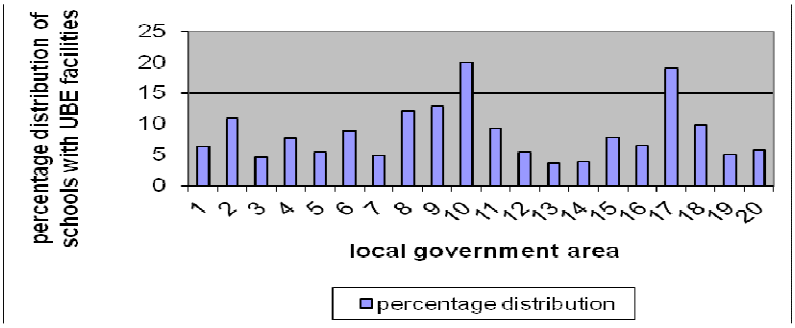

Figure 1
Percentage Distribution of Schools provided with UBE Facilities per Local Government Area in Ogun State.

Figure 1, indicating the percentage distribution of schools with these facilities, across local government areas of the state. The following numbers represent each of the Local Government areas to further assess the distribution adequacy of the UBE facilities in Ogun State in terms of the percentage of schools reached. The Local Government areas were grouped into their various administrative zones of the State. The inadequacy of the distribution of these facilities was again evident. This is presented in table; 2 and figure: 2 that follow:

Table 2
Percentage Analysis of Adequacy of UBE Facilities to Ogun State Public Primary Schools across zones

Zone	Local Government Area	No of Primary Schools	No Of Schools Provided With UBE classroom blocks (including head teachers offices, stores & toilets), furniture, instructional & reading materials	% Distribution Per Zone
Ijebu	Ijebu-East	56	5	
	Ijebu-North	101	5	
	Ijebu-North-East	33	4	

	Ijebu-Ode	39	5	
	Odogbolu	51	4	
	Ogun Waterside	61	4	
	Total	341	27	7.91%
Egba	Abeokuta North	78	5	
	Abeokuta South	46	5	
	Ewekoro	52	4	
	Ifo	73	4	
	Obafemi/Owode	161	6	
	Odeda	100	4	
	Total	510	28	5.49%
Yewa	Ado-Odo/Ota	108	5	
	Imeko-Afon	43	4	
	Ipokia	74	4	
	Yewa North	99	5	
	Yewa South	69	4	
	Total	393	22	5.59%
Remo	Ikenne	20	4	
	Remo North	21	4	
	Sagamu	51	5	
	Total	92	13	14.13%

The table reveals that schools in three (3) of the four (4) zones had below 10% provided with UBE facilities, while one (1) had between 10-19% of its schools provided with UBE facilities. On the whole, the percentage distribution ranges from 5.49 to 14.13, a range of 8.64.

Figure 2 that follow indicate the percentage of schools with these facilities in each of the zones and in Ogun State in general.

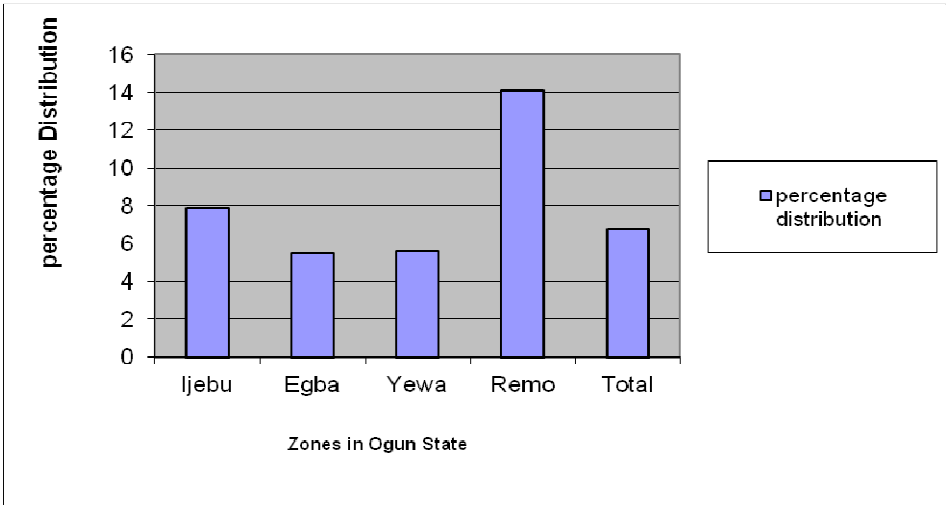

Figure 2
Percentage of Schools with UBE Facilities per Zone and in Ogun State.

The percentage of schools provided with UBE facilities when compared with the total numbers of public primary schools in Ogun State was found to be too low and inadequate. Indeed about 80 percent of the primary schools had not received UBE facilities at about the time of this study. Only 6.73% of the State's primary schools were provided with these facilities, which reflect a low level of inadequacy. Not only that, those provided were not actually based on schools' needs, backed with current and adequate data as the distribution was equally uneven on the basis of the twenty (20) local government areas and across the geographical zones of the State. For example, Ijebu Zone had 7.91% of its 341 schools provided with UBE facilities, Egba Zone had 5.49% of its 510 schools provided with these facilities. Furthermore, Yewa Zone had 5.59% of its 393 schools allocated with these facilities while 14.13% of the 92 schools in Remo Zone were provided with UBE facilities. It was further revealed that at least one out of the blocks of classrooms provided to schools in some sampled Local Government Areas of the State was still not fully completed but has been put to use by the schools. This further compound the inadequacy of these facilities even to the schools already provided. As a matter of fact, it was reported in a school that some furniture were yet to be fully supplied by contractors handling their provisions. Moreover, writing and instructional materials were not adequately distributed.

The implication of the inadequacy is that the claim for a Free and Universal Basic Education has not gone far, and quality education has not been available to fifty percent of children of school-going age in Ogun State. It also implies that two sets of public primary schools are being run in the state; those with UBE facilities and those without the facilities.

Abdulkareem (2000) further corroborates this fact in the findings of his study on adequate provision and maintenance of instructional materials and textbooks for a successful implementation of Universal Basic Education (UBE) programme in Nigeria. He observes that a lot of pupils are without necessary textbooks in spite of the World Bank and Federal Government efforts on the primary education project. Many schools do not have textbooks while those provided never distributed them to users for logistic constraints.

The view pointed out earlier is corroborated by Edun (2005) who posits that efforts of government are still very little compared to the massive needs of primary schools in Ogun State. The inadequacy and uneven distribution of facilities may be ascribed to poor forecast of facilities needs of schools due to poor planning strategies arising from inadequate and poor statistics. Evidence from previous efforts in the provisions of blocks of classrooms, furniture, writing and instructional materials in the area of Basic Education have shown these and past trends are in line with the current study as shown in the research findings of Imogie (1992), Chiaha (1998), Peretomode (2001), Oguntimehin (2004), Deji-Folutile (2004) and Awoyele (2005). Apart from poor forecast, inadequate funding of education is another factor affecting the adequate distribution of facilities to schools. Even, when sufficient planning is put in place, government at all levels is usually not ready to bear the full financial demand of education.

The World Bank is among the group of institutions that the Federal Government has entered into partnership within the implementation of its UBE scheme. The Bank supports capacity building projects that will enable States and Local Councils manage and implement the scheme efficiently.

To this, Ogun State was not an exception. It also provided technical expertise and assistance in planning and budgeting for the UBE at State and Local Council levels. It has already expended a credit sum of $55 million for the scheme, while the federal government is expected to contribute $6.11 million as counterpart funding. The Bank's education projects (I and II), which began on 21 August 2000, were expected to last 48 months (Obanya, 2002). To ensure progress in the provision of facilities to States, the Federal Government conducted nationwide monitoring of UBE classroom construction projects from 3-12 September 2002. The result shows that under the first phase, 280 classroom blocks were completed, and 1,175 classroom blocks were under construction. Thus the situation has not significantly improved, even, in Ogun State. In the same study by Ajayi

and Adeyemi (2007) it was found out that the facilities provided to the selected public primary schools in Ogun State (though inadequate) when compared with schools yet to be reached had a positive significant influence on school performance variables of;

- classroom control and discipline (13.60%)
- teacher motivation (10.60%), and
- (c) teaching/learning environment (8.78%) respective.

These are shown in Table 3 that follows:

Table 3
% Impact on Performance Variables in Public Primary School with UBE Facilities

School Performance Variables	% of Positive Significant Impact on School Performance Variables in Schools Provided With UBE Facilities.	% Situation of School Performance Variables in Schools Without UBE Facilities.	% 0f Significant impact of UBE Facilities.
Classroom Control and Discipline	70.38%	56.78%	13.60
Teacher Motivation	77.24%	66.48%	10.60
Teaching/Learning Atmosphere	36.86%	27.88%	8.78

The inadequacy in the provision of the UBE facilities to primary schools in the State as pointed out in the findings of this study shows that a lot has need to be done not only in the area of fund commitment to the programme but also ensuring that such are utilized for the purpose they are meant for and not diverted for other uses as widely reported of State Governments in the country. Table 4 that follows lend credence to the level of budgetary allocation by the Federal Government in Nigeria of which States cannot be exonerated.

This inadequate trend of funding education has not in any way significantly improved, even in recent time.

Table 4
Federal Government Budgetary Allocation To Education, 1989-2002

Year Allocation	Percentage (%)
1989	6.45
1990	5.45
1991	4.62
1992	4.60
1993	7.20
1994	14.86
1995	11.50
1996	10.82
1997	11.53
1998	9.61
1999	11.13
2000	8.72
2001	7.00
2002	7.90

Sources:
(1) Alani R.A (2004) Education and the Economy; in the case of Nigerian in Lasun Tella and Lasun Gbadamosi (Eds.) Groundwork of Educational management Isiaq ventures
(2) Federal Ministry of Education (2003). Education sector status report. Abuja.
(3) Central Bank of Nigeria (2002). Annual report and statement of accounts for the year ended 31st December, Abuja.
(4) Public Expenditures on Education in Nigeria: Issues, Estimates and Some Implications (2002). The World Bank Africa Region Human Development Working Paper Series.

This nature of fund commitment and utilization are greatly affecting the level of facility provision under the UBE programme even in Ogun State, especially in the area of Government's disposition to faithfully fulfill the payment of her counterpart fund of 50%.

For example, Table 5 below reveals the level of classroom facility decay in the States of the federation-Ogun Satte inclusive.

Table 5
Showing Schools Classroom Situation in Public Primary Schools in Nigerian as at 2000

S/N	STATE	LGAs	School	Total C/Rooms	No of Stream	C/Rooms in good condition	%
1.	ABIA	17	1.103	9.177	13741	2288	25
2.	ABUJA	6	281	2305	3270	455	20
3.	ADAMAWA	21	1315	4244	21044	1146	27
4.	AKWA-IBOM	31	1086	9128	17657	6841	75
5.	ANAMBRA	21	935	7289	14734	3673	50
6.	BAUCHI	20	1147	11395	11395	1841	16
7.	BAYELSA	8	496	3738	9618	678	18
8.	BENUE	23	2364	9255	21228	3052	33
9.	BORNO	27	1715	83898	14675	4384	52
10.	CROSS RIVER	18	807	7372	10165	2948	40
11.	DELTA	25	1015	8401	138191	2448	29
12.	EBONYI	13	754	6350	4112	2822	44
13.	EDO	18	1013	11217	20183	4487	40
14.	EKITI	16	631	8250	16074	3215	39
15.	ENUGU	17	984	11000	10997	3790	34
16.	GOMBE	11	783	8770	9596	1821	21
17.	IMO	27	1220	15630	16085	13720	88
18.	JIGAWA	27	1489	23472		4705	20
19.	KADUNA	23	1640	1640	16284	3686	40
20.	KANO	44	2270	13539	16331	7221	53
21.	KATSINA	34	1797	5652	10737	3946	70
22.	KEBBI	21	992	2878	13776	841	29
23.	KOGI	21	1562	14410	11849	8552	59
24.	KWARA	16	1073	8613	13307	6896	80

25.	LAGOS	20	920	18198	18198	8513	47
26.	NASARAWA	13	981	332	9496	600	18
27.	NIGER	25	1437	5487	7235	3445	63
28.	OGUN	20	1309	10172	14712	2790	27
29.	ONDO	18	1129	6939	18873	5045	73
30.	OSUN	30	1209	10551	1611	-	-
31.	OYO	33	1653	18321	25572	13054	71
32.	PLATEAU	17	1534	7472	15911	702	10
33.	RIVERS	23	1027	9387	11786	2816	30
34.	SOKOTO	23	2088	10158	13198	3433	34
35.	TARABA	16	1426	38387	21648	2647	69
36.	YOBE	17	777	4940	12329	-	-
37.	ZAMFARA	14	831	3915	5427	1590	41
TOTAL AS AT YEAR 2000		774	4429	332408	511939	140134	4246

Source: Obanya (2000)

With particular reference to Ogun State which is having 1309 primary schools as at the year 2000 (and currently in 2006/2007 session the State is having 1,336 schools with the same number of Local Government Areas) the total number of classroom stands at 10172 with 14712 streams. Only 2790 classrooms were in good condition, a percentage of 27. With this high level of need in the area of classroom facilities and low level of fund provision, one is made to wonder if any magic could be done to actualize the goal of achieving education for all by the target year of 2015 through the provision of adequate facilities.

Clearly Ogun State Government has a lot to do in the area of facility provision within the context of the implementation guidelines of the UBE programme in order to meet up with both national and global expectations.

Recommendations and Conclusion

Ogun State government needs to strengthen its efforts in the area of facilities provision and policy guidelines of the UBE scheme to reach other schools that are not currently provided with these facilities while the provision to schools already having these facilities continues. This can be achieved by giving utmost priority to basic education by providing adequate budgetary allocation of 26% as recommended by UNESCO for its operation. Proper implementation, utilization, accountability and feedback mechanism should also be built into the funding process of the scheme. All these will allow the state government to be aware of its standing in achieving the objective of the scheme, especially in the area of facility provision.

To address this inadequacy and uneven distribution, the State Government in conjunction with the federal government and other agencies under the programme need to be pursued vigorously, the collaborative/partnership approach recommended internationally for the implementation of the scheme. This is because, taking a cursory look at the objectives and scope of the UBE programme, it requires the co-operation of all in the area of funding, in particular. This, the state government can achieve by responding to, as a matter of utmost importance, the disbursement of its counterpart funds to quicken federal government and foreign donors responsiveness to fulfill their part of funding the scheme, which mainly focuses on the facility provision to schools.

Finally, it should be noted that only through renewed commitment and sincerity of purpose can Ogun State government achieve and actualize Education for all by the year 2015, taking into account, the extent of needs of primary schools for these facilities and the level at which they have been provided so far.

CONCLUSIONS

The Universal Basic Education all over the world as agree especially by the E-9 nations is o be implemented through collaborative approach. This has brought about great responsibilities to the shoulder of State governments in Nigeria as part of these stakeholders. From the information provided, ogun state government should be more alive to its responsibility of adequately funding basic education for the realization of the objectives of the scheme with world standard. Although Nigeria started late in the implementation of the programme but with renewed interest, the country can be refocused top make a success of the programme.

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TEACHERS' INSTRUCTIONAL BELIEFS ABOUT STUDENT-CENTERED PEDAGOGY

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ABSTRACT

The purpose of this study was to examine teachers' opinions about student-centered instructions, as well as to study effective factors in their instructional beliefs. Six important components of student-centered pedagogy examined in this study that were, educational objectives, content, teaching strategies, and instructional assessment, educational technology and learning environment. The methodology of this study was a quantitative research. An inventory to measure teachers' beliefs about student-centered pedagogy employed to gather data. SPSS 15 was used to produce the mean; standard deviations; Pearson Product Moment Correlation (r); T-test; Bonferroni Post Hoc test and ANOVA. Results showed that the components of student-centered pedagogy have a high influence on their instructional beliefs and also there was a relatively high positive correlation between components of student-centered pedagogy. The analysis some variables such as gender, age, school level and teaching experience indicated, some those had an impact on student-centered beliefs. There was no significant difference between the male and female teachers' beliefs on overall student-centered pedagogy. The analysis also showed overall means of the student-centered pedagogy was statistically significant for elementary, middle and secondary school teachers, age groups and teaching experience.

Keywords: Student-Centered Pedagogy**;** Teacher Beliefs; Primary, Middle, and Secondary Schools

INTRODUCTION

Student-centered pedagogy or student-centered instruction/education; also called engagement and active learning is an approach to education focusing on the needs of the students, rather than those of others involved in the educational process, such as teachers and administrators. This approach has many implications for the design of curriculum, course content, and interactivity of courses. McCombs and Whisler (1997) about student-centered say "The perspective that couples a focus on individual learners (their heredity, experiences, perspectives, backgrounds, talents, interests, capacities, and needs) with a focus on learning (the best available knowledge about learning and how it occurs and about teaching practices that are most effective in promoting the highest levels of motivation, learning, and achievement for all learners). This dual focus then informs and drives educational decision making. The learner-centered perspective is a reflection of the twelve learner-centered psychological principles in the programs, practices, policies, and people that support learning for all". According to King (1993:30) student-centered instruction is a teaching strategy that fundamentally breaks many of the traditional boundaries governing the way students have-by and large-been conditioned and expected to learn for centuries.

According to Peyton et al. (2010) student-centered instruction emphasizes the following approaches: Building on learners' experiences and strengths while also teaching them how to use specific learning strategies to accomplish their goals (CAL, 2007; Ellis, 2008; Nunan, 1988); focusing on the needs, skills, and interests of students while providing learning experiences that promote autonomy, choice, cooperation, collaboration, meaningful communication, and meta cognitive awareness (TESOL, 2009); providing opportunities for students to use the target language to negotiate meaning with teachers and other students in group work, project work,

and task-based interactions while also providing guidance, modeling, and feedback about progress (Adams, 2008; Anton, 1999; Beckett, 2005; Crookes & Chaudron, 2001; Gutierrez, 2008; Lin & Chien, 2009; Morris & Tarone, 2003; Reder, 2005; Reder et al., 2003; Zeng & Takatsuka, 2009; Zhao & Bitchener, 2007); facilitating student work in pairs, in groups, or alone depending on the purpose of the activity, creating learning opportunities that mirror actual tasks in students' lives (Bell, 2004; Ellis, 2009); and using "techniques that enhance students' sense of competence and self-worth" (Brown, 2001:47).

Educators agree that engagement promotes student achievement. Downer et al. (2007) suggested that children enjoy doing small-group problem-solving assignments. Students used requisite cognitive stimulations, social, and motor skills to meet small group goals. Doherty and Hilberg (2007) pointed out that learner-centered pedagogy promoted student achievement. The five standards for effective pedagogy did not raise student academic achievement or help student diversity (Doherty & Hilberg, 2008). In another research, Nykiel-Herbert (2004) found that learner-centered pedagogy raised student achievement. Reynolds (2007) and Carbo (2008) linked learner-centered instructional methods to student achievement.

Learner-centered pedagogy contains features that support needs, interest, experience, and ability. Small group instructions supervised by experienced teachers support student-focus goals (Prince and Felder, 2006). Small group instructions help the teacher's effort to complete diversified instructions. It is easier to teach a small group of students that a large class. Teacher-centered instructions include whole-class instruction, teacher-directed small group instruction, and teacher demonstrations. A short session of whole-class instructions allows teachers to clarify directions and rules. Doherty and Hilberg (2007) used the five standards for effective pedagogy to guide their study. The standards promote learning through joint productivity, reading across the curriculum, connecting new experiences to prior knowledge, promoting complex thinking through engagement, and stressing goal-directed communication through small group. Doherty and Hilberg identified a close connection between teachers" styles, classroom designs, and student achievement.

Collaborating, social interaction, negotiating, and openly communicating to explain the influence of the socio cultural theory in the design of Doherty and Hilberg's (2007) research. Students of similar demographic features bond together for social as well as academic groups (Ohl & Cates, 2006). While students worked collaboratively in groups to meet academic goals, both teacher-centered and student-centered learning prevailed in the same classroom environment. Similar conclusions from both researchers suggested that learning depends strongly on conversations between teacher and student. The conclusions stay consistent with the result of the statistical analyses. Student-focused instructions help to support learning styles and meet student academic goals. Olson (2006) asserted satisfying student learning-styles is counterproductive. It is important to meet the student goal through encouragement. Teaching from concrete to abstract helps clarify difficult concepts. Prince and Felder (2006), Olson (2006) agreed that a learner's efforts determine the extent of success. Using recent research, Olson (2006) argued there is no empirical evidence to support the claim that teaching to meet student preferred learning style increases achievement but rather, to the contrary. This idea is reasonable because student participation helped the performance outcome. Adapting instructional environments to support learning to generate more success than teaching to match student learning styles.

The strength of student and teacher relationships influences learner-centered classrooms. Jones (2007) asserted that teachers play the main role in promoting academic achievement in students. Students emulate teachers and build confidence through relationships. Relying on the teacher create problems for students with decreased confidence in a teacher's character. The teacher's role includes building a personal relationship based on trust and empathy (Mawhinney & Sagan, 2007). Students benefit from the teacher's social and emotional support. The parties build relations on principles governing teacher and student classroom behaviors. Teachers organize instructions, configure classrooms, decide group formats, and supervise instructions (Downer et al., 2007). A positive learning atmosphere encourages teacher creativity and fosters students' success. Nekovei and Ermis (2006) and Parsley and Corcoran (2003) suggested that flexibility in

teaching methods and adequate learning support help to improve student achievement. High-quality classrooms embrace the student's needs, encourage personal connections, and promote autonomy while providing children with learning opportunities (Ysseldyke et al., 2004). This classroom environment is important to support learner-centered instruction.

Students benefit from the technology used to support learner-centered instructions. Some educators overestimate the value of computer-based instruction, and others highlight the capacity of the method to support student creativity and independence (Passerini, 2007). Computer technology encourages learner's interest through interactive and entertaining experiences (Hsieh & Sun, 2007). A well-structured learner-centered instruction reduces student dependency on the teacher for information. Learner-centered technology fosters cooperative group learning in and across schools. McGrail (2007) found that inadequate physical space interferes with a teacher's ability to interact with students and integrate computer technology correctly in instruction. McGrail (2007:59) explained the value of space in this definition "pedagogy is the ways in which an instructor designs the materials and social space the students and teacher occupy as they carry out a curriculum". McGrail indicated that for computers to be beneficial to students in a learner-centered environment the teacher creates adequate space for using computers and spreading out the computer peripherals.

Cornelius-White (2007) suggested that learner-centered pedagogy lessens the instances of teacher directed instructions and increases student involvement in their own learning. Historically, the teacher dominates knowledge delivery and promotes student-dependency for knowledge (Prince & Fedler, 2006). This elevates the teacher as the sole authority and hinders the student's intellectually growth.

One of the most important things a teacher can provide their students with is a learning environment in which they feel comfortable. Teachers should create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation. Learning environment research has provided a useful focus in evaluations of educational innovations (Fisher, Aldridge et al., 2001; Fraser & Maor, 2000; Maor & Fraser, 1996; Newby & Fisher, 1997; Teh & Fraser, 1995; Zandvliet, 2003; Jegede et al., 1995; Taylor & Maor, 2000; Walker, 2002; Moos, 1979). Past research has found links between classroom environments and student outcomes (Fraser, 1994 & 1998a; Fraser & Fisher, 1982; Goh et al., 1995). Technology in the school is one of the best resources that allow students to become actively engaged in the learning process (Aldridge et al., 2003; Trinidad et al., 2001). Such research has shown that students' outcomes are likely to be better when the actual learning environment more closely matches their preferred learning environment (Aldridge et al., 2003; Fraser, 1998b, 1999; Fraser & Fisher, 1983). Brown and Palinscar (1989) believe that the role of learning environments, of collaboration, of community, and of environments that encourage different approaches in students.

LEARNING THEORIES AND STUDENT-CENTERED PEDAGOGY

The *Cognitive Theory* focuses on intrinsic and individual mental processes such as thinking, memory, knowing, and problem-solving. In this way individual learner knowledge can be seen as schema, which is a symbolic mental structure. Petraglia (1998) likens this schema to a situated cognition of everyday experiences to stimulate interest in an authentic learning environment.

Social Learning Theory or situational learning theory is based on the idea that learners can acquire knowledge from observing other people in a social context or situation. Gardner's (1999) Multiple Intelligences complements Social Learning Theory by allowing peers with similar learning styles to work together effectively, or conversely pairing students with differing learning styles to engender balance of student work and group dynamics (Riha & Robles-Pina, 2009). Within this learning theory knowledge is seen as a cultural extension of meaningful situations rooted in metacognition and personal experiences that is more easily and effectively

learned by the individual within a social sphere (Leidner et al., 1995). In viewing the constructivist theory as it pertains to learner-centered instruction in educational technology, researchers, Nessett and Large (2004) suggest utilizing scaffolding to provide structure while students are learning new knowledge. Often time scaffolding can be applied in the form of a graphic organizer which allows the brain's ability to store information to become unlimited through pictorial representations and the chunking and organizing of new knowledge. As the new knowledge or skill is developed, the scaffolding is gradually removed to place the learner back in control of their own learning.

The *Constructivist Theory* model calls for learner-centered instruction where individuals learn by jumping in and working out the task versus when they are given specific instructions. In this way students learn to control the pace of their own learning. This theory also lends itself to more performance based methods of assessment which advocates a learner-centered approach to instruction. Andrew (2007) pointed out that constructivist adoption causes shifts from long lecturing, drills, and rote learning to interacting and building knowledge. Teachers merge constructivist-based pedagogy into instructions to support learner-centeredness (Valli & Buese, 2007). Richards, Brown, and Forde (2007) recommended that teachers use pedagogy to find the needs of students and promote academic achievement in a learner-centered context. Teachers need guidelines to transition to constructivist teaching styles (Andrew, 2007).

Educators use constructivism as a guide to adopt learner-centered pedagogy, and create student-centered classrooms (Froyd, 2007). Constructivism contends that students create mental images from manipulating objects, and then draw cognitive conclusions about their observation. Proponents of this theory argued that increased learning enthusiasm increased in learner-focused setting. The correct application of any theory to a real-world situation reveals its efficacy. Students benefit when teachers consider and apply a learning theory to meet differences in learner styles (Baker & Dwyer, 2005). Teachers encourage achievement by promoting democracy, independence, and collaborative learning styles. According to Brostrom and Lassen (2006:179), "Learning style shows how learners assimilate and remember difficult materials, while learning strategies describe the way students choose to do a learning task". Constructivism encourages teachers to adapt instruction to support learner needs.

Constructivism supports learner-centered pedagogy more than the behaviorist and cognitive theories. The behaviorist and cognitive theories suggest that students need to connect with their learning in a personal way but constructivism stresses comprehensive learner-connectedness. Prince and Felder (2007) suggested that exploring, manipulating, and asking complex questions improve student cache of new information. Hsieh and Sun (2007) argued that aligning a strategy with the constructivist view include learner interactions. The student's experience assists their effort to form new knowledge through discovery learning. Prince and Felder's (2007) research associated the inductive methods of discovery, inquiry, and problem-based learning with constructivist view of learner-centeredness. In constructivist learning environments, student process and discover knowledge. The study focused on student achievement in middle schools and beyond, but the findings have implications for learning groups in elementary grades. Prince and Felder (2006) recommended that teachers should cut traditional lecturing and expand students" cognitive ability through inductive learning methods. Like Cornelius-White (2007), Prince and Felder (2006) agreed that shifting the responsibility for learning from teachers to students provides experiences not attainable through deductive methods.

The final inquiry strategy researched for posterity in learner-centered, educational technology environs is *Case-Based Reasoning* (CBR) or instruction. This type of inquiry strategy has been defined by Jonassen et al. (2000) as an active-learning pedagogy designed for problem/situation analysis and theoretically problem/situation solving, stressing several varied viewpoints and possible outcomes to said problem/situation. Cases or experiences in CBR must be; real, rely on research and study, and foster creation of multiple perspectives by learners (Jonassen et al., 2000). Learners who participate in case-based instruction develop the skills of: group work, problem solving, gathering and analyzing technological data, higher-order decision making, varied

formats of presentation genres, and time management. This inquiry-based strategy applies two-fold the learning theories of constructivism and social learning through a learner-centered environment that puts in place scaffolding framework conducive to multiple intelligences and student-created solutions.

Teacher-student collaboration, discovery learning, and group instructions form the core characteristics of the constructivist theory. The effectiveness of each feature depends on students and teacher collaboration. Students learn from each other and contribute to research. The pedagogy encourages group and individual goal setting and achievement recognition. Learner-centered pedagogy improves dull learning through engaging, collaborative, interesting, and challenging instructions.

In summary, student-centered language instruction focuses on students' needs for learning and communicating effectively. The teacher provides opportunities for students to engage actively in meaningful communication, encourages them to take ownership of their own learning, and gives them explicit instruction in the content and language skills they need and in strategies for gaining that knowledge and those skills (Goldenberg, 2008). (For specific ways to promote learner engagement in instruction, see Sherris, in press.)

The purpose of this study was to understand the following questions:

1. What are teachers' beliefs about student-centered pedagogy?
2. Is there correlation between components of student-centered pedagogy?
3. Is there a difference between teachers' student-centered beliefs and variables such as their gender, age, school level, and teaching experience?

RESEARCH METHODOLOGY

The methodology of this study was a quantitative research. The population of this study was all teachers in primary, middle and secondary schools (K-12) in the Zahedan city in Iran. Of 6827 teachers 365 samples with use of table sample size of Krejcie and Morgan (1970) were produced to questionnaire (Table 1).

Table 1
Population and Sample

Variables		Population	Sample
Primary S.	Male	913	49
	Female	2398	128
	Total	3311	177
Middle S.	Male	755	40
	Female	987	53
	Total	1742	93
Secondary S.	Male	739	40
	Female	1036	55
	Total	1775	95
Total		6827	365

Part of instrument was the inventory to measure teachers' beliefs about student-centered education of Isikoglu et al. (2009) employed to gather data. This inventory has 21 items in four components: educational objectives, content, teaching strategies, and instructional assessment and the other two components were educational technology and learning environment with 11 items. Internal consistency reliability was estimated by Cronbach's alphas. Table 1 reports summary measures of construct validity and reliability for each of the seven

engagement scales. SPSS 15 was used to produce mean; standard deviations; Pearson Product Moment Correlation (r); T-test; Bonferroni Post Hoc test and ANOVA.

Table 2
Summary measures of reliability

Variables	N. of Items	Cronbach's Alpha
Educational Objectives	5	.75
Content	5	.71
Teaching Strategies	6	.78
Instructional Assessment	5	.76
educational technology	6	.79
Learning Environment	5	.77
Total	32	.84

RESULTS

The figures at table 3 show that the teachers marked relatively high scores on student-centered pedagogy (M=3.88, SD=.45). However, the examination of the subscales showed, educational technology received the highest (M=3.91) and content received the lowest (M=3.62) means. These findings indicated that the current sample believed that curriculum goals should be student-centered.

Table 3
Distributions of components of student-centered pedagogy (N=365)

Variables	Mean	Std. Deviation
Educational Objectives	3.7562	.63613
Content	3.6192	.57909
Teaching Strategies	3.9123	.57224
Instructional Assessment	3.8137	.58679
Educational Technology	3.8301	.54840
Learning Environment	3.7863	.57735
Student-Centered Pedagogy (in overall)	3.8849	.45443

Table 4 shows there was relatively high positive correlation between components of student-centered pedagogy. The highest correlation is related to the educational objectives with the educational technology, the teaching strategies with the content, teaching strategies with the instructional assessment, and the learning environment with the instructional assessment.

Table 4
Correlation between the components of student-centered pedagogy (N=365)

Variables	EO	C	TS	IA	ET
Educational Objectives					
Content	.381(**)				
Teaching Strategies	.364(**)	.405(**)			
Instructional Assessment	.283(**)	.357(**)	.418(*		

			*)		
Educational Technology	.464(**)	.246(**)	.329(**)	.277(**)	
Learning Environment	.411(**)	.348(**)	.417(**)	.580(**)	.293(**)

**P < .001

In order to compare male and female teachers' beliefs about overall student-centered pedagogy and the components of it, independent samples t-tests were performed. These analyses revealed a significant difference between the two groups in the component of educational activities and the mean score of female was higher than male. There was no significant difference between the male and female teacher' beliefs on overall and other scales (table 5). Several researchers found similar results (Cheung & Wong, 2002; Tan, 2001). On the other hand, some researchers found that female teachers implemented student-centered education more than their male counterparts (Beck et al., 2000).

Table 5
The comparison male and female teachers' beliefs about student-centered pedagogy (N=365)

Variables	Sex	N	Mean	Std. D.	t	df
Educational Objectives	Male	129	3.5814	.63366	-3.958(**)	363
	Female	236	3.8517	.61820		
Content	Male	129	3.5581	.52896	-1.491	363
	Female	236	3.6525	.60321		
Teaching Strategies	Male	129	3.8605	.58288	-1.281	363
	Female	236	3.9407	.56557		
Instructional Assessment	Male	129	3.7907	.52551	-.553	363
	Female	236	3.8263	.61843		
Educational Technology	Male	129	3.8062	.50121	-.616	363
	Female	236	3.8432	.57316		
Learning Environment	Male	129	3.7597	.58330	-.651	363
	Female	236	3.8008	.57479		
Student-Centered Pedagogy (in overall)	Male	129	.45244	.03983	-1.001	363
	Female	236	.45550	.02965		

P > .05 **P < .001

The compute of ANOVA about the school level, overall and the learning environment means of the student-centered pedagogy were statistically significant for elementary, middle and secondary school teachers. As in table 6 is showed, Bonferroni Post Hoc test indicated that the middle school teachers scored significantly higher on overall of the student-centered pedagogy than secondary school teachers. There was no significant difference between the groups in other components.

Table 6
The comparison school level teachers' beliefs about student-centered pedagogy (N=365)

Variables	School Level	N	Mean	Std. D.	f	df
Educational Objectives	Pr. S.	177	3.7910	.64520	.995	2 362
	Mi. S.	93	3.6774	.61080		
	Se. S	95	3.7684	.64334		
Content	Pr. S.	177	3.6554	.54344	1.341	2 362
	Mi. S.	93	3.6344	.58579		
	Se. S	95	3.5368	.63263		
Teaching Strategies	Pr. S.	177	3.9548	.55205	9.562	2 362
	Mi. S.	93	4.0430	.54998		
	Se. S	95	3.7053	.58115		
Instructional Assessment	Pr. S.	177	3.8136	.57824	2.706	2 362
	Mi. S.	93	3.9140	.52453		
	Se. S	95	3.7158	.64681		
Educational Technology	Pr. S.	177	3.8249	.55171	.266	2 362
	Mi. S.	93	3.8065	.53686		
	Se. S	95	3.8632	.55755		
Learning Environment	Pr. S.	177	3.8588	.53016	3.201(*)	2 362
	Mi. S.	93	3.6774	.62834		
	Se. S	95	3.7579	.59637		
Student-Centered Pedagogy (in overall)	Pr. S.	177	3.9153	.43777	4.445(*)	2 362
	Mi. S.	93	3.9462	.45122		
	Se. S	95	3.7684	.47159		

P > .05 *P < .05

The compute of ANOVA about the age groups, overall and the teaching strategies means of the student-centered pedagogy were statistically significant for teachers with 20-30, 31-40 and 41 and more years old. Bonferroni Post Hoc test showed that the teachers with 20-30 years old scored significantly higher on overall of the student-centered pedagogy and teaching strategies than other age groups. There was no significant difference between the groups in other components (Table 7).

Table 7
Teachers' beliefs about student-centered pedagogy by age groups (N=365)

Variables	Age	N	Mean	Std. D.	f	df
Educational Objectives	20-30	42	3.7857	.56464	1.796	2 362
	31-40	236	3.7924	.62849		
	41-More	87	3.6437	.68160		
Content	20-30	42	3.7143	.55373	.822	2 362
	31-40	236	3.6186	.59672		
	41-More	87	3.5747	.54201		
Teaching Strategies	20-30	42	4.1905	.39744	5.754(*)	2 362
	31-40	236	3.8771	.55901		
	41-More	87	3.8736	.64348		
Instructional Assessment	20-30	42	3.9286	.46291	1.373	2 362
	31-40	236	3.8178	.56555		
	41-More	87	3.7471	.68571		
Educational Technology	20-30	42	3.8571	.56618	.153	2 362
	31-40	236	3.8347	.54794		
	41-More	87	3.8046	.54643		
Learning Environment	20-30	42	3.7143	.45723	.484	2 362
	31-40	236	3.8051	.56506		
	41-More	87	3.7701	.65948		
Student-Centered Pedagogy (in overall)	20-30	42	3.9762	.46790	4.081(*)	2 362
	31-40	236	3.9110	.43823		
	41-More	87	3.7701	.47498		

P > .05 *P < .05

The compute of ANOVA about job experiences groups showed that there were significance differences between the groups in overall and the instructional assessment means of the student-centered pedagogy. Indeed, compute of Bonferroni Post Hoh showed that teachers were 11 to 20 years experiences, who got the higher scores on overall of the student-centered pedagogy in comparison with other groups. There was no significant difference between the groups in other components (table 8).

Table 8
Teachers' beliefs about student-centered pedagogy by teaching experience (N=365)

Variables	Teaching Ex.	N	Mean	Std. D.	f	df
Educational Objectives	1-10	52	3.8462	.50038	.626	2 362
	11-20	185	3.7351	.59901		
	21-More	128	3.7500	.73173		
Content	1-10	52	3.6538	.55606	.708	2 362
	11-20	185	3.6432	.59186		
	21-More	128	3.5703	.57072		
Teaching Strategies	1-10	52	3.9423	.57440	.615	2 362
	11-20	185	3.9351	.53782		
	21-More	128	3.8672	.61951		
Instructional Assessment	1-10	52	3.8846	.54786	4.085(*)	2 362
	11-20	185	3.8757	.57171		
	21-More	128	3.6953	.60910		
Educational Technology	1-10	52	3.9038	.49545	.664	2 362
	11-20	185	3.8054	.60341		
	21-More	128	3.8359	.48240		
Learning Environment	1-10	52	3.8462	.50038	.898	2 362
	11-20	185	3.8054	.59433		
	21-More	128	3.7344	.58167		
Student-Centered Pedagogy (in overall)	1-10	52	3.9038	.49545	3.894(*)	2 362
	11-20	185	3.9405	.44445		
	21-More	128	3.7969	.44118		

P > .05 *P < .05

DISCUSSION AND CONCLUSION

The purpose of this study was to examine teachers' opinions about student-centered instructions, as well as to study effective factors in their instructional beliefs. Six important component of student-centered pedagogy examined in this study that were, educational objectives, content, teaching strategies, and instructional assessment, educational technology and learning environment. In base of teachers' view, the components of student-centered pedagogy have a high influence on their instructional beliefs and also there was relatively high positive correlation between components of student-centered pedagogy. The analysis some variables such as gender, age, school level and teaching experience indicated, some those had an impact on student-centered beliefs. There was no significant difference between the male and female teachers' beliefs on overall student-centered pedagogy. The analysis also showed overall means of the student-centered pedagogy was statistically significant for elementary, middle and secondary school teachers, age groups and teaching experience.

Student-centered pedagogy influences student achievement with varied instructional arrangements based on the unique needs of each student. This form of pedagogy provides teachers an opportunity to focus on students and meet their learning needs through learner-centered instructions. Such individualized learning arrangements impact student performance in different ways. When a teacher delivers instructions through learner-centered pedagogy, the method increases students' participative activities and cognitive focus.

Effective use of learner-centered instructional strategies highlights the importance of instructional groups based on features that match students' ability and interest. Individualized and group instructions arrangements help to enhance performance of underachieving students. Teachers used individualized instructions to remediate instructions. Student-centered pedagogy allows teachers to individualize instructions based on the students' learning goals.

A review of the literature (see introduction) showed that student-centered pedagogy improves academic performance. Student-centered pedagogy favors the constructivist approach. It encourages students to learn through experiences with technology and other teaching strategies. Effective teachers recognize cultural differences, promote collaboration, independent research, higher order thinking, and open discussion. Teachers use strategies that give learners direct control of their learning to achieve learner-centered success through participation (Musti-Rao & Cartledge, 2007). Inadequate learner-centered training and training misuse achieve the same ineffectiveness. Appropriate training and practice improve the art of learner-centered instruction delivery. Active student participation decides the learner-centeredness of the pedagogy. Student-centered strategies need teachers to focus on students' needs. The teacher also uses a variety of group strategies and inquiry teaching methods. Pair teaching, interest groups, discovery learning, field trips, experiments, and computer-based instructions are among some of the strategies teachers used. Students learn to manage their learning while teachers conduct periodic performance conferences.

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EXAMINING STUDENT TEACHERS' SELF-EFFICACY FOR IMPLEMENTING THE CONSTRUCTIVIST APPROACH IN TERMS OF THE VARIABLES OF GENDER, DEPARTMENT AND GRADE LEVEL

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ABSTRACT

This study aims to examine student teachers' self-efficacy for implementing the constructivist approach in terms of gender, department and grade variables. To achieve this purpose, the study was conducted using 160 student teachers studying in the third and fourth grades in the Departments of Classroom Teacher Education and Science Teacher Education in Celal Bayar University. As a result of assessing the data obtained from the implementations, a significant relationship between the levels of self-efficacy of female and male student teachers regarding lesson planning was found to be in favor of the female student teachers. In the examinations performed considering the department variable, it was observed that the scores of classroom student teachers are much higher than those of science student teachers for the aspects of self-efficacy belief for the assessment-evaluation process and for developing a learning environment. Additionally, as a result of the assessment made considering the grade variable, no significant relationship was found between the self-efficacy beliefs of student teachers studying at third and fourth grades based on subscales and total scores.

Keywords: Classroom and science student teachers, self-efficacy, constructivist approach, gender, department and grade level

INTRODUCTION

The radical change in primary school programs realized in the 2005 – 2006 academic year in Turkey was based on the constructivist approach. Particularly the results Turkey obtained in the international and national comparative achievement studies urged the authorities to adopt such a change. The program and the issues it covered and the Science and Technology course curriculum in particular were designed within the scope of the spirality principle and enriched with learning, teaching and assessment activities appropriate to the constructivist approach. Unlike the traditional approaches, considering an individual's brain as a "tabula rasa", the constructivist approach argues that students try to form connections between their previous knowledge and their new knowledge by using the prior knowledge when they encounter any learning situation or information. In other words, constructivism implies that students construct their own meanings in their minds based on the relationship between their prior knowledge and experience (Aviram, 2000; Harland, 2003). According to Spigner-Littles and Anderson (1999), this approach suggests that knowledge should be acquired as a result of a process where individuals continuously construct their experience buy means of active mental

processes. According to this approach, knowledge emerges as a result of a cognitive construction of an individual and thus involves aspects peculiar to the person. Since the process of knowledge construction is the process of forming a relationship between prior and new knowledge, and since each individual's knowledge based on his/her previous experience is different, individuals' constructing knowledge will be different. According to Güçlü (1998), one of the basic views of constructivists is that knowledge is subjective. Therefore, the constructivist approach generally stresses the process of students' cognitive learning and conceptual understanding and their development within these processes instead of directly focusing on their level of achievements. Adams (2006) states that the constructivist approach practices try to understand how students construct knowledge. When these aspects of the constructivist approach are considered, it can be seen that defining knowledge and how learning happens are explained in a different way than the other approaches.

When the practices of the constructivist approach for learning settings are considered, it is clear that there are great changes in roles inside the classroom compared to the traditional approaches. While students are more in the center in the constructivist approach, teachers have the role of assisting and guiding them in the knowledge construction process. Warwick and Stephenson (2002) argue that constructivist teachers accept that learning is an individual and active process and they are aware of the fact that students arrive in the classroom with several alternative understandings against real scientific knowledge. It can be said that teachers have a lot of essential roles in helping students increase their cognitive activities (Canpolat and Pınarbaşı, 2002): creating learning environments appropriate to students' previous experiences (Chen, Burry-Stock and Rovegno, 2000); revealing students' prior knowledge (Bağcı-Kılıç, 2001); determining misconceptions and lack of knowledge that can have a preventive effect on them acquiring new knowledge and eliminating these; providing effective participation in the lesson; orienting students toward first-hand sources; assessing them by using different techniques before, after and during the process; and developing social learning settings in the classroom where they can learn together.

When relevant literature is examined, it can be seen that there are studies put forth revealing the differing attitudes of teachers and student teachers towards the constructivist approach (Ray, 2002; Plourde and Alawiye, 2003; Baylor and Kitsantas, 2005; Unal and Akpinar, 2006; Sung, 2007; Karadağ et al., 2008; Kesercioğlu et al., 2008; Balım et al., 2009; Bonner and Chen, 2009; Evrekli et al., 2009; Gürbüztürk and Şad, 2009; Saunders, 2009; Shirvani, 2009; Evrekli, Şaşmaz-Ören and İnel, 2010; Semerci and Yeşilyurt, 2010; Uzuntiryaki et al., 2010). As a result of the examination, it can be seen that student teachers' sensual and cognitive behaviors, beliefs, opinions…etc. in terms of different variables regarding the constructivist approach have been examined; however, there has been a limited number of studies examining their self-efficacy (Evrekli, Şaşmaz-Ören and İnel, 2010) and therefore, it became apparent that there is a need for the present study. In this respect, the main problem statement of the study is as follows: "Is there a significant relationship between the levels of self-efficacy of student teachers on classroom teacher education and science teacher education programs for implementing the constructivist approach in terms of gender, department and grade level?" The sub problems of the study are listed below:

"Is there a significant relationship between the levels of self-efficacy of student teachers on classroom teacher education and science teacher education programs for implementing the constructivist approach in terms of the independent variable gender?"

"Is there a significant relationship between the levels of self-efficacy of student teachers on classroom teacher education and science teacher education programs for implementing the constructivist approach in terms of the independent variable department?"

"Is there a significant relationship between the levels of self-efficacy of student teachers on classroom teacher education and science teacher education programs for implementing the constructivist approach in terms of the independent variable grade level?"

METHOD

The Research Design

Within the scope of the current study, a survey was conducted for the purpose of determining the self-efficacy of student teachers for implementing the constructivist approach in terms of gender, department and grade level variables. The survey is a widely used technique, which is not empirical. It is generally referred to as a data gathering method performed by means of asking a sample representing a group opinions about the subject matter condition (generally through conducting surveys) (Christensen, 2004).

Participants

The participants of the study are composed of 160 student teachers on science teacher education and classroom teacher education programs in the 2009 – 2010 academic year. The participants were determined as 40 student teachers from each grade and department. 63.1% (n=101) of the participants were female while 36.9% (n=59) were male student teachers. 50% of the student teachers (n=80) were studying in third grade and 50% were in fourth grade. Similarly, 50% (n=80) were students of the classroom teacher education program while the rest 50% (n=80) were students of the science teacher education program. 54.4% of the participants were graduates of a normal high school, 30.6% (n=49) were graduates of super high school and 15% (n=24) were graduates of Anatolian high schools.

Data Gathering Instrument

The Self-efficacy Scale for Implementing the Constructivist Approach: Within the scope of the study, the self-efficacy scale developed by the researchers was used in order to determine student teachers' self-efficacy for implementing the constructivist approach. The preliminary implementation form of the scale was developed under the scope of four aspects, as a result of literature examination, and then submitted for expert opinions. The preliminary implementations with regards to the scale were conducted with 284 student teachers studying at the same university where the study would be conducted. The scale development process involves exploratory factor analysis and confirmatory factor analysis. The KMO value in the first analysis of exploratory factor analysis process was found to be .94 while the Bartlett test was found to be significant at .001 level (χ^2 =8673,37; df=1431; p=.000<.001). The factor load cutting value was found to be .40 in the first analysis and the analysis was conducted by using basic elements analysis with the Varimax vertical rotation technique. Thirteen items were left out of the scale, which was originally composed of 54 items, as a result of the analysis. The variance value based on the exploratory factor analysis of the scale is 13.97% for the first factor (eigenvalue: 5.73), 13.74% for the second factor (eigenvalue: 5.63), 12.88% for the third factor (eigenvalue: 5.04) and 10.33% for the fourth factor (eigenvalue: 4.24). The reliability values of the subscales in the scale are, respectively, as follows: .84, .88, .91 and .89. Variance for the whole scale was found to be 50.92% while the Cronbach alpha reliability value was found to be .96. For the purpose of determining the agreement between the model obtained as a result of the exploratory factor analysis and the data, the confirmatory factor analysis was done. It was found, as a result of the analysis that χ^2/df=1,67, RMSEA= .047, NFI= .96, NNFI= .98, CFI=.98, RMR=.029, SRMR= .047. The values of agreement were found to be, comparatively, at a good level.

FINDINGS AND INTERPRETATION

Findings and interpretation of the first sub problem: In line with the solution of the sub problem; "Is there a significant relationship between the levels of self-efficacy of student teachers on classroom teacher education and science teacher education programs for implementing the constructivist approach in terms of the independent variable gender?" Data obtained from the participants were analyzed with Mann Whitney U Test as they were not in normal distribution. Table 1 shows the results of the analysis regarding the scores the student teachers obtained from whole self-efficacy scale and sub factors for implementing the constructivist approach.

Table 1
Examining the level of self-efficacy of student teachers for implementing the constructivist approach in terms of the gender variable

Subscales	Gender	N	Mean rank	U	Z	p
Self-efficacy belief for planning the lesson	Female	101	88,46	2176,00	2,852	.004*
	Male	59	66,88			
Self-efficacy belief for the learning-teaching process	Female	101	82,31	2796,50	.649	.516
	Male	59	77,40			
Self-efficacy belief for assessment-evaluation process	Female	101	85,41	2483,50	1,759	.079
	Male	59	72,09			
Self-efficacy belief for developing a learning environment	Female	101	84,08	2617,50	1,283	.200
	Male	59	74,36			
Total	Female	101	84,98	2527,00	1,601	.109
	Male	59	72,83			

*significant at p<.05

When the results obtained from the analysis made are examined and whole scale and subscales are considered, it can be seen that the values of the female mean ranking are higher than those of males in all dependent variables. However, when the self-efficacy aspect for only lesson planning is examined, a significant relationship is found between the groups in favor of females (Z=2,852; p=.004<.05). Moreover, when self-efficacy (Z=1,759; p=.079>.05) and total scores (Z=1.601; p=.109>.05) for the assessment-evaluation process are evaluated, it is found out that the values of mean rankings of female scores are quite higher than those of males, although not significant. When the self-efficacy aspect for the learning and teaching process (Z=.649; p=.516>.05) and self-efficacy aspect for developing a learning environment (Z=1.283; p=.200>.05) are examined, no significant relationship is found between the groups.

Findings and interpretation of the second sub problem: In line with the solution of the sub problem; "Is there a significant relationship between the levels of self-efficacy of student teachers on classroom teacher education and science teacher education programs for implementing the constructivist approach in terms of the independent variable department?", it was found that data did not show a normal distribution, and therefore, analysis was done by using Mann Whitney U Test. Table 2 shows the result of the analysis.

Table 2
Examining the level of self-efficacy of student teachers for implementing the constructivist approach in terms of the department variable

Subscales	Department	N	Mean rank	U	Z	p
Self-efficacy belief for planning the lesson	science	80	74,73	2738,50	1,581	.114
	classroom	80	86,87			
Self-efficacy belief for the learning-teaching process	science	80	79,89	3151,00	.168	.867
	classroom	80	81,11			
Self-efficacy belief for assessment-evaluation process	science	80	73,36	2629,00	1,954	.051
	classroom	80	87,64			
Self-efficacy belief for developing a learning environment	science	80	73,93	2674,00	1,799	.072
	classroom	80	87,08			
Total	science	80	75,63	2810,00	1,331	.183
	classroom	80	85,38			

*significant at p<.05

When the results of the analysis are examined, it is determined that there is no significant relationship between self-efficacy of student teachers for implementing the constructivist approach for the department variable. When the mean rankings of student teachers are examined it can be seen that classroom student teachers' level of efficacy are higher than those of science student teachers, considering all aspects and total scores. Additionally, for the aspects of self-efficacy for assessment and evaluation (Z=1,954; p=.051>.050), one of the subscales of the scale, and self-efficacy for developing a learning environment (Z=1,799; p=.072>.050), the mean rankings differ in favor of classroom teachers.

Findings and interpretation of the third sub problem: Data obtained from student teachers were analyzed with Mann Whitney U Test, which is one of the non-parametric tests, for the solution of sub problem: "Is there a significant relationship between the levels of self-efficacy of student teachers on classroom teacher education and science teacher education programs for implementing the constructivist approach in terms of the independent variable grade level?" Table 3 shows the results of the analysis:

Table 3
Examining the level of self-efficacy of student teachers for implementing the constructivist approach in terms of the grade variable

Subscales	Grade Level	N	Mean rank	U	Z	p
Self-efficacy belief for planning the lesson	3rd grade	80	79,32	3105,50	.324	.746
	4th grade	80	81,68			
Self-efficacy belief for the learning-teaching process	3rd grade	80	81,26	3139,50	.207	.836
	4th grade	80	79,74			
Self-efficacy belief for assessment-evaluation process	3rd grade	80	80,53	3197,50	.009	.993
	4th grade	80	80,47			
Self-efficacy belief for developing a learning environment	3rd grade	80	85,06	2835,00	1.248	.212
	4th grade	80	75,94			
Total	3rd grade	80	82,12	3070,50	.442	.658
	4th grade	80	78,88			

*significant at p<.05

According to the results regarding data analysis, when the mean rankings of student teachers' self-efficacy scores for the constructivist approach, and mean rankings of the subscales of the scale were examined, no significant relationship was found in terms of level of grade. In addition to this, when the subscale of self-efficacy belief for developing a learning environment were examined, mean ranking values of third grade students' scores were found to be higher than those of fourth grades (Z=1,248; p=.212>.05).

DISCUSSION, CONCLUSION AND SUGGESTIONS

This study attempted to examine the self-efficacy levels of student teachers for implementing the constructivist approach in terms of gender, department and grade level variables. In this respect, analysis obtained were discussed and assessed within the scope of three independent variables.

Discussion and results regarding the gender variable: As a result of generally interpreting and examining the data obtained from the study, scores of females are found to be better than the scores of males considering the subscales and total scores and, in general, for the self-efficacy scale for lesson planning, a significant relationship was detected, while in the assessment-evaluation scale, there is an insignificant but high relationship. Similarly, Erişen and Çeliköz (2003) obtained findings as women consider themselves more competent in assessing student success than men do. Moreover, when the general findings in the present study are examined, according to literature women's general attitudes (Akpınar, Yıldız and Ergin, 2006; Çapri

and Çelikkaleli, 2008; Bozdoğan, Aydın and Yıldırım, 2007; Çetinkaya, 2009; Baykara-Pehlivan, 2008; Baykara-Pehlivan, 2010), motivation (Acat and Yenilmez, 2004) and opinions (Özbek, Kahyaoğlu and Özgen, 2007) towards the teaching occupation are more positive (significantly higher or at the level of averages) than those of men. In addition to this, the teacher self-efficacy studies in literature were examined (Cheung; 2008; Kahyaoğlu and Yangın, 2007; Yaman, Koray and Altunçekiç, 2004; Gürbüztürk and Şad, 2009) and it was seen that there are studies proving that women have higher self-efficacy beliefs than men. Regarding the study, Evrekli et al. (2009) found out that female science education teachers' attitudes about constructivist approach were more positive than male student teachers. Moreover, similarly, Balım et al. (2009) concluded in their study examining the student teachers' opinions on constructivist approach that females had more positive views than males. Regarding the study, Evrekli et al. (2009) found out that female science education teachers' attitudes about constructivist approach were more positive than male student teachers. Moreover, similarly, Balım et al. (2009) concluded in their study examining the student teachers' opinions on constructivist approach that females had more positive views than males. Likewise, İnel, Evrekli and Türkmen (2010) conducted a study with classroom student teachers and found that there is a significant relationship in favor of female student teachers, in terms of their opinions and attitudes, for the constructivist approach. Karadağ et al. (2008) examined the classroom teachers' opinions about the constructivist approach and concluded that female teachers felt more competent than male teachers, particularly in terms of education status. Yılmaz et al. stated that female student teachers' cognitive models regarding the teaching profession were significantly more student centered. When the relevant literature is examined, the fact that the scores of females are generally higher than males can be explained with the cultural phenomenon in Turkey that the teaching profession is considered more suitable to women in assigning societal roles and therefore, women's attitudes, opinions and motivation for the occupation and their self-efficacy are higher. Related to this view, Cheung (2008) implies in his study conducted in Hong Kong and Shanghai that there is a misconception that women are better in educating young children, and the teaching profession is considered more suitable for women than men, and that this may cause the self-efficacy of women to be higher. Also, Gürbüztürk and Şad (2009) indicated in their study that men have significantly higher levels of traditional beliefs in teaching compared to women. Although there is no significant relationship among groups for the constructivist approach in terms of beliefs in the authors' study, it was put forth that mean female scores were slightly higher than those of males. Based on the findings of this research, another reason for the findings in favor of women in the study, in the self-efficacy aspect, for the implication of the constructivist approach is said to be opinions and attachment of men regarding the traditional approach. Acat and Yenilmez (2004) gained a different perspective in their study and they revealed that men had higher resistance in learning the teaching skills and knowledge, and that they thought they would never learn these skills. This finding apparently supports the findings of the present study.

Discussion and results regarding the department variable: As a result of a general interpretation of the findings about the department variable, it can be seen that the self-efficacy of classroom student teachers for implementing the constructivist approach, and their self-efficacy for the subscales of the scale are higher than those of science education student teachers. However, it is clear that these two groups significantly differ from each other in the aspects of assessment and evaluation and developing learning environments. The relevant literature examinations demonstrate that there are studies proving that classroom student teachers' attitudes towards the teaching profession are higher (significantly higher or higher than the average) than science education teachers (Bulut and Doğar, 2006; Çapri and Çelikkaleli, 2008; Bulut, 2009; Baykara-Pehlivan, 2010). On the other hand, Kahyaoğlu and Yangın (2007) stated that there is no significant relationship between the professional self-efficacy of students on classroom teacher education and science teacher education programs. In his study conducted at the primary-school teacher's level, Karacaoğlu (2008) stated that classroom teachers considered themselves more competent than all other fields of study, particularly in aspects such as, professional knowledge, knowing students, the learning-teaching process, and assessment considering all subscales. Moreover, Gürbüztürk and Şad (2009) examined the constructivist approach beliefs of the student teachers in terms of the field of study variable and, as a result of interpreting the findings, it was determined that beliefs of classroom student teachers are higher than science student teachers. Also, when the findings of

the attitude survey by Evrekli et al. (2009) conducted with science student teachers regarding the constructivist approach, the opinion survey by Balım et al. (2009) regarding the constructivist approach, and attitude and opinion survey by İnel, Evrekli and Türkmen (2010) conducted with the classroom student teachers regarding the constructivist approach are considered together, it can be seen that means of classroom and science student teachers are very close to each other, in terms of opinion and attitude variables. The findings of the research show that the reason why the self-efficacy of classroom teachers is particularly higher than that of science student teachers can be linked to the successful experiences in courses on teaching practice and school experience which classroom student teachers attend, starting from the third grade. The case that classroom student teachers were found to be more competent in the field of self-efficacy for assessment and evaluation can be related with their generally attending the course on assessment-evaluation a term before the science education student teachers.

Discussion and results regarding the grade level variable: In conclusion to the general interpretation of the findings regarding the grade level, it can be seen that the fourth grades consider themselves more competent in the self-efficacy aspect for planning a lecture, and third grades consider themselves more competent in the self-efficacy aspect for the learning-teaching process and developing a learning environment, and also considering the total score. When the relevant literature is examined, some studies in parallel with the research findings and some in contrast with them have been seen. For instance, Evrekli et al. (2009) in their study on attitudes of science student teachers towards the constructivist approach, and Balım et al. (2009) in their study on the opinions of science student teachers towards the constructivist approach found out that the scores of fourth grades were higher than the third grades, although not significant. Also, in a study conducted with classroom student teachers, İnel, Evrekli and Türkmen (2010) stated that third grade students' views on the constructivist approach were higher than those of fourth grades, while the attitudes of former were lower than those of the latter. Aslan and Köksal-Akyol (2006) concluded in their study on preschool student teachers that there was no significant relationship between the attitudes towards the teaching occupation and grade level. In parallel with the study, Şahin and Ersoy (2009) investigated the classroom teachers' level of competency in assessment-evaluation with regards to the new program and found out that fourth graders considered themselves more competent than the third graders. As well as this, Akpınar, Yıldız and Ergin (2006) put forth that attitudes of third grades were higher than fourth grades in their study that aimed at determining science student teachers' attitudes towards the teaching profession. The closest findings to the research were obtained in another study by Gürbüztürk and Şad (2009). The researchers demonstrated that the beliefs of third graders about the constructivist approach were higher than the other grades in terms of mean value, although it wasn't significant. As a result of interpreting the findings obtained in the study, it can be said that the main reason why self-efficacy scores of student teachers studying in third grade are higher than those of fourth grades is the special education methods course, in which science education student teachers can learn about the methods, techniques and strategies in the constructivist approach. The science education student teachers participate in the continuation of this course in fourth grade, and do some practice by preparing sample lecture plans. The method courses, in particular, are an essential pre-service preparation for the teachers, in their professional careers. These courses aim at assisting the student teachers in gaining necessary professional skills, for example, instructing different teaching methods, assessing student knowledge and implicating classroom management techniques (Yilmaz-Tuzun, 2008). The reason why self-efficacy scores of student teachers studying in the fourth grade are lower than the ones studying in third grade can be the negative performances experienced in teaching practice I & II, and special teaching methods course II. Performances are associated with any activity, task or one experience. Such experiences are referred to as mastery experiences by Bandura (2004) and are one of the most important sources of developing a self-efficacy belief. According to Watters and Ginns (1995), students' self-efficacy may change during the teacher education program. The authors explained this with the fact that experiences that students succeed in, or fail at, change throughout the program in different aspects.

SUGGESTIONS

The following suggestions were provided as a result of interpreting data obtained from the findings of the study: Considering that male student teachers and science education student teachers have lower self-efficacy scores than female student teachers and classroom student teachers, it is important that these groups should be encouraged, particularly for the implication of the constructivist approach. Regarding future studies, considering different variables and different samples, it is thought that similar studies should be conducted, and a case study is necessary, for the purpose of determining the reasons for differences among student teachers, in terms of gender and department variables, and putting forth different solution ways. It can be said that student teachers should be provided with the opportunities to prepare lesson plans for implementing the constructivist approach in courses such as, school practice and teaching practice, and some experience in order to assess and evaluate these in practice activities, and that they should receive feedback from the instructors of these courses.

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BIODATA AND CONTACT ADDRESSES OF AUTHORS

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IMPACT OF GLOBALIZATION, EDUCATIONAL BRANDING AND INNOVATIVE TECHNOLOGY ON DEVELOPMENT, MANAGEMENT AND QUALITY EDUCATION IN A NIGERIAN UNIVERSITY

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ABSTRACT

This study is an appraisal of the effort made by the management of Obafemi Awolowo University (OAU)), Ile-Ife at employing Educational Branding as a business strategy to re-brand it selves to becoming the foremost University in Nigeria and the 53rd in Africa. It discussed various branding and Educational Marketing strategies used in spite of the challenges of depressed economy, globalization, desire to meet the MDGs and the achievement of Education for All. It examined students and staff disposition to the branding program and the impact on the image of the university, management and quality of teaching and learning.

Keywords: Educational branding, marketing, globalization, changing economy, innovation, strategic plan.

INTRODUCTION AND BACKGROUND

The potential of new technologies in fostering national development, provision of quality education and in branding education is globally recognized. Just as other industries are facing the challenge of global recession, so also the schools need to develop authentic brands in order for them to attract the right students, faculty, staff, donors and friends. In Nigeria today, one of the panaceas to resolving the challenges faced in education at all levels is "Educational Branding". Some of these challenges are: access and equity, high rates of failure/drop-out, falling standard, poor infrastructures, shortage of staff and poor funding.

The Minister of Education (2009) sees education as a tool that can be used to foster the development of all citizens to their full potential. So that Nigeria can become a strong, democratic prosperous and economy model. However, Egwu (2009) says; for us to successfully achieve this, we must first transform and develop the capacity of our population into competent and highly skilled citizens that can compete globally. Good as this may be the constraints/challenges that can impede the actualization of the above has been identified. The challenges as identified by Egwu (2009) include:

- Low enrolment, retention and transition at the basic education level;
- Low carrying capacity at the tertiary level;
- Inadequate and obsolete infrastructure, equipment and library facilities;
- Inadequate numbers of teachers;
- Low capacity of staff in ICT, management and content delivery;
- Inadequate instructional materials;
- Poor funding; (p. 16)

Other obstacles to the achievement of Education for All (EFA) and the Millennium Development Goals (MDGs) are problems of access, equity and non existence of an open school, system. Egwu (2009) commenting on the above says;

In terms of access there are deep issues of physical access, quality access and economic access. Provision of uniform access to quality basic education presents a big challenge in view of economic, cultural, urban-rural dichotomy and other disparities in the country (p.17).

In this age of globalization, the importance of equitable access to quality education can not be denied. This is because globalization takes its root in education, labor, international trade agreement, international/transnational partnerships, telecommunication and recently terrorism. Today, glimpse of globalization becomes evident in the practices of education especially with the need for re-branding, accountability and technology. Akanbi (2007) identifies ICT as one of the most powerful tools of globalization. Illich (1971) emphasizing the importance of these new technologies says: Education cannot be reformed unless we ensure individual learning or social equality though provision of quality education. Gell and Conchrane (1993) also opine that for the desired change to occur, the importance of new technologies in the globalize world must be considered. It must also be embedded with multiple spheres of influence.

Stair (1996), Rinne (2000) and Webster (2001) have criticized those that argued that education should not be part of the development of globalization. Webster (2001) says it is only when education is seen as an integral part of information business that there would be better understanding of education as being the core of globalization system. Today educational policy is becoming an important part of economic trade, labor and social policies all over the world. In the developing countries education has acquired an unusual profile in the struggle for national survival. The reason for this is the realization of the important role education plays as a core tool for achieving the MDGs plan. In Nigeria particularly, there has been an unprecedented growth in enrolment at all levels of education. However, despite this growth, the issue of access to quality education and the availability of qualified teachers still remains one of the enduring challenges. However, literature revealed that some of these challenges can be resolved through effective branding initiatives. Educational branding is a new field and it is relatively new in Nigeria. It is being used in the developed countries and there are many literatures on the importance of branding among are: (Levinson 2002, Smiths, Nelson 2006 and Teague 2009) .The problem with Nigeria is that branding in education, its application and the integration of ICT is still insufficient to meet the global needs of EFA and the MDGs. For this reason, the topic is timely.

GLOBALIZATION

The term globalization has different connotation. Some theories see it as an assemblage of micro-structural forces discernible in the networks of capital, information, labor, products and people across states and nation. Monahan (2005) sees it as the blurring of boundaries that are previously held stable and fixed under the condition of modernity between local, private, global structure and agencies. Akanbi (2007) views globalization from social, economics, political, cultural and educational perspectives. To this school of thought, education is considered as the core of the globalization process. Perraton et -al (1999) on the other hand describe globalization as the emergence of changed global structures that are driven by skill revolution, organizational explosion, money, goods, people and continuous flow of ideas.

Although globalization is commonly associated with industry and business, but education has become the core of globalization process. In the field of Educational Technology, globalization is not new. As far back as 1964, MCluhan opines that Mass Communication revolution and the broadcast media have reduced the world to a “Global village”. In the world today, educational policy is an important component of economy, trade and social development. Some examples of global development in the field of education are current rapid growth in open-distance education, workplace learning, basic education and the emergence of Mega Universities. Other dividend of globalization currently sweeping across the African countries is the Information Technology revolution. As a result of ICT revolution, national boundaries have been broken leading to equitable access to education. The revolution also ushered in a new era characterized by innovative ways of production, packaging,

transmitting and disseminating information and knowledge (Richard & Pricewater 1998). Not only this, the spirit of globalization also manifest in the statement of goals of many International Organizations and Professional Associations, such as the United Nations, UNICEF, Society for Information Technologies (SITES), The Association for the Advancement of Computing Education (AACE) and International Council of Education for Teaching (ICET).

It is also at this age of new economy and globalization that calls for modern and improved ways of service provision, productivity and training. In a globalize economy, our values and needs have changed because of the diffusion of ICTs. Not only this, the way we conduct business have also changed, in the same light, the diffusion of ICTs into education in a changing economy means increase in the rate of participation. The integration and diffusion of ICTs into education has implication for education and the globalize economy.

INFORMATION AND COMMUNICATION TECHNOLOGY AND THE CHANGING NATURE OF SCHOOL

As in the industries where traditional jobs have changed to become multi-skilled, so also it is in education. Today, ICTs have helped to streamline management, information system, influence the nature of works, the need to develop new strategies and products based on new technology. Another area that calls for re-branding is the change in the client's demand as a result of the new economy. With the new economy, our clients are interested in new services and products. Their desire is that these products or services be delivered in less time than in the past. Not only this, they are also more sophisticated in expressing or asking for their demands. In an attempt at resolving some of these challenges, the management of Obafemi Awolowo University, (OAU) Ile-Ife took the following steps.

Setting the Stage

Obafemi Awolowo University, Ile-Ife (formerly University of Ife) was established in 1962 with students' enrolment of 224. Currently, the total enrolment is over 40,140 including the Pre-Degree, Diploma, Distance Learning and Postgraduate students. Prior to the commencement of branding its programme, the university had a public relation office. This office is responsible for linking the university with the outside world. However, the university took a new approach by establishing an Advancement Office with the support of the Carnegie Corporation of New York. According to IMPACT (2009) the functions of the Advancement unit include among other things to identify and relate with potential donors and sponsors to advance the strategic goals of the university. This new unit is also to anchor the Alumni unit of the University. What was in practice before was the obsolete or the traditional method of sourcing for support which was not effective. The main activity of this unit then was to welcome alumni members who come on voluntary visit to the University.

During this period, the condition of the university was deteriorating due to poor funding, lack of infrastructures and mass exodus of qualified staff. Other challenges facing the university then were obsolete equipments, decreasing attractiveness of academic career to younger and intelligent scholars, gender disparities in admission into science and technology related courses. However, with the establishment of the Advancement Office with properly trained staff and clearly defined functions, the university's image has greatly improved. The advance Alumni relations and fund raising drives have also greatly improved. The improvement was due to the branding effort of the advancement office. The functions of the new Advancement Office as stipulated by the University Senate include:

- Re-brand the image/courses offered in the University;
- publish news letter, Alumni News;
- generate more money for the University using credible endowment;
- organize advancement workshops.

The effort of the Advancement Office at re-branding would not have been possible, if not for the development of a new strategic plan. It is true that the university management has been proposing a strategic plan, prior to

this period; the need for a strategic plan was not immediate. However, with the establishment of the Advancement Unit and the need to re-brand, the need for new strategic plan becomes necessary and very urgent.

Case Description

It was these that gave impetus for the birth of a strategic plan (2004-2008). The new plan proposed is participatory, involving all the students, staff, unions and other stake holders within and outside the Ivory Tower. The industries and their captains, labor markets and the banking sectors were not left out.

A committee was set up including the Directors of the Advancement Office, Linkages and Sponsored Research to oversee the implementation of the new strategic plan. The inauguration of the Committee in 2007 led the university to review and re-engineer the entire university system to meet the demands of a new economy.

The Philosophy Guiding the Project

The goals set by the committee are:

- enhancement of ICT potentials for teaching, learning, research and services;
- enhance resource mobilization through linkages;
- promote entrepreneurial resourcefulness for OAU Ile-Ife graduates;
- ensure gender equality;
- regain the image of OAU as an international institutions;
- develop a strong community relationship;
- establish several industry/university projects;
- attract research and academic funding;
- promote staff and student exchanges; and
- market academic and university research services (p. 8).

In order to achieve the above stated goals, another important unit that will assist the Advancement Office in its branding effort was established. It was called the Directorate of Linkages and Sponsored Research. This unit had made significant impact at getting grants and loans for the development of the university.

EDUCATIONAL BRANDING IN NIGERIA

Educational Branding mean different things to different people depending on the culture and location. In Nigeria, the concept is new in Education have been misconceived by many. There are those who still erroneously believed that education should not be seen or run as a business organization. According to Teague (2009) many people have asked him what Educational Branding means and his roles as a brand consultant. According to Teague the question came as a result of misconception and lack of knowledge about the importance of branding as a marketing strategy in education. Quoting Teague (2009) he said, those asking are often surprised to learn that brand development found its way into education". Other reasons advanced for the misconception is that people do not equate school or school system as a business out fit. There are many examples of such people in Nigeria. However events in Nigeria have shown that these categories of people are gradually shifting ground. These "old schools" are gradually reducing because of new information and the success stories as a result of educational branding strategies being employed in most universities.

Educational branding is a business strategy for developing authentic brands that are meant to give particular name and image to schools or institution of learning. This is done with the ultimate aim of attracting the right clients, staff, faculty, donors' alumni and other people within the community who are interested in helping to promote the success stories. It also involves using strategically targeted marketing designs, campaigns, agencies, integrated media approach and innovative technology to produce our own individual marketing strategy following well defined brand guide lines in order to promote expertise or attract more students and

fund to our institution. This concept was introduced during the regime of President Obasanjo. The concept of branding introduced then was private, public and community participation. (ADOPT A SCHOOL) The concept of branding is becoming a household name today in the country. The concept was first introduced into education by the then Honorable Minister of Education under President Olusegun.

It involves community participation in financing education and the different ways of improving education at the Basic and Post Basic education level due to inability of the Federal Government to shoulder the finance of education alone. This concept was vehemently opposed then, because the stake holders were not adequately informed and carried along .Although it was a laudable move but it was misunderstood. Branding concept is currently accepted, it is a common slogan and it is being used in Nigeria by the Honorable Minister of Information. She has coined a slogan "Re-Branding Nigeria". The main thrust of this paper is to highlight the success stories of how OAU Ile-Ife used this business strategy in re-branding itself to becoming the most beautiful University in Africa, foremost ICT University in Nigeria and the 53rd best University in Africa.

TECHNOLOGY/BRANDING STRATEGIES EMPLOYED

Re-branding strategies employed by OAU Ile-Ife included advertising, selling promotion and public relations. These were facilitated by the Advancement Office, the Public Relations Unit and the Directorate of Linkages and Sponsors Research. The University employed advertising as the main promotion mix. The Advancement Office and the Directorate of Linkages made use of integrated media approach and new technology. Each of this unit created a web-site of their own that keeps the public informed about the progress made so far, the challenges ahead and what they can do to help resolve the challenges.

News letters and electronic letters were also made available to tell our success stories on branding. Video clips, visuals, community radio station called GREAT FM 94.5 and a new digital television station were established to produce programmes designed to change the image of the university and generated more fund for the university. On the international scene, Alumni and other ambassadors of the university who are excited and interested in helping to share our vision and goals were used.

CAPACITY BUILDING/TRAINING AND MANAGEMENT CONCERN

Realizing the importance of the pre-requisite skills in a new economy, the university management decided to organize several capacity training for students, staff and all stake holders under different components. About 400 staff was trained in educational marketing, programming using modern technologies and research methodology. They were expected to go back to their different units to train others.

Many other workshops were held outside Nigeria and were funded by Carnegie Corporation. These workshops and training programmes were organized with the view of improving the administrative powers and skills of the advancement professional, stakeholder and Advancement practitioners. There was other collaborated training. One of which was in conjunction with council for Advancement and Support Education (CASE) based in the United States of America.

The university management also was able to successfully organize some research fairs nationally. A business incubation centre was also established. It is hoped that this centre will act as a nucleus for the commercialization of the innovative business ideas of the university.

Not only this, the university has also embarked on regular update of the Alumni database; this is with the view to strengthening or consolidating their effort as a major source of income for development in the university. The captains of industries were also involved in the re-branding process.

Success Story on Branding

A number of memoranda of understanding (MOU) were signed under the private-public partnerships. In the area of international collaboration, the university as a result of the branding programme has firm linkage agreements backed by memoranda of understanding with more than 85 higher institutions from the entire continents of the world. The resultant effect is research collaborations, international exchange of staff and students. Having told the success story, it is necessary to investigate how the students and staff perceived the branding effort and their reactions to it. It is also necessary to find out the impact the branding efforts have on the university. In Doing this, the following questions will be provided with empirical answers.

Research Questions

- How did the university staff and students react to the branding move?
- What impact did the university re-branding efforts have on management and administration, students, staff and image of the university?

In order to provide empirical answer to the following question, the following research objectives are stated.

Research Objectives

The following objectives are to guide the study:

- investigate the students and staff perception of the branding efforts;
- find out the students and staff disposition to the re-branding efforts;
- assess the impact of the re-branding effort on the students;
- examine whether it significantly influence management and administration.

METHODOLOGY

This Pilot Study Employs Survey Design

Three hundred and eighty participants constitute the sample for the study. They were drawn from the population of OAU Ile-Ife community. Three hundred students and eighty staff were selected using stratified sampling based on faculties and job-type for staff. A-25 items questionnaire was developed to collect information from the sample. It was made up of different sections. Demographic data of the sample, faculty for students, department/unit for staff, and the next section solicited for information on how the students and staff perceived the re-branding of the university. Section III asked for their disposition/reaction to it. The fourth section is concerned with the impact of the re-branding efforts on students. The last section examined the influence of branding programme on management and administration in the university. The questionnaire was tested for reliability. A reliability coefficient of 0.75 was obtained. The data collected was analyzed using simple percentage, Pearson correlation statistics.

FINDINGS AND DISCUSSIONS

Table 1
Familiarity with the concept of branding

Valid	Frequency	Percentage	Valid %	Cumulative %
Yes	288	96.0	97.3	97.3
No	8	2.7	2.7	100
No response	4	1.3	1.3	
Total	300	100	100	

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From the data collected, it was glaring that 96% of the students sampled are familiar with the meaning of Branding in Education. Students were further asked where they first heard about the term, below is the data collected in this respect.

Table 2
First place of knowing about the term branding

Valid	Frequency	Percentage	Valid %	Cumulative %
School	147	49.0	50.3	82.2
Home	93	31.0	31.8	31.8
Internet	52	17.3	17.8	100.0
No response	8	2.7	100.0	
Total	300	100		

Forty nine percent of the students first heard of the term used in the school, while 31.0% at home during media broadcast "Re-brand Nigeria and 17.3% through personal reading on the internet. On the disposition of students to the branding programme, find the results of the data analyzed.

Table 3
Students Disposition to the Branding Programme

RESPONSE	OPTION		FACULTY					
		Agriculture	Education	Social Science.	Technology	Arts	Pharmacy	Total
I am favorably disposed to the integration and application of branding.	YES % of Total	34 12.6%	28 10.4%	32 11.9%	34 12.6%	36 12.8%	31 11.5%	195 72.5
	NO Count % of total	10 3.7%	19 7.1%	7 2.6%	15 5.6%	8 3.0%	15 5.6%	74 27.5%
	Count % of total	44 16.3%	47 17.5%	39 14.5%	49 18.2%	44 16.4%	46 17.1%	269 100.00

The result of the data collected in respect of students' disposition to the branding effort showed that 72.5% of the students across the six Faculties samples were favorably disposed to the university branding programme while 27.5 were not favorably disposed.

Table 4
Paired t-test on staff attitude toward branding

	$\overline{X}$ MEAN	STANDARD DEVIATION	STANDARD ERROR	tc	df	Sig.
O.A.U. Staff Attitude to Branding	5.100	5.625	0.629	8.11**	79.	0.01

*Significant at 0.01 level.

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From table 4, a mean value of 5.1 was obtained with a standard deviation of 5.625. When this was subjected to a t-test to determine its level of significance, the t calculated value of 8.11 was obtained. (tc = 8.11 df=79 p < 0.01). This result was very significant. It therefore implied that the staff of O.A.U. Ile-Ife was favorably disposed to the branding effort of the university. On the impact of the branding programme on students, find below the findings in table: 5.

Table 5
Perceived Effect of Branding on Students performance

RESPONSE	OPTION	FACULTY						
My academic performance has improved significantly due to the branding programme.		Agriculture	Education	Social Sci.	Technology	Arts	Pharmacy	Total
	YES Count in %	39 13.6%	48 16.7%	45 15.7%	39 15.7%	45 15.7 %	40 13.9%	258 89.2%
	NO Count in %	5 1.7%	2 0.7%	3 1.0%	9 3.1%	2 0.7%	10 3.5%	31 10.8%
	NO RESPONSE							
	Count of % total	44 15.3%	50 17.4%	48 16.7%	48 16.7%	47 16.4 %	50 17.4%	269 100.0

The data obtained in respect of the branding programme on student's performance showed that 89.2% of the students opined that their academic improved. While 10.8% said there was no improvement in order to determine whether the perceived effect was significant a Pearson correlation was carried out below is the results obtained.

Table 6
Symmetric Measures of student's perception of the effect of branding

Branding and its effect at improving students academic performance	Pearson correlation Approx. significant Number of valid cases	0.0787* 0.010 287

*Significant at 0.01

From the Pearson correlation r = 0.787 at 0.01. Since the r obtained is higher, it implied that student's performance improved after the branding progrmme. The fact that students performance improved may not be unconnected to better provision of infrastructure, teaching materials, various collaborated programmes and improved methods of teaching/learning which were dividends of the re-branding efforts. One may therefore conclude that the branding efforts have significant impact academic, image and the financial status of the university. In order to determine the impact of the branding efforts on management and administration in the university, questionnaire was administered on the staff of the university. Find below the result of the analyzed data.

Table 7
T-test of Branding and impact on management and administration

	$\overline{X}$ Mean	Standard deviation	Standard error	25% confidence interval lower	Upper	tc	df	Sig.
Branding effort and impact on management and administration at O.A.U. Ile-Ife.	-2.08	7.14	0.80	-3.66	-0.486	-2.60*	79	0.01

- Significant at 0.01 level

Table: 7 above revealed that t-calculated value of -2.60 was obtained. It was also evident that the t value was very significant, tc=-2.60, df=79, p<0.01. From this result, it implied that there was a remarkable improvement in management and administration after the branding programme.

The improvement in management and administration may not be unconnected with the applications and integration of modern theories and the various collaborative advancement training aimed at improving the professional skills of administration. It can therefore be concluded that the collaborated training by "CASE" and other Advancement workshops have yielded positive results.

CURRENT CHALLENGES FACED

Some of the problems or set backs that would have prevented the success of the branding effort were it not for the doggedness and resolve of the university management were: resistance of both students and staff to the innovation, high cost of implementation, epileptic power supply and misconception of the relevance of branding to education.

SUMMARY AND CONCLUSION

The following conclusions were drawn from the findings ninety-six percent of the students are familiar with branding 82.2% heard about branding at schools, 31.8% at home and 17.8% through personal research on the internet. 72.5% of the students across the six faculties were positively disposed to the university branding programme while 27.5% were not. O.A.U. staff was also positively disposed to the branding programme. There was also a remarkable improvement in students' performance. Also there was remarkable changes and improvement in management and administration at O.A.U. Ile-Ife. The image of the university was greatly improved both at home and abroad; quality of teaching was also greatly improved. Research opportunities with grants and collaboration with outside world was enhanced. Finance has greatly improved in spite of low government subvention to the university. It was this branding programme that made OAU Ile-Ife in Nigeria the most beautiful university in Africa, the foremost ICT and best university in Nigeria.

SOLUTIONS AND RECOMMENDATIONS

In order to address the problems identified earlier, the university man agent had put in place on how it will ensure sustainability of financing beyond the duration of the Carnegie Grants and the other grants from the Corporate Organizations. In this respect the university has established private ventures, research centers and

corporate units to market the university products to the International and local communities. The problem of epileptic power supply was addressed by making provisions for alternate heavy weight generators at specific and important centers in the university. This was in anticipation of the new E-Learning projects, e-administration and the complete digitalization of the Hezekiah Oluwasnmi Library, the Bursary and the Health Center. Understanding the importance of adequate facilities, the management have planned upgrading major facilities like internet , the bandwidth and other ICT facilities under 3 phases(First generation that have passed, second generation that have also been achieved and the third generation which we are yet to be implemented. It include Staff Quarters, students hall of residence, Obafemi Awolowo University Teaching Hospital Complex(OAUTHC).The University management purchase a VSAT Earth Station 4.5/1.5Mbps and 256/128Kbps. International and transnational partnerships were made in training ,research, workshops and manpower development/ web content development and authorship as a way to reduce costs.

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THE POSITIVE IMPACTS OF USING DATA VISUALIZATION TO MONITOR ONLINE EXAMS IN GEOGRAPHY EDUCATION

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ABSTRACT

Online tests and classes are becoming widely adopted systems in academic institutions. This is quite a recent phenomenon whereby I have had the opportunity to experience the transition of using these online systems in geography classes. From teaching in a traditional classroom setting to using online systems such as ETUDES at the community college level (teaching at two community colleges in the Los Angeles Community College District) or CLE (teaching classes at UCLA) for hybrid as well as online classes within a matter of a couple of years, I have been able to witness the advantages and disadvantages of both systems. Online classes and exams are becoming a prevailing practice in education. Because they are being used more widely, it is imperative to assess student learning behavior based on how they perform on varying test structures in order to improve the system of testing.

I discuss the positive effects of using data visualization and specific techniques I used to detect patterns of learning behavior for students taking in-class and online exams.

Keywords: exam, Internet, systems, pattern, data visualization

INTRODUCTION: WHAT DATA VISUALIZATION IS AND HOW IT IS USED

Information visualization is enhancing and improving the human capability to detect patterns and relationships between data sets while exploring and analyzing data (Alexandru Telea, 2008).Geography technology such as geovisualization allows users to visualize and analyze previously unknown relationships and patterns with new methods (Shin, 2006; Wiegand, 2001).

In the context of geography technology in education, Artvinli (2009) emphasizes how new approaches allow educators to go beyond basic knowledge and present new levels of comprehension.

Although data visualization charts have allowed me to detect several previously unknown test strategies used in geography classes and several correlations among questions, which gave useful feedbacks on the test quality, I was able to improve the affect of these data visualization charts by not only using more data, but also by enhancing data visualization and using new and different data visualization techniques.

I have been teaching physical geography for a number of years and some of the most significant exercises and components of the class have been GPS and GIS. Students not only enjoy activities related to GPS and GIS but they also find these exercises beneficial. They have the opportunity to familiarize themselves with new technologies while simultaneously learning more about geography. Scholars such as Karmen Kolenc-Kolnik support the use of GIS by geography instructors in order to stimulate knowledge of geography and to enable the development of “inter-subject connection” for further use and potential preparation for young students’

professions (Kolenc-Kolnik, 2006, 1). Therefore using the web (i.e. ESRI exercises) and new technology "in the classroom is not a replacement for other kinds of research, but it is a valid way to enhance student learning and excitement about geography" (Logan et al, 2010, 20). Because technologies such as GIS, GPS, and remote sensing are becoming so prevalent in geography, assessing student learning behavior in taking online exams in geography education is especially important. In my specific study, the students who are the subjects of my investigation had some prior experience using GIS and geography technologies in general. Does this mean that the transition from in-class to online tests is easier for them as opposed to students without this prior experience? Data visualization can show such patterns. Through using data visualization, I show how to analyze the results of in-class and online examination and therefore, how it affects geography education and learning behavior at large.

RESEARCH METHODOLOGY: TYPES OF DATA VISUALIZATION AND HOW IT IS DEVELOPED

As data visualization and associated analysis tools have become more accessible in recent times, geographers have dedicated more attention to exploring their uses in enhancing geographic education (Board on Earth Sciences and Resources, National Research Council 2006; Baker 2005; Bednarz 2004; Kerski 2003; Meyer *et al.* 1999).

My research methodology includes quantitative analysis namely data visualization to detect patterns by analyzing students' test scores. In many related studies pertaining to the use of technology in classrooms, the research methodology used by scholars has been more qualitative. For example, in "The Digital Versatile Disc as a Learning Support Medium in the Teaching and Learning of Map Work", Aubrey Golightly uses qualitative analysis techniques including observation, interviews with the learners, and questionnaires for her research methodology.

In articles about geography technology in education that do use data visualization, the purpose of using geo/datavisualization is to convey information to the readers in an effective way rather than to use the data visualization for the authors'/instructors' own purposes. In an article relating to online courses, WinklerPrins et al, use pie graphs and bar graphs to show the results of their study in evaluating their students.

Scholars who have conducted studies on teaching geography technology who support data visualization as a research methodology include Martin Raubal, Bernhard Gaupmann, and Werner Kuhn (1997) who not only support instructors learning from using data visualization but also "students [in order] to perform and visualize operations as well as to see how the data are processed" (1). Therefore, I have been sharing my study and results with my students which are learning from the process as well.

In "E-learning for Geography's Teaching and Learning Spaces" Lynch et al "promote the idea that considering best practice with reference to educational technology will increase the versatility of teaching geography in higher education" (2008, 1). As a result, through using data visualization as the instructor, to detect technology-use patterns (namely online exams) in the classroom, I learn the best ways to apply and improve student use of technology in the classroom. Lynch et al emphasize the strategies and techniques employed by the "teacher" which are then transferred to the "learner". Clark (1994) also emphasizes the method used by the instructor as the "active ingredient" (26). Lynch et al use data visualization to show e-learning trends (Figure 1, 2008, 2). They state that "one of our purposes is to encourage geography faculty to assess where any teaching-learning activity is placed in e-learning 'space', consider whether it could be re-located, and establish the most effective way to get there" (2008, 2). As a result, Lynch et al would support my research methodology which is an "e-learning space" in and of itself that assesses another e-learning endeavor, online examination.

The sample group of my research consists of 55 students taking Geography 1, Physical Geography as a GE requirement at West Los Angeles College and Los Angeles Pierce College.

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Out of the three main dimensions of spatial thinking: Spatial-visual stimulus, spatial orientation, and spatial mutual relations (Gollede & Stimson, 1997 cited in Bednarz, 2001), I focus on spatial-visual stimulus, using data to show spatial patterns visually. Two of the main stages of spatial thinking discussed by Artvinli (2009, 5) developed in geography education (Bednarz, 2001) which I use most are "Abilities (skills) that recognize spatial distribution and spatial patterns and Associating and correlating spatially distributed phenomena."

I use two different sets of data to compare and contrast student learning behavior based on the type of test (online vs. in-class). Two online test data sets are used with two data sets for in-class tests. Data visualization is the perfect tool to allow geography instructors to analyze student performance data and subsequently improve the assessment process. The types of models I use are common to show statistical information that measures relationships and their correlations (McMillan & Schumacher, 2006). Although several geographers have sought to examine and analyze the pluses and minuses of incorporating technology into courses (Smith et al., 2006; Fletcher et al, 2007) most scholars and instructors have not used technology themselves to assess the impacts of using new technology in courses. I will discuss other research methodologies and how they compare to mine in the "Results" section.

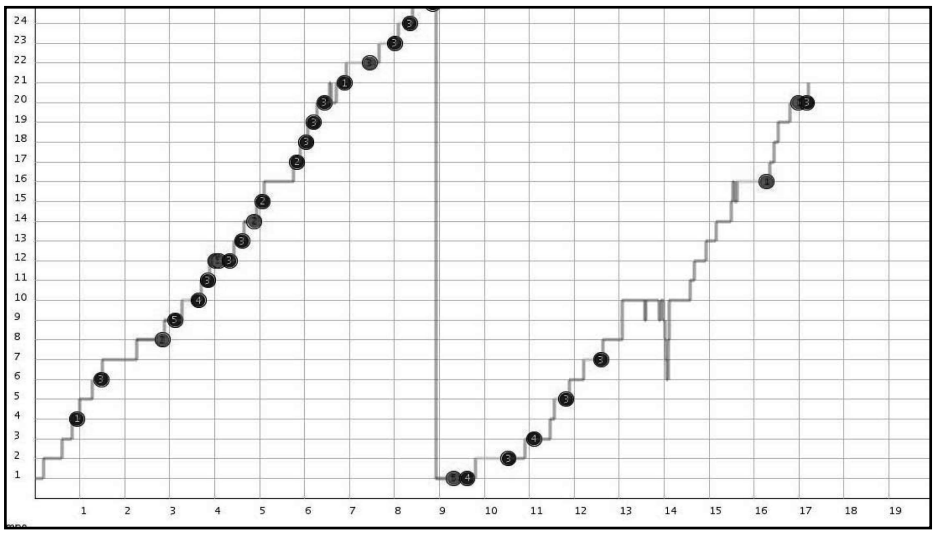
I use a 'chronological reviews of tests' and compare online tests with each other rather than comparing online with in-class assessments. Although I do evaluate the differences between the first online tests given as compared to the second, the aim of my study is to compare the online to the in-class exam scores.

Furthermore, in terms of the actual visualization methods, I use geometric and symbolic methods (i.e. represented by using lines). Symbolic visualization is used for representing non-numeric data (i.e. demonstrated through pixels, icons, etc).

Discussion: Significance of Experimentation

Although there are technical differences (examples of 2D and 3D displays that I use are line graphs, histograms, box plots, and scatter plots), my data visualization emphasizes the students' scores in addition to variables such as time. The first data visualization is a 2D chart showing a chronological review of tests taken by the students:

Table 1
Chronological Display of Exams



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The two axes show the time line (horizontal axis) and the questions submitted to the learner (vertical axis), respectively. Therefore, everything is in the context of time. The horizontal line segments show the view of an item for a given time interval.

The basic elements used in displaying a chart are:

Figure 1: *The four basic elements in displaying a data visualization chart.*

However, for my data visualization I did not decide to use circles (i.e. in the form of pie charts, etc). This is because different forms of visualization are better for different purposes. For example, circles are better for more specific purposes. Circles can represent the responses given by students on specific items. This is demonstrated through the example of a pie graph that displays specific strategy usage. Because my uses of visualization methods are for data that is more general, circles (i.e. in the form of pie charts) are less useful.

Therefore, instead of the pie chart, I found a box plot much more useful for my specific type of data:

Table 2
Sample Box plot of student scores

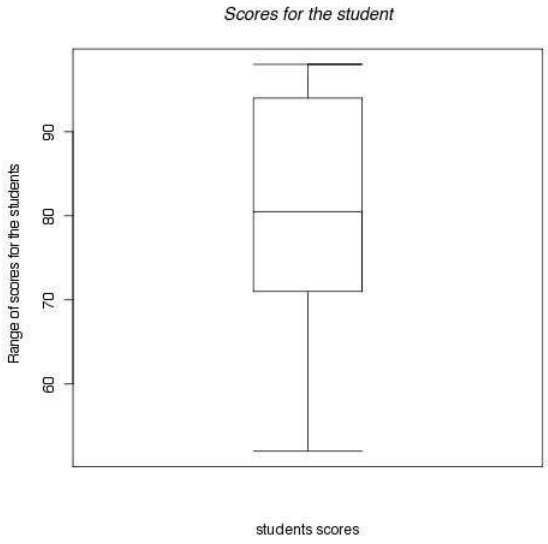
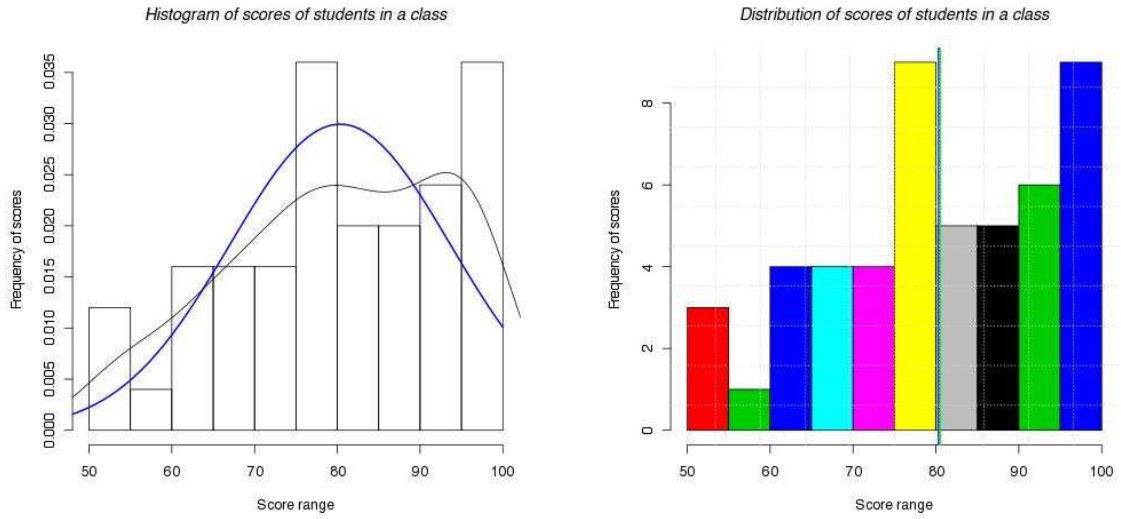


Table 3 and 4
Bar graph and histogram of student scores



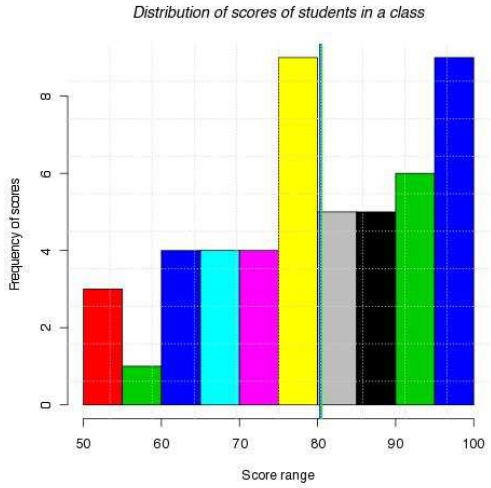
The bar graph and histogram show more detailed outcomes than the box plot.

My Data Visualization

I decided to use a simple bar graph to introduce the data and have a fundamental visual of the scores. This helps to have a general understanding and idea of how students are performing.

In-Class Tests:

Table 5
Bar graph of in-class student scores

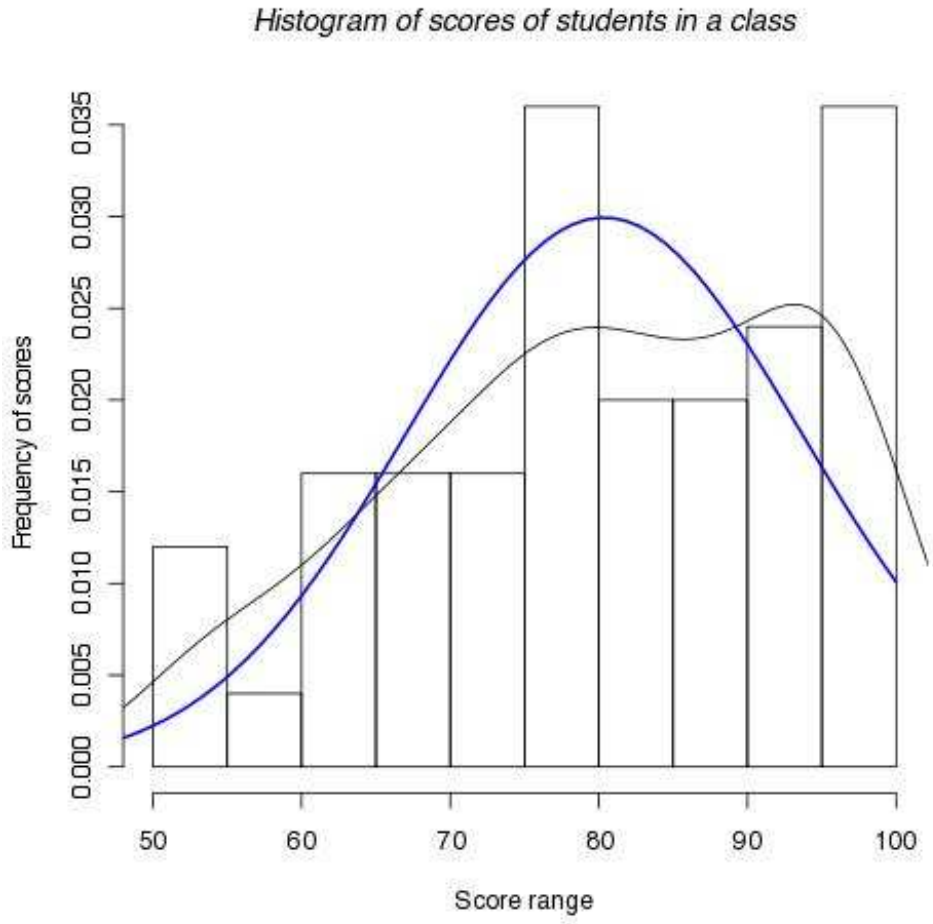


This graph displays the distribution of scores for students taking in-class exams. I expected this outcome; however I was surprised to see the mean and the median have a close result. This graph was a good choice for creating my first data visualization for students' scores because it gives a general idea of (in-class) student performance.

The next data visualization I decided to use is a histogram using the same variable(s) (student in-class exam scores) in order to compare both methods. Which one is more effective?

Although the bar graph is more visually pleasing, the histogram is easier to read. Immediately, one notices that it follows the conventional pattern (normal weight distribution model). The score range once again appears to be average, as expected.

Table 6
Histogram of in-class student scores.



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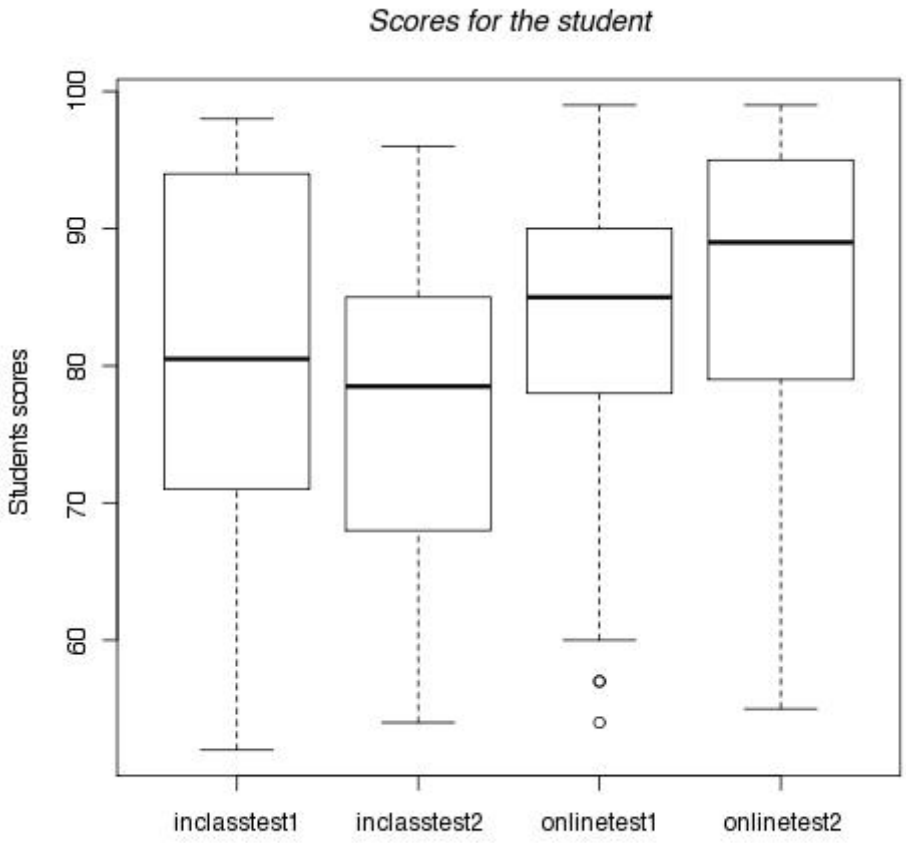
Comparing In-Class to Online Assessments

The box plot was one of the most effective ways for showing the comparison of online exam scores to in-class scores. It is clear and easy to read. One can immediately see as well as compare the averages and spot the 'outliers' (students who scored the lowest).

Table 7
Box plot of student scores



The last data visualization I used that I found most helpful for comparing online and in-class exam scores is line graphs. The lines graphs I created turned out to be both visually aesthetic as well as the most effective. This type of data visualization shows the most detailed information making it the best way to analyze the data. Here is an example of one of the many line graphs I created (due to realizing it is the best data visualization for this type of data):

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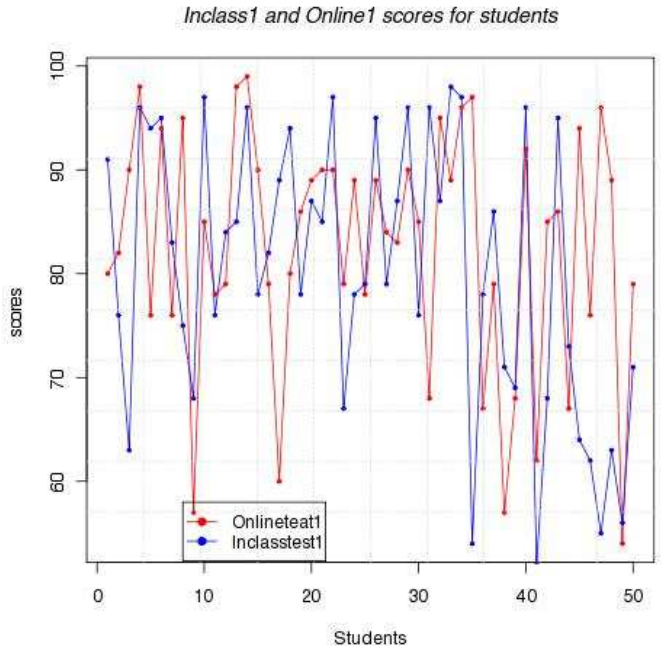
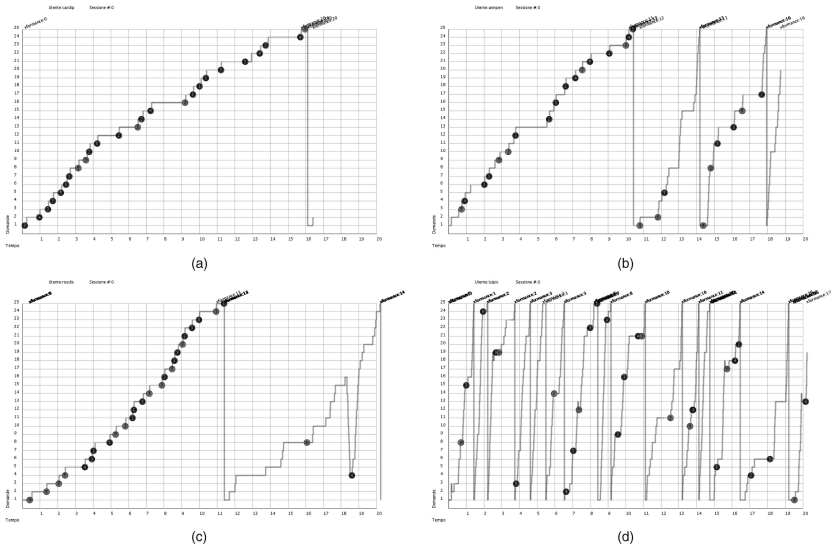
Table 8
Scatter plot of in-class and online student scores



Comparing types of similar data visualization techniques

Although visually displaying two different types of data, line graphs are the most effective and best forms of data visualization for showing these kinds of patterns. In addition to using the standard line graph (as shown above), a step-ladder visualization emphasizes different phases. These are shown in the first three (a-c):

Table 9
Sample line graphs



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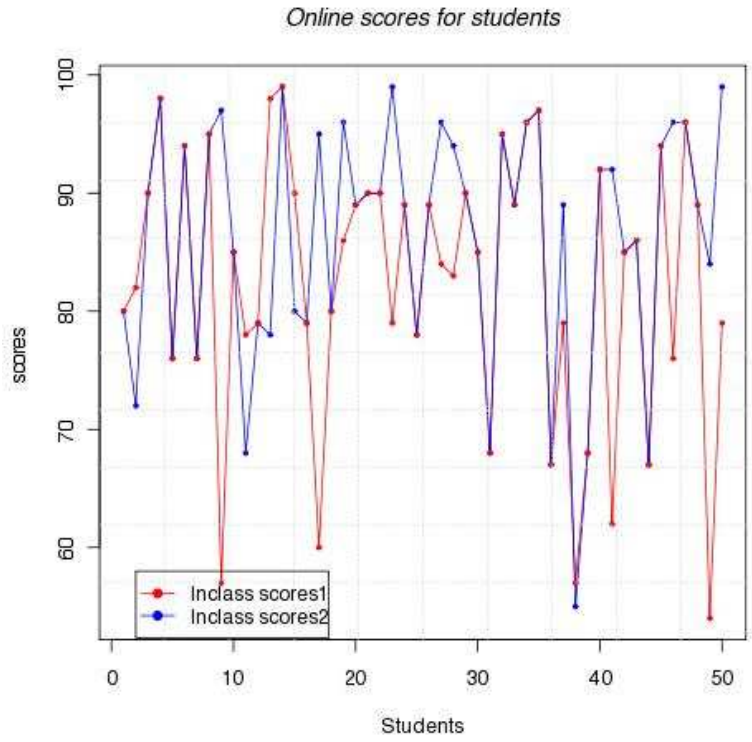
The last visualization (d) shows that the general pattern is a-typical. This type of visualization is, thus, the best way to illustrate numeric data such as test scores. In the next, section, I will describe why and how I specifically analyzed data based on this particular type of line graph.

Analyzing the Data

As mentioned, I found that the best type of data visualization for analyzing test scores is a line graph. As a result, I created a line graph to display students' performance after taking each test (in-class as well as online). The next step entailed comparing the online exam scores to the in-class scores. Finally, I compared two of each and analyzed the outcomes considering order (which test was taken first) as a factor.

First Exam Scores:

Table 10
Scatter plot for online student scores



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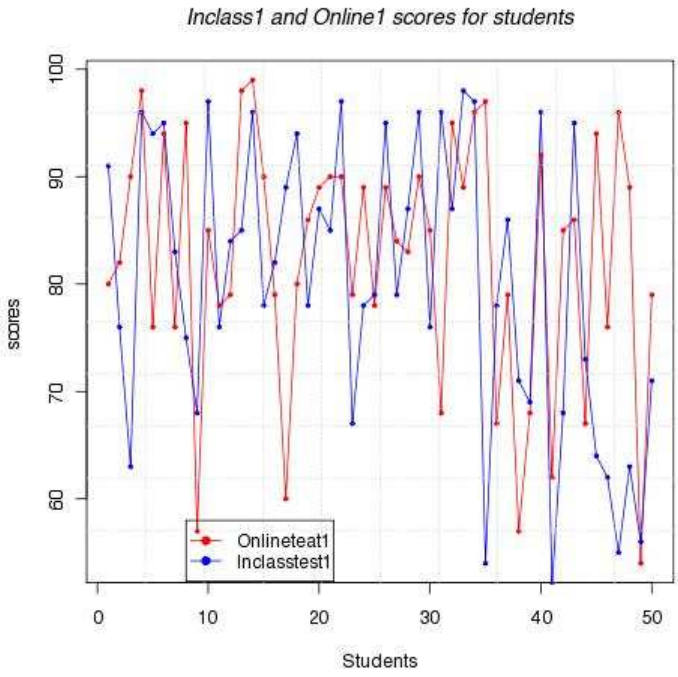
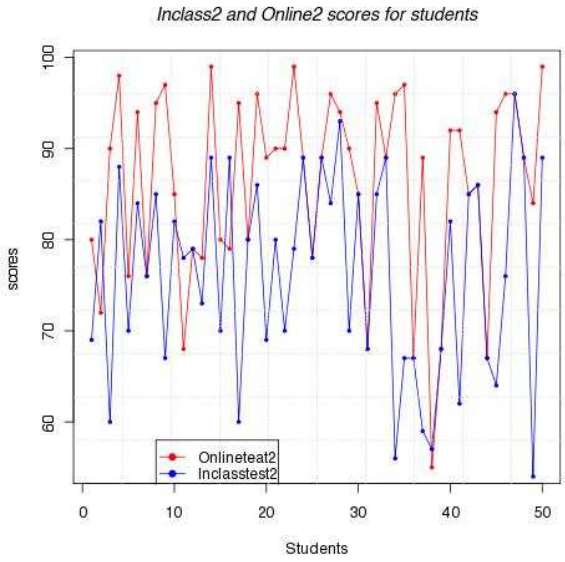
First Comparison:

Table 11
First scatter plot for in-class and online student scores



Second Comparison:

Table 12
Second scatter plot for in-class and online student scores



RESULTS AND DISCUSSION: USING TECHNOLOGY IN THE CLASSROOM

The first data visualization for the first exam scores shows that most students scored consistently except for the couple that did well on the first test and subsequently, 'took it for granted' and scored relatively much worse on the second exam.

The first comparison between in-class and online exam scores shows that students scored consistently except for the couple who did much better/worse on either the online or in-class exam (clear example demonstrated through the last couple scores at the end who scored much better on the online test).

The last comparison shows students generally scoring much higher on the online exams. This seems to demonstrate that the more online tests students take, the higher they score. This could possibly be explained by observing the transitions students experience from taking in-class exams to taking exams online.

Looking at the first data visualization that shows the first comparison for in-class to online exams, one can easily see that a couple students scored exponentially higher (by 35 %) on the online tests, which debunks the theory of transition. So what could possibly be the reason for these 'outliers' that don't follow the pattern?

One possible factor is cheating. Some possible ways of detecting cheating include following eye movement through such patterns as mouse browsing. In the future, I would like to use data visualization to try to solve some of these questions and problems to improve assessment and make it as sound and fair as possible.

In general, not only are students scoring higher on online exams but they also seem to be more motivated to use this kind of technology. In the past, using computer technology in learning activities such as conducting online exams has been perceived as a trend whereby instructors felt ambivalent about using technology (namely computers) as a way of improving education (Bednarz, 1995). Presently, however as demonstrated through this study, students are just as motivated to learn and use technology as instructors. Prensky (2001) makes note of the generational gap between the student and the instructor, believing that even though many instructors were not born during this digital era, their position of being "Digital Immigrants" does not hinder them from using technology to their own advantages. For the generation of mostly students who were, in fact born in the digital era, Artvinli (2009) coins the term "Digital Inhabitants," students who are becoming experts on technological advances and are taking the transition of these improvements much easier.

Another factor to consider is the structure of the exams. The way questions are asked, both verbally and how they are presented on a test makes a difference in stimulating the students' thinking and the answers they choose (Pizzini, Shepardson, and Abell 1992; Wilen 2001; Vogler 2005)

CONCLUSION

Although there have been studies on how geography technologies such as geovisualization can be integrated into curriculum to the degree of creating a 'culture' that promotes instructors to use geography technologies in their lessons (Jenner, 2006), there have not been many studies on how they can use geography technologies namely geovisualization for their own pedagogic purposes. One question that I pose is whether geography technologies and data visualization in education are more useful as a tool for instructors or should they become a primary goal for both students and teachers, alike?

Chalmers (2006) does not believe that technologies such as geovisualization and GIS, are as beneficial for instructors as they are for students because of teachers' lack of time. To counter this argument, there are many examples of programs that adequately train instructors in using new technologies in a short amount of time

(Johansson, 2006; Kerski, 2003; McClurg & Buss, 2007; Mota et. al., 2006; Siegmund et. al., 2007). In general, there are more instances and a wider research literature that supports both instructors and students mutually benefiting in a learning-teaching process from geography technology (Aladag, 2007, Alibrandi, 2003, Alibrandi & Sarnoff 2006; Beishuizen, 2006; Demirci, 2004, 2006, 2007; Donert, 2006a, 2006b; Ida, 2006; Johansson, 2006; Kerski, 2000, 2003, Mark, Kay & Dan, 2003; Siegmund et. al., 2007). This is true to the degree of a "culture" being created around using geography technologies (namely GIS and geovisualization) so that instructors are developing new ways of integrating these technologies into their lessons (Jenner, 2006). Simultaneously, it benefits the students in that "it can be the means to professional development" (Artvinli, 2009, 11).

Data visualization in particular has been enhancing the human capability to detect patterns, arrangements, and relationships between data elements while exploring the data (Chun-houh et al, 2007). My experiments demonstrate how data visualization can not only contribute to noticing patterns and comparing methods, but how it can lead to generally improving teaching and assessment processes by analyzing different forms of data visualization. It demonstrates how some data visualization is better for showing some data and patterns than others, depending on the variables, purpose, and techniques used.

Besides using data visualization, other forms of assessing student learning patterns include student involvement through participatory methods. Scholars such as Logan support student surveys that allow them to evaluate the online system Instructors use. These surveys would include questions such as "to what extent does the site's design reinforce or undermine the central message?" (Logan, 5, 2007). Furthermore, questions about the 'user friendliness' of the site could also be incorporated into survey such as "how easy is the site to use?" (Smith, 2001, 1). Therefore, students would evaluate "the site's navigation scheme." However, due to students' different background experiences with technology and personal biases, the surveys would not demonstrate an objective reflection of students' performance on online versus in-class exams. Although studies such as the one by Wilbanks (2004) have considered both the geographical dimensions of technology in education and society at large and the technological dimensions of education and geography in society, my own study is original in that it examines a phenomena involving technology (online exams) by using technology (data visualization).

Other arguments about the general use of technology in classrooms by students as well as by instructors include the concept of 'isolation'. This is a notion discussed by David Higgitt (2010) in that the use of computers in classrooms isolates the students from each other and isolates the students from the instructor. However, Logan (2007, 1) states that "Ideally the computer is an object around which social interaction in the classroom occurs, rather than a technology that serves to isolate students from each other and their teachers." One solution may be hybrid courses. Others recommend using computers and online sources in classrooms "in conjunction with non-Web resources including atlases, books, newspaper articles, and evidence collected by students themselves in the field" (Logan et al, 2010, 5) while others perceive the use of technology as an ethical issue in which "Some have called for ethics instruction to counter undesired uses of the technology" (Wetherholt, 2010, 1).

As a result, there are pluses and minuses "of both real and virtual course[s]" (Colvard, 2006, 1) as well as the methods used to assess the effectiveness of the 'virtual' and 'non-virtual' component(s) of the class. I found that data visualization is an effective method to compare student performance and detect patterns. There are ways of finding the pattern you want to see or the information that you would like to display (i.e. the 'outlier') depending on the type of data visualization one uses, in turn 'personalizing' the process. In my particular study, I found the scatter plot to be the most effective to show the transition of students switching from taking in-class to online exams and the results of those exams. With the constant development of new programs and enhanced visual techniques, there will be an increasing amount of freedom to choose what form of visualization works best for one's own data and study.

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THE EFFECTS OF THE COMPUTER SIMULATIONS ON STUDENTS' LEARNING IN PHYSICS EDUCATION

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ABSTRACT

Broad acceptance of web-based software as a teaching-learning medium for processing information has opened new vistas in education by taking full advantage of learners' basic senses of learning such as visualizing 3D objects and fundamental concepts with applets. Applets provide animated, interactive and game-like environments in which students learn through exploration. Most of the applets are available on-line cover high school and college science courses. This study focuses on the technical and pedagogical benefits of more advanced-topics-related applets used in physics course. These applets emphasize the connection between real-life phenomena and the underlying science. Also, the effects of physics concept learning with computer simulations and traditional physics learning without computer simulations on students' achievement and attitude were compared. The study was performed on two groups (total 93 students) during one semester at a public university in the west of the Turkey. When the results obtained from the study were evaluated statistically, it was found that there was a significant difference in conceptual test between groups' scores in favor of the treatment group. Also, it could be concluded that the courses with computer based-activities have a positive effect on students' attitude. According to the results of this study, the present study suggests that carefully developed and tested educational applets in conjunction with real-equipments can be engaging and effective in students' understanding of the physics.

Keywords: Applets, computer simulation, educational technology, learning environment, physics education.

INTRODUCTION

The use of educational technologies, such as computer animations and interactive simulations, in science and engineering courses has increased dramatically in the last decade. The popularity is partly because of the fact that simulations are easy to integrate into a curriculum. Most of the textbooks used in the college courses now include various simulations as DVDs or a URL to websites (Wieman & Perkins, 2006). Available simulations are stated as an interactive multimedia which is a combination of multimedia and interaction. The media are composed of text, image and/or movie. The interaction is composed on trigger and action. Java applets written by a powerful programming language from SUN Microsystems are simple solutions for excellent educational multimedia because of image, sound, and interaction powers. Java applets can easily be included in a html document with other multimedia elements such as images, graphs, diagrams, tables, videos, and audios allowing an easy configuration of dynamic multimedia learning materials (Wieman et al., 2008a).

A number of control buttons below the applet itself allow students to start, stop, and step the animations, and the mouse can be used to read scaled coordinates and to drag and drop objects around the frame. Each applet is designed to focus on a single physical principle or concept, excluding unnecessary detail; this keeps applets small and easily downloadable over the internet on a range of connection speeds.

Also, as a result of their simplicity, applets do not require lecturers to adhere to a particular pedagogical approach, though the creators point out that applets are most effective when used in collaborative learning or tutorial-type settings (Krusberg, 2007).

Applets are effective learning tools; however, to enrich the teaching-learning environment they must still be a part of instructional design (an experienced instructor and a well-designed curriculum). Educational applets should follow the same basic strategies with in effective teaching. These are to: a) define specific fundamental principles; b) encourage students to use sense-making and reasoning in words and diagrams; c) use students' before knowledge to build new concepts; d) make a connection to real-life experiences; e)increase collaboration in activities; f) be careful not to limit students' exploration; g) monitor students' understanding (Finkelstein et al., 2006).

An applet assists when instructor introduces a new topic, builds a concept, tries to reinforce ideas and provide final review and reflection (Wieman & Perkins, 2005). Also it creates a common visualization between students and instructors which facilitates the communication and teaching. Group activities are even more substantial for students in terms of working in pairs and manipulating applets themselves. In engineering and science courses, applets are widely used in various educational settings including lecture, in-class activity, small group activities, homework, and laboratory (Perkins et al., 2006).

The limitation of using pictures, words, and gestures in classical physical lecture makes harder to convey a fundamental concept to students or share the same visual models. Applet serves as versatile visual aid increasing the communication and allowing for interactive engagement through lecture demonstrations and concept test (Mazur, 1997). Also traditional assessment methods such as in-class quizzes can be replaced or supplemented with the simple applet-based multiple-choice on-line tests with a variety of questions (Kamthan, 1999). Besides, having access of students to internet encourages asynchronous distance learning and they can study the course material from home in their own time. Applet-based homework questions increases exploration motives of students before the lecture.

Applets offer the same benefits as the demonstrations using real equipment also following advantages. Students can:

- use where the real equipment is either not available or impractical to set up;
- change variables easily in response to students' questions that would be difficult or impossible to change with real apparatus;
- show the invisible connections explicitly with multiple representations;
- run the applets on their own computer at home to go over or extend the experiments to clarify and strengthen their understanding (Finkelstein et al., 2005).

While many researchers (Azar & Şengüleç, 2011; Christian & Belloni, 2001; Bayrak, 2008; Bozkurt & Ilik, 2010; Krusberg, 2007; Viadore, 2007) find it appealing to use simulations in their classroom, little research has been done to determine if simulations improve a learner's understanding of or enthusiasm for science and how simulations can be designed and used most effectively. The main aim of this study was to compare the effect of physics concept learning with computer simulations and traditional physics learning without computer simulations on college students' physics achievement. In this study, the author examines the following questions:

- Is there any statistically significant difference between physics concept learning with computer simulations and traditional physics learning without computer simulations groups' conceptual understanding?
- Do students find computer simulations as a positive learning experience?

METHOD

The study was conducted on college physics course (covering electricity and magnetism) during the spring of 2010 (S10). The subjects in this study consisted of 93 students attending a public university in the west of the Turkey. The research method was a quasi-experimental design in which an instructor who was assigned to teach two lecture sections of the same course. The quasi-experimental design consists of two groups that one group is subjected to a treatment and the other is subjected to a control group (Fraenkel & Wallen, 1996). In the study, there were two identical classes, namely, traditional physics learning without computer simulations (TPL) and physics concept learning with computer simulations (PCL). 47 students in the TPL class were the control group. 46 students in the PCL class were the experimental group.

Before the intervention, all participating students took a pretest. The pretest scores were used to test the equivalence of the two groups and for analysis of students' performance. The posttest scores were used as the dependent variable. Conceptual Survey in Electricity and Magnetism (CSEM) was used to provide data for quantitative analyses and to evaluate students' physics performance. Also, an evaluation questionnaire toward computer simulations was used to provide data for quantitative analyses and to access students' opinions on their learning experiences with computer simulations.

Students in the PCL and the TPL groups were taught the same concepts during one semester. Both groups were given the same time period. This course for non-science students has four credit hours. Students in the PCL group attended to lectures three hours and then each student studied the assigned applets in the computer laboratory class one hour per week. Students in the TPL group attended to lectures four hours in a week. All students in the PCL group completed a worksheet while interacting with the assigned computer simulations. The worksheet is aiming at encouraging students to reflect on the simulated phenomena and to present related conceptual reasoning to explain the phenomena. Specifically, students are required to:

- identify the physics principle(s) or concept(s) to explain the physics phenomena,
- articulate the rationale to use a particular principle or concept to explain the physics phenomena, and
- describe how principles or concepts are applied to explain the physics phenomena.

The simulations were selected from the physics education technology (PhET) made by the physics education research group at University of Colorado at Boulder. The simulations are designed to be highly interactive, engaging, and open learning environments that provide animated feedback to the user. The simulations are physically accurate, and provide highly visual, dynamic representations of physics principles. Simultaneously, the simulations seek to build explicit bridges between students' everyday understanding of the world and the underlying physical principles, often by making the physical models (such as current flow or electric field lines) explicit (Finkelstein et al., 2006). Concepts in electricity and magnetism (E&M) were chosen as the topic for this study because of their abstracts nature. Total eleven research-based applets, shown in Table: 1, were used in this study.

Students engaged in a series of exercises including: DC-circuits (examining resistors in series and parallel, building a simple circuit and then predicting, observing, and reconciling its behavior as various elements (resistor and bulbs) were added or rearranged, and finally developing methods to measure resistance in multiple ways in these circuits); Electrostatics (measuring the static charge); Magnetics (introducing Faraday's Law, magnetic force balance, and metal detector activity). Some applications used in the computer laboratory class were given as follows.

Table 1
The list of the conducted applets

The Number of the Experiments	The Chapter of the Experiments	The Name of the Experiments
1	Electricity	Balloons and Static Electricity
2		Charges and Fields
3		Ohm's Law
4		Resistance in a Wire
5	Circuits	Circuit Construction Kit (DC only)
6		Circuit Construction Kit (AC+DC)
7		Signal Circuit
8	Magnets	Faraday's Electromagnetic Lab
9		Faraday's Law
10		Magnets and Electromagnets
11		Magnet and Compass

An example of applets used for electrostatic chapter, shown in Figure 1a, traditional balloon demo is presented in which students can observe the electric charges.

Although the simulation is simple, it is effective for animating the Coulomb attraction between oppositely charged objects and the movement of negative charges (electrons) as they are transferred from the sweater to the balloon when rubbed together. Polarization is also represented as the negative charges in the wall shift away from their positive ion cores (nuclei) as a charged balloon approaches (Perkins et al*.,* 2006).

Another applet application used in laboratory can be Circuit Construction Kit (CCK) applet, shown in Figure 1b. It offers a learning environment similar to the real-life laboratory. Students connect light bulbs, switches, batteries, resistors, and wires to create arbitrarily complex DC circuits. Realistic looking voltmeters and ammeters are used to measure voltage differences and currents.

Also this, the CCK applet introduces an animation of the electrons flowing through the circuit elements and the ability to continuously adjust the resistance of any component or the voltage of the battery. Students can close/open the switch and change the resistance of the resistor. So, students observe the change in the motion of the electrons, the brightness of the bulbs, and monitor the voltage difference. This applet orients the students to examine the relationship between the reason and the effect (Wieman et al*.,* 2008b).

As an example of applets used for magnetism chapter, magnets and electromagnets applet (Figure: 1c) is presented in which students can predict the direction of the magnetic field for different locations around a bar magnet and electromagnets; identify the characteristics of electromagnets that are variable and what effect each variable has on the magnetic field's strength and direction, and; relate magnetic field strength to distance quantitatively and qualitatively (PhET, 2011).

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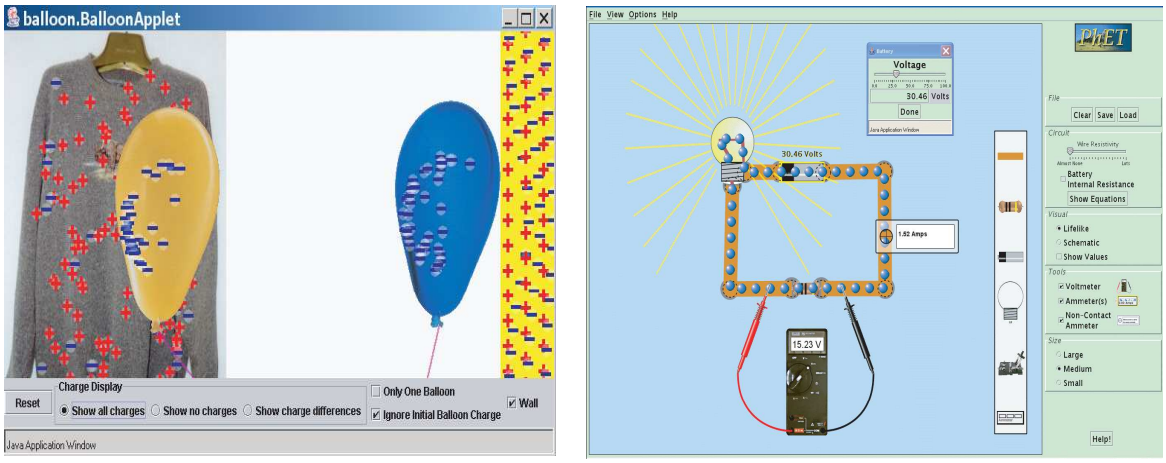
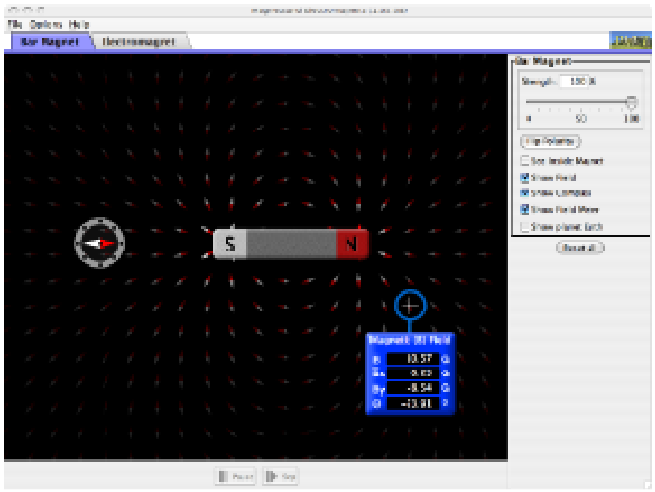


Figure 1
a. Balloons and Static Electricity; b. Circuit Construction Kit "CCK" (DC Only)



c. Magnets and Electromagnets

Note: Applets developed by the physics education research group at University of Colorado at Boulder (http://phet.colorado.edu/index.php) were used in this study.

The Data Collection Tools

The data of the study was collected in three different ways:

- conceptual test (Conceptual Survey of Electricity and Magnetism "CSEM") scores,
- evaluation questionnaire towards computer simulations, and
- instructor' observation in the computer laboratory class.

Conceptual Survey in Electricity and Magnetism (CSEM)

Conceptual Survey of Electricity and Magnetism (CSEM) consists of thirty-two question, this multiple-choice conceptual test designed to assess student's knowledge of topics in electricity and magnetism (Maloney et al.,

2001). Generally, student's scores on CSEM are analyzed by calculating the normalized gain (Hake, 1998). He defines three ranges of g: low (0-0.3), medium (0.3-0.7), and high (0.7-1.0).

The Hake gain is a normalized gain defined as;

$$g = \frac{\text{Actual gain}}{\text{Max. possible gain}} = \frac{\text{Posttest} - \text{Pretest}}{\text{Max. score} - \text{Pretest}}$$

"g" measures the percentage improvement of the posttest score relative to the pretest score compared with the maximum amount of improvement that could have achieved. This, in turn, is assumed to be the improvement because of the learning that took place between the pre-and-post tests. This conceptual test was given on the first day of class as a pretest and on the final day of class as a posttest to groups.

Evaluation Questionnaire for Computer Simulations (EQCS)

The purpose of the evaluation questionnaire is to access students' opinions of the usefulness of computer simulation learning experiences, the attitudes toward computer simulations, the impact on content knowledge, and the influences on cognitive skills (Chou, 1998).

After interacting with computer simulations, students in the PCL group were asked to complete this questionnaire to provide insight into their learning experiences. It was made clear, at the beginning of the evaluation questionnaire, that in all the statements, "computer simulation" refers to all the materials related to the learning with computer simulation activity, including the computer simulations.

Twenty items of the Likert scale questions are positively phrased and the rest are negatively phrased. The validity and reliability of the EQCS was done by Chou (1998). Among the thirty Likert scale questions, six items concern students' perceptions of the use of computer simulations after completing this study.

The eleven items in the second category were to access students' attitude toward the learning framework under examination in this study.

The third category focused on the influences of the learning framework on the information a student has at his or her disposal in the area of physics. There were seven items in this category. Finally, the five items in the last category were associated with cognitive skills such as students' ability to think and reason.

The Data Analysis

The data obtained by administrating the CSEM and EQCS to students was analyzed by using SPSS 16.0 program. For analysis of data, the data obtained from the EQCS scored by 1, 2, 3, 4, and 5 respectively for the choice of "strongly disagree", "disagree", "neutral", "agree", "strongly agree" and for all items. The minimum score of this five-point Likert scale is 30 and the maximum score is 150.

Then, to compare the effects of two different teaching methods, arithmetic mean, standard deviation, independent t-test, and gain factor statistical techniques were used. All parametric tests were conducted at a probability level of 0.05 (95% confidence).

RESULTS AND DISCUSSION

To determine whether learning outcomes are as good for PCL as for TPL the author examined the pretest scores and posttest scores. The author collected data on pre/post conceptual test scores, and attitude scores. The CSEM was administered to all students in the course at the beginning and end of the semester.

The CSEM pretest provides a measure of previous physics understanding from formal or informal learning. Improvement between pretest and posttest provides a measure of conceptual learning.

The results of the CSEM pre-and-post test scores, and normalized gain scores also known as Hake factor for groups are given in Table: 2.

Table 2
The results of CSEM for groups

Semester	PCL			TPL		
	Pretest	Posttest	Gain *"g"*	Pretest	Posttest	Gain *"g"*
S10	40.5	62.7	0.37	40.8	54.3	0.22

It could be concluded from Table 2 the conceptual test score of the PCL group was higher than the TPL group' conceptual test scores. When the gain factors of the groups were evaluated, it could be said that the PCL' gain factor was medium (g=0.37) and the TPL' gain factor was low (g=0.22). The independent t-test results of the groups were given in Table: 3.

Table 3
The results of the comparison of pretest and posttest scores of the groups

CSEM	Group	*N*	*M*	*SD*	*df*	*t*	*p**
Pretest	PCL	46	40.5	5.26	91	0.27	0.78
	TPL	47	40.8	5.20			
Posttest	PCL	46	62.7	7.67	91	5.92	0.00
	TPL	47	54.1	6.09			

Note: *statistically significance defined as p<0.05; *M*: Mean; *SD*: Standard Deviation; *df*: Degree of Freedom; p: significance value; t_{table}=1.65.

It could be concluded from Table 3 that independent t-test was used to examine whether the difference in physics achievement according to the pretest and posttest scores of the PCL group and the TPL group was significant. According to the independent t-test results, it was found that there was a significant difference between groups' posttest scores of the CSEM (t=5.92, p<0.05) in favor of the PCL group.

Finally, students in the PCL group were asked to complete an evaluation questionnaire at the end of the last simulation session to provide insight into their learning experience. The results of the EQCS are given in the below.

The Likert scale questions were grouped into four (usefulness, influences on students' attitudes, influences on content knowledge, and influences on cognitive skills) categories. The first six questions focused on students' perceptions of the use of computer simulations as a learning tool after finishing this study.

It could be concluded from Table: 4 students strongly disagreed that they had difficulty using computer (M=1.02) and agreed that computer simulation is an appropriate technique to learn physics concepts (M=4.76). Students also agreed that computer simulation is a valuable tool (M=4.31) and that it should be used more often in physics learning and instruction (M=4.59), as well as that a course using a computer would be more interesting (M=4.28). They were less sure that they can learn the subject matter more easily if there were computer terminals in the classroom (M=3.52).

Table 4
The results of the EQCL' usefulness

Items	M	SD
The computer simulation is an appropriate technique to learn about concepts in physics	4.76	0.65
The computer simulation is a valuable tool	4.31	0.61
Computer simulations should be used more often in physics learning and instruction	4.59	0.87
A course that uses a computer in some of its teaching would be more interesting than a course taught without using a computer	4.28	0.85
If there were computer terminals in my classroom, I might be able to learn the subject matter more easily	3.52	1.01
I have difficulty using the computer as a learning tool because computers are too complicated	1.02	0.59

Note: M: Mean; SD: Standard Deviation

The eleven questions in the second category were used to access students' attitude toward the learning framework under examination in this study. It could be seen from the following Table 5 that students were more inclined to agree that with the effort they put into it, they were satisfied with what they learned while learning with the computer simulation (M=4.19). On the other hand, students disagreed that they felt frustrated by learning with computer simulations and that learning with computer simulations is just another step toward depersonalized instruction (M=1.73). Students also disagreed that learning with the computer simulation made them feel quite tense (M =1.79) or is inflexible (M=2.04). Students were more inclined to the neutral attitude that taking a course with the requirement to learn by using computer simulation would be too dehumanizing (M=2.46) and that the computer simulation made the learning more mechanical than traditional instruction (M=2.15).

Table 5
The results of the EQCL' influences on students' attitudes

Items	M	SD
I prefer learning with computer simulation than other learning procedures	4.41	0.99
While learning with the computer simulation, I felt challenged to do my best work	4.17	0.91
As a result of having studied some material with the computer simulation, I am interested in trying to find out more about the subject matter	4.23	0.87
I felt as if I had a private tutor while learning with computer simulation	3.21	1.01
With the effort I put into it, I was satisfied with what I learned while learning with the computer simulation	4.19	0.79
Taking a course with the requirement to learn by using computer simulation would be too dehumanizing	2.46	0.95
The computer simulation made the learning more mechanical than traditional instruction	2.15	0.85
The situation of having to learn with the computer simulation made me feel quite tense, comparing to the traditional way of learning physics	1.79	0.87
I felt frustrated by learning with the computer simulation	1.77	0.84
Learning with the computer simulation is inflexible	2.04	1.07
I am not in favor of learning with computer simulation because it is just another step toward depersonalized instruction	1.73	0.91

The third category concerns the influences of the computer simulation learning framework on the amount of information a student has at his/her disposal in the area of physics. There are seven items in this category. It could be concluded from Table 6 that students agreed that learning with the computer simulation improved their understandings of how theories can explain physical observation (M=4.45) and that it improved their understanding of the basic principles of physics (M=4.79). They were sure that learning with the computer simulation increased their factual knowledge of physics (M=4.38) or that it increased their interest in the theoretical and conceptual structure of physics (M=4.51). Students were also sure if learning with the computer simulation is superior to traditional way of learning (M=4.66). Students were more inclined to neutral about the statement that they just tried to get through the material rather than trying to learn (M=2.61). They disagreed that too much material was presented (M=2.22).

Table 6
The results of the EQCL' influences on content knowledge

Items	M	SD
Learning with the computer simulation improved my understanding of the basic principles of physics	4.79	0.87
Learning with the computer simulation increased my factual knowledge of physics	4.38	0.91
Learning with the computer simulation improved my understandings of how theories can explain physical observation	4.45	0.79
Learning with computer simulation increased my interest in the theoretical and conceptual structure of physics	4.51	0.90
In view of the amount I learned, I would say learning with the computer simulation is superior to traditional way of learning	4.66	0.91
I found myself just trying to get through the material rather than trying to learn	2.61	0.99
In view of the time allowed for learning, I felt too much material was presented	2.22	0.78

Finally, the five items in the last category are associated with cognitive skills such as students' ability to think and reason. It could be concluded from Table 7 that students agreed that the computer simulation improved their ability to think logically (M=4.37), to learn independently (M=4.28), and to solve new problems in physics by using basic principles and concepts (M=3.95). They were sure that the computer simulation improved their ability to think in abstract terms (M=4.25) or to use new approaches, or ideas when called upon to solve a problem (M=4.34).

Table 7
The results of the EQCL' influences on cognitive skills

Items	M	SD
The computer simulation improved my ability to think in abstract terms	4.25	0.83
The computer simulation improved my ability to think logically	4.37	0.92
The computer simulation improved my ability to learn independently	4.28	0.85
Learning with the computer simulation improved my ability to use new approaches, or ideas when called upon to solve a problem	4.34	0.87
Learning with the computer simulation improved my ability to solve new problems in physics by using basic principles and concepts	3.95	0.79

The researcher observed the students studied on the applets and worksheets in the computer laboratory class. The observation of the study was unstructured. The researcher' observation notes indicated that interacting with the well-designed applets helped students develop their own mental models and understanding of the physics concepts.

This was particularly helpful for topics of circuits. Students had enjoyable opportunity to explore basic concepts, as well as challenge, correct, add to his/her understanding of how world works. Similarly, students found exploring the applets fun and through this exploration, discovered new ideas about the physics.

When something unexpected happened, students questioned their understanding and changed parameters in the applet screen to explore the details. This behavior was in contrast to the way students approach to the experiments, covering same topic, using merely real-equipments. In those experiments, the many complex unknowns are mysterious, uncontrollable, and threatening.

For example, in DC-circuit lab students spent considerable time worrying about the significance of the color of plastic insulation on the wires. Besides, most of the students thought that their goal with such experiments was to reproduce preordained results as fast as possible, without making mistakes. In the applets application with real-equipments, students explored and changed the parameters easily without concerning with small details or worrying about the consequences.

However some students who just watched the applet without any action to understand it were not able to make sense of the physics. They must interact actively with the applet. Most of the learning occurred when the students was asking themselves questions that guide them exploration of the applet and their discovery of the answers.

CONCLUSION

According to the results of this study, it could be said that the computer simulations were able to improve students' learning outcomes compared to traditional physics learning. This finding supports the studies conducted by Azar & Şengüleç (2010); Bayrak (2008); Finkelstein & Pollock, 2005; Finkelstein et al. (2005); Finkelstein et al. (2006); Redish et al (1997). The results of the evaluation questionnaire toward computer simulations in this study were evaluated from two aspects which are pedagogical and technical.

When the results were evaluated from the point of the pedagogical, it could be said that students prefer learning with computer simulation than other learning procedures; while learning with the computer simulation, they felt challenged to do their best work; with the effort they put into it, they were satisfied with what they learned while learning with the computer simulation; learning with the computer simulation

improved their understanding of the basic principles of physics; learning with the computer simulation improved their understanding of how theories can explain physical observation.

When the results were evaluated from the point of the technical, it could be said that the simulations support an interactive approach, employ dynamic feedback, follow a constructivist approach, provide a creative workplace, reduce unnecessary drudgery, make explicit otherwise inaccessible models or phenomena, and constrain students productively (Finkelstein et al., 2006). Also the present study suggests that carefully developed and tested educational applets in conjunction with real-equipments can be engaging and effective in students' understanding of the physics.

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WHY SHOULD NOT WE ADVOCATE EDUCATIONAL SCIENCE?

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ABSTRACT

When we speak of a system called education, the first thing we need to do is to widen up the horizons of our mindset so that it will open up new vistas for mankind. Educational System in any country has been evolving for so long and has, over the years, been significantly influenced by the works of a number of philosophers, sociologists, researchers and scientists. In this paper, we shall argue that there should be a discipline scientific in nature which will study the educational system. We cannot reshape our educational system if we do not deal with it professionally. No doubt there is a subject or discipline under the same name *Education* to look after the education as a field of study but it is so diluted that there is no uniformity and neutrality in its nomenclature and functions as a result, the subject *Education* has been confined to teacher training programmes only through out the world. Subject *Education*, in common with other social sciences, suffers from a double lag: slow progress in fundamental research and delay in using research findings. Perhaps the disease is even more pronounced in the subject of Education than in the other social sciences. Certainly it is more devastating in its effects because malfunctioning of education endangers the health of the whole society.

Keywords: Education, system, nomenclature, universe and educational science.

CAN EDUCATION BE AN ACADEMIC SUBJECT?

Education is a perennial process originating from the origin of humankind. The first thing which is wrong at global level in our educational system is that a particular subject can not be called as *Education* because education is a social process and combinations of different areas and subjects. It houses many concepts and the word can be applied to all fields and disciplines. Richard Peters in his inaugural lecturer as professor of the Philosophy of Education at the Institute of Education, London, in 1963, insisted that "Education in not an autonomous discipline, but a field, like politics where the disciplines of history, philosophy, psychology, and sociology have application" (Peters, 1963). The developing role of disciplinary perspectives on education has had a vital bearing on the nature of education as a subject over the last 50 years. In particular, it tended to suggest that education should be regarded principally as the application of a range of approaches borrowed from the disciplines, rather than as a single discipline (McCulloch, 2002).

Probably the best known published work to promote disciplinary approach to education was *"The Study of Education"* edited by J.W. Tibble. Tibble's edited collection was intended to explore the nature of education as a subject of study and the nature of its contributory disciplines. Some, as Tibble noted, would illustrate the separate contributions of the different disciplines to the study of education, while others would deal with a major educational topic in an interdisciplinary way, " that is showing the contributions which different forms of thought can make to it" (Tibble, 1966).

Tibble repeated his winning formula with a further edited collection, *An Introduction to the Study of Education*

based on the disciplines, specifically addressed to teachers. He was confident as to the value of this chosen approach in terms of understanding education, and opined:

It is clear that 'education' is a field, not a basic discipline; there is no distinctively 'educational' way of thinking; in studying education one is using psychological or historical or sociological or philosophical ways of thinking to throw light on some problem in the field of human learning (Tibble, 1971).

Education as a discipline has been subject to intense criticism for more than a decade. Individuals as well as groups of critics have singled out specific aspects of education upon which to focus their criticisms. According to Francis S. Chase, Subject *Education*, in common with other social sciences, suffers from a double lag: slow progress in fundamental research and delay in using research findings. Perhaps the disease is even more pronounced in subject education than in the other social sciences. Certainly it is more devastating in its effects because malfunctioning of education endangers the health of the whole society (Chase, 1983).

In his book, *The Education of American Teachers*, Dr. James B. Conant rejects the idea that education is an academic discipline. The argument he develops is a logically simple one that follows a rather familiar pattern. Education, like medicine, is a practical art where scientifically derived generalizations may helpfully guide action and a deductive-theoretical endeavor where the "wide premises of culture," largely unexamined, condition decision-making. And in education, since these two "modes of thought-the practical and the theoretical-are inseparable, it is impossible to designate so "vast a field of human activity directed toward practical ends" as a separate discipline (Conant, 1963).

Conant further suggests that the effort of scholars to identify those separate and distinct fields of knowledge within the total world of human experience and scholarship that are worthy of being studied and taught in the sacred groves of academe is, of course, not new. And over the years, education has been particularly stubborn in resisting easy classification and continues today to nettle the academic purists who guard the doors of truth and scholarship. Seen in historical perspective, Conant represents just the latest effort by a scholar to put education in its "proper" place.

Bernard Bailyn makes a similar plea for a broader definition of education in his book *Education in the Forming of American Society*. Here he urges that we think of education "not only as formal pedagogy but as the entire process by which a culture transmits itself across the generations; . . ." (Bailyn, 1960). Bailyn further suggests that education should be seen more than an academic discipline and it is only possible to gain a proper understanding of the role of education if one sees "education in its elaborate, intricate involvements with the rest of society, and notes its shifting functions, meanings, and purposes" (Bailyn, 1960).

Professor Belth in his book entitled, *Education as a Discipline,* believes that "the study of education is the study of the way in which models for inquiry are constructed, used, altered and reconstructed" (Belth, 1965). In other words, the study of education is "the study of the creation and the use of models on which the operation of reason depends." And it is such a study that one can determine how subjects are developed and improved, and how they acquire their meaning and intellectual force. He performed a valuable service by showing the confusions in the subject of Education with regard to its disciplinary character and functions. He further argued that Education is the "subject of subjects," and education can not be autonomous. It borrows theories from other disciplines. It is "perhaps the most creative, certainly the most demanding, of all areas of study" (Belth, 1965). Belth notes that there are a number of familiar clichés that have grown out of the view that education has no theory of its own: "everyone teaches"; "all institutions educate"; "all experience educates"; and "the basis for teaching is knowing" (Belth, 1965).

The picture of *Education* as a subject is lamentable throughout the global village. The subject has been confined to teacher training programmes as a result the subject education is being used as a knowledge

commodity throughout the world. It gave mushroom growth of teacher training institutions by neglecting the other important issues and dimensions of education. Prof. Mohanty in his book *Adult and Non-Formal Education* published from *New* Delhi India commented on subject *Education* as:

"We know that in India even the subject of Education of which adult Education is only a specialized branch, was for long a distant star in the galaxy of academic discipline. Education had been considered as synonymous with practice of teaching which required mastery of a few tricks of the trade and therefore, not a subject fit for any intellectual study or research" (Mohanty, 1995).

Prof. Tyler also opined that subject *Education* should not be confined to teacher training programmes:

"Tyler expands and refines the beliefs about the study of education that he brought to the chairmanship of the University of Chicago's Department of Education. In a memorandum to President Hutchins, Tyler had offered three guiding principles. The study of education would henceforth go beyond instrumental questions such as "how to carry on the required educational program most effectively and efficiently." It would confront the reality that "some of the most critical problems facing our generation are questions about what the educational program should be. Moreover, the study of education would involve bringing "the university closer to other agencies of the community concerned with educational problems." (Tyler, 1983). The image of faculties and schools of education is in bleak throughout the world. Recently a popular book "*Some of* My *Best Friends are Professors"* by Professor Williams in which Williams made the statement that if a survey is made on the campus of any American University concerning the respectability and reputation of its separate faculties, the faculty of education would be considered the weakest and most incompetent (Williams, 1958).

Such a survey was made in America and the scholars of different academic disciplines, from colleges and universities distributed about the nation were selected from the "1957 Directory of American Scholars" edited by Jacques Cattel. Each scholar was asked to comment anonymously on Professor William's conclusion, by rating the faculty of education in academic respectability, intellectual honesty, scholarly research and influential teaching in comparison with other faculties on that campus. Maximum scholars agreed with the opinion of Professor William's conclusion.

John Field of University of Sterling also opined that the study of education as discipline has never formed a significant element or contribution at undergraduate and postgraduate levels. *Education* as a subject is itself a very disparate and fragmented one (Feild, 2002).

For more than three decades before his death in 2003, John Wilson was a ceaseless advocate of education as a coherent enterprise in its own right or, more concisely, of the integrity of education as a human undertaking. He also believed that education is more than a discipline. Wilson's strong convictions about education as a form of action possessing an integrity of its own, and accordingly about philosophy of education as a *sui generis* activity, became clearly evident in his books of the 1970s like *Educational theory and the preparation of teachers* (1975), *Philosophy and practical education* (1977) and *Preface to the philosophy of education* (1979a). These convictions also underlay his many writings on educational studies and his work as a founder editor in 1975, and later as General Editor, of the *Oxford Review of Education*. Informing these convictions was a wary insight, reminiscent of Michael Oakeshott's criticisms some decades earlier, that 'education is a natural stage for the dance of fashion and fantasy' (Wilson, 1980), and that a failure to take up arms against the consequences of this allowed the field of educational studies to become beset by incoherence. Secondly, Wilson's determination to confront the dance of educational fashion took shape as a sense of mission to provide a more disciplined and a more promising environment for educational thought and action. Towards the end of a 1980 essay, titled 'Philosophy of Education: retrospect and prospect', he voiced his concerns frankly:

I see little hope for the future unless and until the staff of institutions concerned with the study of education and

the preparation of teachers themselves, individually and collectively, display a good deal more interest in the rational and intellectual discussion of educational issues, and a good deal more anxiety to sophisticate the level of that discussion (Wilson, 1980).

Briefly speaking, Wilson has repeatedly stressed his view that education is not a 'contestable' concept. In other words he has insisted that its meaning is *not* to be essentially linked to the perspectives of different cultures or different historical eras. It is more than a discipline.

Recently JSTOR conducted a study in order to evaluate the development of research in education discipline. Ithaka undertook this job as a study in the field of education research began in December 2007 and completed in March 2008. Ithaka opined about nature of discipline education as:

The work that goes on in schools and departments of education is so diverse that the field is not easily characterized (Ithaka report, 2008).

The report further says that:
Research in education is interdisciplinary, and can address a range of audiences from practitioners and policy makers to scholars. While scholars based in schools of education sample the subjects and practice of many subfields, we found that they identify primarily as scholars of education, rather than with their subspecialty or methodology (e.g. psychology, economics, or policy) (Ithaka report, 2008).

Now, it is crystal clear that education cannot be an autonomous discipline and it is illogical to say a particular subject "Education" because education is a social, intellectual and all round developmental process. Education as a system is the combinations of different areas, levels of education and subjects. It houses many concepts and the word can be applied to all fields and disciplines. If a particular subject will be called as *Education* then what about other subjects like Sociology, Chemistry, and History etc. Aren't they part of education? A particular subject can not be entitled as "Education" because education is just like Universe having no end, no boundaries, vast in scope and exploring. As a particular place or creation can not be called as Universe similarly particular subject cannot be called as Education that is why in competitive examinations in India, *Education* is not considered as a subject. As Universe is combination of different creations like earth, water, sky, sun etc, similarly education is a combination of different fields, stages, areas and issues like Science Education, Technical Education, Medical Education, Value Education, Computer Education, Secondary Education etc. Education is a very broad term and cannot be confined to a particular process or subject. Just the term "*Human being"* can not be restricted to a particular man or to a man of specific region, country or religion and the term human being represents the whole mankind same is the case with the term Education. Now the question arises "what should be the subject or discipline that will study the whole educational system of any society from different approaches and philosophies"? That subject should be applied and scientific in approach. We suggest that the subject should be called as *Educational Science* like we have *Political Science* to study politics, *Environmental Science* to study environment, *Life Sciences* to study plants and animals. The functions of *Educational Science* will be same what George. F. Kneller has mentioned in the preface of his edited book *Foundations of Education* about the existing subject *Education:*

"Finally, let me say a word about the study of education as a discipline. I agree that the ideas and findings that make up the discipline of education are of little value unless they can be used to improve the actual process of education or, to resolve particular educational problems. The first task of a general study of education is to produce an understanding of education rather than a practical competence in teaching or administration. To this end, a general study of education should be organized around the concepts and facts by means of which education can be understood rather than around the problems that make such understanding necessary. A course cast in terms of certain problems is no likely to pass beyond those problems, whereas a course organized around principles will produce the general understanding of education that is applicable to all educational

problems" (Kneller, 1963).

The detailed discussion about nature and scope of proposed subject *Educational Science* and its areas of specialization are discussed as under:

Educational Science: A scientific subject to study all aspects and dimensions of education.

John Dewey argued that all problems of education can be solved scientifically by applying the method of reflective thinking (Dewey, 1910). So it is evident that almost educational problems need scientific approach for their solutions. In the light of the practical and theoretical difficulties that attend the present effort to determine the "status" of any field of knowledge, the defense for education might well argue that nothing is to be accomplished by continuing to pursue this effort along these traditional and completely unproductive lines. This is not to be interpreted as a willingness to abdicate responsibility for justifying with reason the right of education to be considered a field worthy of the most serious study. It is to suggest, rather, that the whole argument about the legitimacy of education's claim for academic respectability be taken out of the realm of logic and placed, instead, in the dynamic world of the existential present. Once education is viewed against the backdrop of the living present, the whole argument suddenly takes on a strikingly dramatic new character. Modern education, instead of being simply a hypothetical abstraction, rather forcefully makes the point that it exists and is identifiable, has structure and purpose, and, therefore, can and should be analyzed, studied, and reflected upon. It would appear, then, that instead of arguing more on status of education as an academic subject, we should direct our creative energies to understanding the dynamics of this crucially important social phenomenon so that we can direct it with greater intelligence and skill.

If such a deeper, more comprehensive understanding of the nature and structure of education is to be achieved, it is obvious that we must bring to our study of education a breadth and depth of scholarly inquiry that matches these great and exciting goals. The approach to this kind of inquiry must necessarily be broadly integrative in character. Educational Science as an applied discipline can play this role for making our educational system effective and relevant to contemporary era. Though it is true that scholars in history, philosophy, psychology, and sociology can make valuable contributions to our understanding of education, there still remains the primary need for concerned scholars to study the educational process in its entirety and to relate this specific knowledge to this larger pattern. Hence the need of Educational Science as autonomous discipline or subject arises.

Dr. Paul Woodring in 1957 concluded his analysis of American Education in *A Fourth of a Nation* with the strong recommendation that support be given to develop scholars in subject education whose responsibility would be to view the total educational enterprise in its broadest social setting. In defining the tasks of this scholar, Woodring not only identified the kind of comprehensive knowledge about education which is needed but also provided a description of education as a field of scholarly inquiry (Seckinger,1964).

The scope and importance of subject *Educational Science* in any educational system can be understood from this point that let us consider that educational system is just like solar system. Different planets of solar system are like different faculties, courses and aspects of education revolving around *sun* which is *Educational Science* because no subject can move ahead unless guided by *Educational Science.*

Keeping this in view, *Educational Science* will have a broader scope and vast area of investigation in order to solve educational problems and produce sound educational policies and theories. *Educational Science* will be purely applied and interdisciplinary discipline for the cause of education. In other sense, *Educational Science* should be established as a complementary approach to the study of education. It will be the combination of different forms of expertise that is taken to be the most effective means of addressing the problems and processes of education.

As discussed earlier that *Educational Science* will be applied and interdisciplinary subject so it has to borrow the theories and concepts from different disciplines because educational system of any society rests upon different foundations. The term, foundation, implies a base or structure on which something is to be built. These foundations help us to view education in different perspectives so that sound educational policies and theories will be framed.

The basic foundations of education are as under:

Philosophical Foundations of Education

In the words of J.G. Fitche, "the art of education will never attain complete clearness in itself without philosophy. There is interaction between the two and either without the other is incomplete and unserviceable." According to Taneja, there is bilateral relationship between education and philosophy. Philosophy is theory and education is practice. Without philosophy, education would be a blind effort and without education, philosophy is cripple (Taneja, 2003).

This bilateral relationship gives birth to Philosophy of Education or Educational Philosophy.

Understanding the philosophical basis for an educational system can help to improve the academic success of students on a wide spectrum of learning abilities and styles. Combining philosophy with other modes of instruction can also provide a new and intriguing way to present educational concepts. Philosophy of education is concerned both with facts and values about all aspects of human learning.

Kritsonis urged that studying educational philosophy can help teachers and other educators focus on questions that are speculative, prescriptive, and analytical; it can help enlarge thoughts so better personal choices can be made; it helps in self-evaluation of beliefs and self-knowledge" (Kritsonis, 2007).

Briefly speaking, Philosophy of Education will be a core paper in the syllabus of *Educational Science*.

Sociological Foundations of Education

Sociological factors have a great impact on the educational thought and practice (Koul, 1984). The sociology of education is concerned with the interrelations between education and society. Thus it has different main fields of study. Firstly, it defines, classifies and analyzes both education and society scientifically. Education itself is a vast, covering formal and institutionalized learning, and the informal, unconscious educative impact of the society, the family, the mass media, and so forth. Each form of education is having sociological aspect, including the cultural (aim, ideology, value, norm, curricula, etc.), the institutional (administration, organization, role, etc.), the personnel (teacher, student, etc.), and the process (teaching, learning, administrating, etc.) aspect.

The history of educational sociology shows that it was first established independently in the USA. Generally speaking, this situation remained unchanged until the end of the Second World War, although certain European sociologists devoted attention to education and, in Germany and Poland some scholars tried to establish and systematize educational sociology before the War. In the first stage (1900-1910) educational sociology consisted of the compilation of sociological findings useful for teachers; in the 1920s, it was a sociology of education from the essentialist point of view as against the psychological "Measurement Movement"; and in the third stage (1930- 1950) it became a sociology of educational problems, what is called the functional school of educational sociology by some, a scientific base for the "Community School Movement" or for the diagnosis of youth problems. This stage continued for a decade even after the War. It was not until the concept of sociology of education began to replace traditional educational sociology that sociology began to be interested in the objective study of education. Since then, this idea has been widely

accepted, and the sociology of education, as a sub-division of sociology similar to sociology of law, sociology of the family, political sociology, urban sociology, and using the same empirical techniques, has proved to be the most effective in the analysis and planning of education (Shimbori, 1972).

Broadly speaking, the sociology of education turned its interest to the influence of education upon the society, including the role of education in social and economic development, in the recruitment and training of manpower, and in achieving national independence, unity or revolution. Sociologists of education should introduce a number of sub-divisions according to the form and aspect of education under consideration. Thus, there should be sociology of in-school and one of out-of-school education.

Psychological Foundations of Education

It is gospel truth that process of education has psychological bases. In the words of P. R. Nayar;

"Education is a purposefully designed process aiming at fostering the harmonious and healthy development of individuals as productive, successful and well adjusted persons in society. No aspect of component thereof can be left untouched by Psychology. Almost all lessons in education have psychological dimensions" (Nayar, 1997).

Hence, to improve educational system a need for educational psychology arises. Educational psychology is the study of how humans learn in educational settings, the effectiveness of educational interventions, the psychology of teaching, and the social psychology of schools as organizations. Although the terms "educational psychology" and "school psychology" are often used interchangeably, researchers and theorists are likely to be identified as educational psychologists, whereas practitioners in schools or school-related settings are identified as school psychologists. Educational psychology is concerned with how students learn and develop, often focusing on subgroups such as gifted children and those subject to specific disabilities.

Technological Foundations of Education

There is no denying in the fact that that technological revolution has taken place at global level, as a result an electronic touch has been given to whole educational system. This gave birth to an applied field "Educational Technology". Technology means the systematic application of scientific or other organized knowledge to practical task. Therefore, educational technology is based on theoretical knowledge from different disciplines (communication, psychology, sociology, philosophy, artificial intelligence, computer science, etc.) plus experiential knowledge from educational practice. Educational technology is the use of technology to improve education. It is a systematic, iterative process for designing instruction or training used to improve performance. Educational technology is sometimes also known as instructional technology or learning technology. In the contemporary era, we can not improve our educational system unless and until it is not supported by educational technology.

Briefly speaking, educational technology should be an integral part of *Educational Science* because education can not be standardized unless supported by technology.

Foundations of Research in Education

It is an accepted fact that research in education as in other fields is essential for providing useful and dependable knowledge through which the process of educationl can be made more effective. Research carried out on *Education* acts as the sovereign solvent for educational problems. Hence it is essential to pursue research in the theory and practice of education through proper methodology. Therefore Methodology of Educational Research should be core paper of *Educational Science.*

Statistical Foundations of Education

This area is being used in almost all the fields of knowledge. In education, statistics is the backbone for research. Statistical part of the syllabus is very popular as it is always scoring from the examination point of

view. Therefore it is essential to have Educational Statistics in the syllabi of *Educational Science.*

Historical Foundations of Education

As aspect of our life has a historical approach same is the case of education. Education has its own history. The history of education is the history of teaching and of learning, and the history of what might be described as the curricula: what it is that is taught or learned. Education has taken place in most communities since earliest times as each generation has sought to pass on cultural and social values, traditions, morality, religion, knowledge and skills to the next generation. With the development of writing, it became possible for stories, poetry, knowledge, beliefs, and customs to be recorded and passed on more accurately to people out of earshot and to future generations. In many societies, the spread of literacy was slow; orality and illiteracy remained predominant for much of the population for centuries and even millennia. Literacy in preindustrial societies was associated with civil administration, law, long distance trade or commerce, and religion (Barr, 1984). Hence it is important to have history of education as an essential part of *Educational Science.*

Morphological Foundations of Education

It is the innovative aspect of education which authors of this paper have explored first time. So far as the term *Morphology* is concerned, it is the study of general appearance and structure of an organism or its parts. Of course educational system has also general appearance and different parts so it is essential to know morphology of education. The main focus in this area will be to know what the general structure, stages of education is and its parts like school, colleges, universities, libraries, play grounds, etc. It will also study functional and structural aspect of these parts of educational system. It will also throw light on modes, forms and agencies of education.

Political Foundations of Education

This is also the innovative aspect of education. Right from the Plato, every philosopher has advocated that politics have a great influence on education. In contemporary era, there is a close relationship between education and democracy. So it is important to know political foundations of education with depth. The 1985 Paulo Freire's book, *The Politics of Education*, has stimulated many authors to revisit his theme that students should be taught to understand and critique societal institutions with their influence on education especially the influence of politics. Therefore, political foundations of education should be an essential component of *Educational Science.*

Economical Foundations of Education

As every aspect of life has an economical foundation and same is the case with education. Education economics (or economics of education) is the study of economic issues related to education, including the demand for education, and financing and provision of education (*Wikipedia encyclopedia).* Education economists analyze both what determines or creates education and what impact education has on individuals and the societies and economies in which they live. Historically at the World Bank a great deal of emphasis has been placed on determining outcomes to educational investment and the creation of human capital. The primary mission of the economics of education group is to identify opportunities for improved efficiency, equity, and quality of education and promote effective education reform processes; to help improve, among both World Bank staff and clients, knowledge of what drives education outcomes and results; to better understanding how to strengthen the links of education systems with the labor market; and to build and support a network of education economists and build bridges to all those who are interested in their work. Therefore, economics of education should be an essential part of educational science. (World Bank, 2007)

More than these foundations, the focus of *Educational Science* should also be on below mentioned aspects of education and should be included in the syllabi of *Educational Science.*

- Teacher Education
- Educational Guidance and Counseling

- Educational Planning and Management.
- Demographic Education
- Comparative Education
- Special Education
- Distance Education
- Inclusive and Intercultural Education
- Curriculum Development
- Educational Measurement and Evaluation
- Physical Education
- International Education
- Computer Education
- Peace Education
- Value Education
- Sex education

From the above cited list, it is obvious that areas of teacher education and physical education are of prime importance in any educational system so these two areas of education should be studied professionally and two separate allied scientific subjects should be launched. At present, around the world, we have teacher training programmes like ETE, B.Ed and M.Ed but as discussed earlier that education can not be confined to a particular training or subject so the nomenclature of these programmes need to be redesigned. Authors also suggest that the existing B.Ed degree should be renamed as B.T.S. (Bachelor of Teaching Studies) or B.T. Ed (Bachelor of Teacher Education) like B.P.Ed (Bachelor of Physical Education). Similarly M .Ed should also be renamed as M.T.Ed.

It is important to keep in view that our educational systems enroll every year large number of special children, so, it is essential to have teacher training course in the areas of special education besides general education. It is pertinent to mention here that each university should have *Faculty or School of Educational Sciences instead of Faculty of Education* with following subjects/ Departments like School of Life Sciences.

- Educational Science
- Teacher Education
- Physical Education
- Special Education

CONCLUSION

Briefly speaking, *Educational Science* should emerge as modern and scientific subject for the overall study of education. *Educational Science* will be a discipline with a mission to advance knowledge on the strength of research, innovation, teaching and extension for the cause of education. The subject will aim at producing talented professionals in education needed by the modern world. The proposed subject shall engage in capacity building and research in policy making, planning and administration of education instead of present subject education which has been confined only to teacher training programmes throughout the world. Let us accept the change and be educational scientists like social scientists. I shall conclude here with my own definition of *Educational Science*:

"Educational Science is the scientific study of the all aspects of education for the cause of education."

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A NEGLECTED RESOURCE OR AN OVERVALUED ILLUSION: L1 USE IN THE FOREIGN LANGUAGE CLASSROOM

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ABSTRACT

The role and use of L1 in instructed second/foreign language classroom, especially in intensive foreign language programs, has without any doubt been at the crux of a fair extent of controversy, debate, and discussion. Although some research has been conducted on the attitudes of both foreign language instructors and learners towards L1 in the L2 classroom, very few studies have aspired to investigate the impact of L1 use on the proficiency gains of learners and its purpose. In view of the limited research on this issue, this study aims to report the findings of a specific study on the purpose of L1 use by language instructors in the speaking course in an intensive English course at Anadolu University. The results of the study show a judicious and systematic use of L1 by instructors geared towards facilitating communication and relationship between the teacher and students.

Key words: L1 use, second/foreign language, language learning, input.

INTRODUCTION

The role of the mother tongue in the instructed second/foreign language learning classroom and its use by both language instructors and learners has always been a vexed question of much debate, controversy, discussion and dispute among linguists, methodologists, language teachers, and learners. In short, we could easily argue that everyone concerned with language teaching is engrossed by the argument. As it is widely known, the history of language teaching has witnessed various approaches and language teaching methods which have regarded L1 use in the L2 classroom both in favor or disapproval. While the use of L1 in the foreign language classroom, also known as the Bilingual Approach, gained popularity notably at the peak of Grammar Translation Method, L1 use, was almost vetoed by the Direct Method (Richards & Rodgers, 1986) and the Communicative Approach, easily recognized the exclusively English policy or the Monolingual Approach. The main premise of the proponents of the monolingual approach and the Direct Method was that 'second language learning mirrors first language acquisition, involving lots of oral interaction, very little grammatical analysis, and no translation' (Brown, 1994). Also pivotal in furthering the Monolingual Approach was Krashen, who advocated maximum exposure to the target language in the foreign language classroom (Krashen, 1985). In time, this approach has had its own opponents, what came to be acknowledged as the Bilingual Approach. Unlike the premise of the Monolingual Approach, proponents of the Bilingual Approach profess to moderate approach to L1 use in the foreign language classroom. Contrary to the dominant view when every chance in the language classroom should be made use to increase the amount of comprehensible input, supporters of the Bilingual Approach such as Atkinson (1987), Harbord (1992), and Rinvolucri (2001) are some of those who are in favor of *judicious* and *minimal* use of L1 in L2 classrooms (italics added).

Despite the belief in the merits of the judicious and minimal use of L1 in L2 classrooms, there does not seem to be a set of occasions where and when it should be used. As such, it rests to the foreign language instructor to decide when, why, and under which circumstances to use. Consequently, under which circumstances L1 should

be used in the foreign language classroom seems to be decided on in accordance with the diverse peculiarities of language classrooms.

Aim and Scope of the Study

Given this versatile yet unresolved issue of L1 use in L2 classroom settings, this study aimed at investigating in which situations L1 is used by foreign language instructors in L2 classrooms. Specifically, it was carried out to find out any recurring common situations and under which circumstances L1 is used by English language teachers.

Statement of the Research Questions

This study aimed at answering the following research questions:

1. For what purpose(s) is L1 used by foreign language instructors?
2. Are there any common patterns among the instructors in the use of L1?
3. Does the amount of L1 use in the L2 language classroom display any change over a period of time?

Review of Literature

In this section, arguments for and against the use of the mother tongue in the foreign language classroom is discussed.

L1 use in L2 classrooms

The use of L1 in L2 classes, be it in multilingual or monolingual settings, has been one of the hotly debated controversial issues in the field of ELT. There have been times when it was viewed and welcomed with complete favor or disfavor. While L1 use, better known as the Bilingual Approach, gained popularity in the heydays of the Grammar Translation Method, the preference to avoid its use in the foreign language classroom stemmed from the advent of the Direct Method, the Monolingual Approach, at the beginning of the twentieth century (Richards & Rodgers, 1986; Harbord, 1992; Harmer, 2001) But this ruthless opposition and attitude towards the use of students' mother tongue, according to Harmer (2001), has seen a significant change recently.

In the literature, a number of academics, researchers, and teachers underline the growing methodological need in TEFL for a principled, systematic, and judicious use of mother tongue in the classroom by language instructors. Yet, an ever-increasing body of researches, researchers, academics, and teachers alike, believe in the merit of using only the target language in the foreign language classroom. Those who claim that only the target language should be used in the language classroom base their claim on three grounds:

a. The learning of an L2 should model the learning an L1 (through maximum exposure to the L2).
b. Successful learning involves the separation and distinction of L1 and L2.
c. Students should be shown the importance of L2 through its continual use.

(Cook, 2001: 412).

Proponents of this approach also claim that using L1 in the foreign language classroom does not run in accordance with the second language acquisition theories (Polio, 1994). In underlining the importance of the use of the target language in the foreign language classroom, Brown (2001) draws attention to the crucial role the language teachers' use of the target language has in a foreign language classroom. At this stage, language teachers are virtually the only source of most of the linguistic input learners can be exposed to. Similarly, Cross (1995), who views school as a society claims that the target language should be used in every possible occasion for purposes such as conducting the class and for social interactions as well as managerial purposes. In his attempt to underline the importance of the use of only the target language, (Nunan 1995) claims:

In all types of classrooms, teacher talk is important, and has been extensively researched and documented. In the language classroom it is particularly important because the medium is the message. The modifications

which teachers make to their language, the questions they ask, the feedback they provide and the types of instructions and explanations they provide can all have an important bearing, not only on the effective management of the classroom, but also on the acquisition by learners of the target language.

As can be deduced from the above mentioned quotations, the main purpose of reducing or even abolishing the use of the mother tongue in the foreign language classroom aims to maximize the amount of time spent using the target language to help the language learner to learn the target language efficiently and effectively. In emphasizing the significance of input for language learners, Cross (1995) states that the amount of linguistic input the learners can have is closely related to the richness of the linguistic environment, the classroom where the learners dwell in. As such, given the limited chances, especially monolingual foreign language learners have as their sole source of input is the classroom. Hence, the importance given to making use of every possible opportunity in the class to use the target language may be understood better.

On the contrary, those who have a somewhat moderate approach to using L1 in the foreign language classroom complain that little consideration and attention has been given to the use of the native language in the foreign language classroom. The pretext behind this, according to Atkinson (1987), is the implication that the native language has no role to play in the foreign language classroom. In talking about the causes of this neglect, he claims that many of the claims put forth by those who are in disfavor of the use of L1 in the language classroom were not scrutinized adequately. Atkinson (ibid) states that a number of factors, such as the association of translation with the Grammar Translation Method, the backwash effect whereby native speakers posses, Krashen and his associates' influence, and the truism that one can only learn English by speaking English are responsible for this neglect.

Rinvolucri (2001), one of the proponents of those who are in favor of judicious and careful use of the mother language especially in the monolingual foreign language classroom, maintains that there is a natural need for the mother tongue on learners' way towards English. He also draws attention to the danger that absolute direct Methodism, paradoxically, can force language learners in reverse mode to the mother tongue considerably more than an open approach can fulfill. He states that both the mother tongue and the target language should be present in the learning activities the class engages in since they are both frequently present in the students' minds. In line with this argument, he claims:
Using the mother tongue in a judicious and highly technical way in the EFL classroom allows the fullness of the learners' language intelligence to be brought into play. By excluding the mother tongue, we feel there is a risk of alienating the student and reducing her mind's openness to pleasurable and creative play, which is essential to fast and deep learning (Rinvolucri 2001).

In arguing for mother tongue use in the foreign language classroom, Harbord (1992) states that the mother tongue should be used for three main reasons; it is a learner preferred strategy, a humanistic approach, and an efficient use of time. Similarly, Atkinson (1987) proposes some uses of the mother tongue, such as eliciting language (all levels), checking comprehension (all levels), giving instructions (early levels), building and/or maintaining cooperation among learners, discussing classroom methodology(early levels), presenting and reinforcing language (mainly early levels), checking for sense, and testing. Harbord (1992) categorizes the purposes for which the mother tongue can be used into three: facilitating communication, facilitating teacher-student relationship, and facilitating the learning of L2. The purposes for which L1 can be used can be summed up as:

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Table 1
L1 use occasions

Harbord (1992)	Piasecka (1988)
Using L1 to facilitate communication	
-Discussion of classroom methodology during the early stages of a course	-Educational counseling
-Explaining the meaning of a grammatical item (e.g. a verb tense)	-Publicity
at the time of presentation, especially when a correlate structure does not exist in L1	-Negotiating the syllabus
-Student-student comparison or discussion of work done	-Access skills
-Giving instructions for a task to be carried out by students	-Profiling and record
-Asking or giving administrative information such as timetable changes,	-Integrating newcomers
etc., or allowing students to ask or answer these in L1	-Personal contact
-Checking comprehension of a listening or reading text	-Classroom management
-Explaining the meaning of a word by translation	-Setting the scene
-Checking comprehension of structure, e.g.	-Language analysis
How do you say "I've been waiting for ten minutes" in (L1)?'	-Cross-cultural issues
-Allowing or inviting students to give a translation	-Materials (Worksheets
of a word as a comprehension check	and tapes with mother
- Eliciting vocabulary by giving the L1 equivalent	tongue instruction)
-L1 explanations by students to peers who have not understood	-Correcting
-Giving individual help to a weaker student, e.g., during individual or pair work	-Resolving individual areas of difficulty
Using L1 to facilitate teacher-student relationships	
-Telling jokes in L1	-Assessment and
-Chatting in L1 before the start of the lesson	evaluation of the lesson
to reduce student anxiety	-Focusing on a particular
Using L1 to facilitate learning of L2	-Rules governing grammar, phonology,
morphology spelling, formal	
speech, and writing can be arrived at collectively or explained by the teacher	

Collingham (1988)	Atkinson (1988)
-Discussion and negotiation of the syllabus	-Eliciting language
-Role-play	-Checking comprehension
-Teaching grammar	-Giving complex instruction
-Teaching language functions	-Discussion of classroom meth.
-Teaching vocabulary	-Presentation and
-Teaching phonology	reinforcement of language
-Teaching literacy	-Checking for sense
-Comprehension	-Testing
-Creative writing	-Development of useful learning
-Providing information	strategies
-Record keeping a recently taught language item	-Using translation to highlight

As could be seen from table 1, the functions put forward by the proponents of L1 use in the foreign language classroom are quite similar. It seems that L1 use in the foreign language classroom is viewed just a strategy to facilitate communication and learning, not an end in itself. In a study on the purposes of Turkish secondary school students' code-switching, Elridge (1999) found that using the mother tongue in the foreign language learning classroom had some general and some specific purposes. While the general functions were oriented to classroom tasks, specific functions included equivalence, floor holding, meta-language, reiteration, group membership, conflict control, alignment and misalignment. He claims that there is not a parallelism between the lack of mother tongue use and the quality and quantity of target language use commenting that:

It is worth emphasizing once more that decreasing mother tongue use in the classroom does not increase the quality and quantity of target language use, any more than decreasing one's consumption of meat automatically increases one's consumption of cheese. To prescribe the former under the assumption that the latter will be achieved thus betrays a logic that is entirely spurious. If we want students to speak more English

in the classroom, we should concentrate on that issue, with all the precision and energy at our disposal (Elridge 1999).

Though different writers offer some practical reasons for the use of L1, there does not seem to be overall complete agreement. Harbord (1992) frames this as:
Perhaps the most important point to be made in the discussion on the rights and wrongs of using the mother tongue in the classroom is that translation, and indeed use of the mother tongue generally, is not a device to be used to save time for 'more useful' activities, nor to make life easier for the teacher or the students. Instead, as Duff says, it should be used to provoke discussion and speculation, to develop clarity and flexibility of thinking, and to help us increase our own and our students' awareness of the inevitable interaction between mother tongue and the target language that occur during any type of language acquisition.

The above mentioned writers who are in favor of the judicious and minimal use of the mother tongue in the foreign language classroom do not refrain from drawing attention to possible dangers that may arise due to excessive dependency on it. Atkinson (1987) claims that some or all of the following problems can ensue due to excessive dependency on L1 in the foreign language classroom.

1. The teacher and/or the students begin to feel that they have not 'really' understood any item of language until it has been translated.
2. The teacher and/or the students fail to observe distinctions between equivalence of form, semantic equivalence, and pragmatic features, and thus oversimplify to the point of using crude and inaccurate translation.
3. Students speak to the teacher in the mother tongue as a matter of course, even when they are quite capable of expressing what they mean.
4. Students fail to recognize that during many activities in the classroom it is crucial that they use only English.

As the use of the mother tongue is a very delicate subject, the right time and place to use it seems to be rather complex. While Brown (2001) maintains that classroom language should be the target language unless some distinct advantage is gained by the use of the mother tongue, Harmer (2001) is of the opinion that the usefulness of L1 use depends on when and for what purpose(s) it is used in the classroom. Nevertheless, there seems to exist a tendency that it can be used especially in beginner and elementary classes. One of the problems that many instructors teaching beginner or elementary levels face is teaching target structures or lexical items. Since the focus of this study is on L1 use in speaking classes, teaching lexical items to these levels is assumed to be problematic as this tends to be based on personal experience of the researcher.

The importance of vocabulary in learning a foreign language has been emphasized on many occasions. Some even view vocabulary as the skeleton of a language, saying that vocabulary knowledge alone without grammatical knowledge of that language may enable one to communicate. Liu and Shaw quote (Willis, 1990; Nattinger & DeCarrico, 1992; and Lewis, 1993) who express this importance noting that "a key element of successful native-like performance in a foreign language is mastery of lexical relations-collocations, lexical phrases, fixed phrases." Similarly, Chastain (1988) claims that vocabulary usually plays a greater role in communication than the other components of language and the lack of needed vocabulary is the most common cause of students' inability to speak during communication activities. Laufer & Hulstijn (2001) and Falk (1973) draw attention to this importance stating that all second language teachers and learners are well aware of the fact that learning a second language involves the learning of a large number of words together with aspects of phonology, syntax, and the writing system of a language.

The usefulness of vocabulary can be better appreciated when the components of communicative competence, which is generally the ultimate objective for language learners, are considered. Communicative competence, according to Brown (1994) and Richards (1992) consists of grammatical competence, which encompasses

knowledge of lexical items and rules of morphology, syntax, sentence-grammar semantics, and phonology, discourse competence, sociolinguistic competence, and strategic competence.

For the teaching of such a significant aspect of language, various techniques were developed and suggested. Lewis and Hill (1985) and Akar (1991) put these techniques into three groups; visual, aural, and verbal techniques and subcategorize verbal techniques as: definitions, synonyms, antonyms, word formation and parts of speech, cognates, series and semantic fields, scales/clines, games, riddles, asking others, using dictionaries, contextual guesswork, concept forming, and translation.

As can be seen from the above list, translation is considered to be one of the ways of teaching vocabulary. Although its avoidance is generally advised in the foreign language classroom, there seems to be a tendency to use it to save time, not to bother the students with lengthy explanations, not to confuse the students, when it is rather difficult for teachers to explain, and to make it easy for students to understand complicated terms such as abstract notions, and at times when occasions of teaching unplanned passive vocabulary lexical items arise.

METHOD

Subjects

This study was conducted at Anadolu University, School of Foreign Languages, an intensive program; two months after the semester began, with the participation of five beginner classes, with roughly twenty-five students in each. The classes having the speaking course at the same time of the day were chosen. The assignment of the classes to beginner level was carried out in accordance with the scores the participant students got from a proficiency test given at the beginning of the academic year. These beginner classes all had the same number of speaking course hours a week, and were exposed to the same structure(s) and vocabulary items throughout the same week as they studied the same textbook. In addition to these common points, all of these classes had the same skill courses and the same number of class hours for each course for the whole semester. They also followed the same textbooks in each course. As such, it can be said that they were exposed to nearly the same amount of English. The only difference was that these classes had different teachers.

Instruments/Materials

The data used in this study were collected through tape recordings, which lasted five weeks. The first two speaking course hours of the five classes were recorded for five consecutive weeks. A total of fifty lesson hours were recorded and transcribed by the researcher himself.

Data Collection Procedure

Prior to the five-week recording period, the researcher himself observed some speaking courses for two weeks to form an idea about the use of L1 in L2 classes. The researcher also consulted with some speaking instructors working at the same institution about L1 use in L2 classes.

Data Analysis

A number of steps were followed in analyzing the data. First of all, the purposes of L1 use were categorized into sub-headings such as facilitating teacher-student communication, facilitating teacher-student rapport, and facilitating learning. Then, the purposes for which L1 was used the most and least were identified. And finally, since the analysis of the data showed that the instructors used translation as a vocabulary teaching technique, the researcher sought to find out whether the speaking teachers had any systematic choices for using translation in explaining the meaning of unknown lexical items. These lexical items were first identified. In all of these analyses, calculations were based on percentages.

Considering the possibility that some of the lexical items were not preplanned to be taught, the researcher decided to examine if any consideration was given to their frequency of usage. For this purpose, a vocabulary profile of the words that were identified was applied. A program called "The Complete Lexical Tutor" available at http://132.208.224.131 was used. This program has three sections available for researches. One of these sections prepares a list of the most frequent words based on corpora. Another section allows one to prepare a concordance sheet. And its final part provides one with a profile of all lexical items in any text based on their frequency. In this research, the final part of this program was used. All the lexical items identified were entered into the program and a profile was run. The lexical items that fall into the most frequent thousand words were considered as systematic choices of teachers, since a significant body of literature suggests that teaching foreign language learners the most frequent 3000 words should be the aim of any language program.

RESULTS

At the end of the two-week preliminary observation which was conducted to have an idea about the use of L1, the researcher sub-categorized why L1 was used the most by the instructors. One of the noteworthy aspects concerning the use of L1 by the language instructors in L2 classes was that L1 use was all related to classroom tasks in one way or another. Another peculiarity of L1 use seemed to be multifunctional or open to different functional interpretations.

As regards to the first research question, which sought to answer the purpose(s) of L1 use by the instructors, it was found that the instructors used L1 the most for some different purposes (Table 1). As can be seen from the table, the speaking instructors used L1 for a variety of purposes, ranging from checking comprehension to explanation of classroom tasks, from managerial issues to building rapport with students. Though some of these can be put roughly into the same category, what is apparent is that L1 use looks really *multifunctional.*

Table 2
The most and least frequently employed strategies

	The functions of L1 use by the language instructors	No. of Occ	%
1	To ask a question relevant to the lesson/course	221	29.3
2	To explain new/unknown vocabulary items directly in L1	110	14.5
3	To repeat the instruction of an activity-given earlier in English	65	8.6
4	To tell a joke/for humor	49	6.4
5	To warn a student about his/her disturbing behavior	46	6.1
6	To answer a question relevant to the lesson/course	37	4.9
7	To draw students' attention to a certain point/issue	36	4.7
8	To explain how an activity will be done directly in Turkish	32	4.2
9	To repeat the explanation of a vocabulary item given earlier in English	22	2.9
10	To ask a question irrelevant to the lesson/course	21	2.7
11	To explain a new grammar point directly in Turkish	21	2.7
12	To praise a student/student behavior or to make a compliment to a student	20	2.6
13	To explain the purpose of the lesson/activity/topic	13	1.7
14	To end a lesson	13	1.7
15	To chat with students	12	1.5
16	To correct mistakes (vocabulary, grammar)	11	1.4
17	To greet students	5	0.6
18	To explain cultural aspects in English	5	0.6
19	To say goodbye	5	0.6
20	To explain the purpose(s) of the lesson/activity/topic explained earlier in English	4	0.5

21	To give homework	3	0.3
22	To repeat the explanations of a structure given earlier in English	2	0.2
23	To warn a late comer	1	0.1
Total		754	100

As can be seen from table 2, the instructors used L1 for a variety of purposes, ranging from purely linguistic to managerial and humanistic aims. Using L1 to facilitate teacher-student communication and relationship achieved the lion's share, since many of the purposes for which L1 were used aimed to establish a good relationship between the language instructor and the students. This finding runs in harmony with Harbord's (1992) view that L1 use in the L2 classroom involves a humanistic approach and a learner preferred strategy. Humanistic views of language teaching believe that students should be allowed to express themselves comfortably in their L1 while learning a foreign language. This finding also supports Schweer (1999), Prodromou (2002), and Juarez and Oxbrow's (2008) studies which all show to some extent that teachers and learners alike favor the use of L1 in the foreign language classroom. Mitchell's (1988) study has shown that the use of L1 in the foreign language classroom to explain grammar and activities and to give background information was acceptable according to the participant teachers of the study. In the same way, learners also feel that using L1 is relieving. In underlying the tranquilizing feeling and the willingness of students in expressing themselves in their L1s, Auerbach (1993) contends that starting with L1provides a sense of security and validates the learners' lived experiences, allowing them to express themselves, which in turn encourages the learner to be willing to experiment and take risks with the target language.

Another function L1 use served is related to classroom management, such as warning a student about his/her distracting and disturbing behavior and dealing with late comers. Yet, it was found that L1 was used by far the most by teachers to facilitate teacher-student communication, which looks understandable and justifiable given the insufficient linguistic knowledge of the students at the very beginning of the semester.

Although L1 was used by language instructors for most of the purposes underlined by Atkinson (1987), Piasecka (1988), Collingham (1988), and Harbord (1992), interestingly, L1 was not used for some other purposes such as discussion/negotiation of the syllabus, discussion of classroom methodology, educational counseling, teaching cross-cultural issues, and finally teaching phonology. As the study was conducted two months after the semester began, discussion of classroom methodology and educational counseling which are very common among the participant language instructors may have already been done at the very beginning of the semester. As for the discussion/negotiation of the syllabus with students, it could be said it may well have been done at the start of the semester.

As has already been underscored, facilitating teacher-student communication was the most widely observed purpose for which L1 was used. In building a sound communication with students, the instructors used Turkish to explain new/unknown vocabulary items. (The distribution of L1 use by instructors to explain new/unknown vocabulary items according to the weeks is presented in Table 3).

Table 3
The use of L1 to explain new/unknown lexical items according to the weeks

Inst.	Week 1		Week 2		Week 3		Week 4		Week 5		Total
	n	*%*	n	*%*	n	*%*	n	*%*	n	*%*	
1	2	*50*	1	*25*	1	*25*	--	--	--	--	4
2	3	*23*	4	*31*	4	*31*	1	*7*	1	*7*	13
3	3	*18*	4	*23*	3	*18*	4	*23*	3	*18*	17
4	3	*34*	2	*22*	2	*22*	1	*11*	1	*11*	10
5	3	*23*	4	*31*	3	*23*	2	*15*	1	*8*	13

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The data presented in the above table seem to offer some very interesting findings. As each beginner class studied the same structures and their communicative functions presented through the same theme, the classes may normally be expected to yield similar result, which is the case as seen in the above table. All of the instructors resorted to L1 to explain the meaning of an unknown vocabulary item consistently using it the least in the final week of the study. As could be seen in the above table, the instructors used L1 the least in the final week. This decrease in the use of L1 over the weeks, small as it may be, could be interpreted as a systematic choice on the part of the instructors. Contrary to the other instructors, instructor 1 made no use of L1 in the final two weeks to deal with unknown vocabulary items, which could be due to the particularities of this class or particular teaching approach of the instructor himself/herself. Interesting findings on the use of L1 to deal with the part of speech of unknown vocabulary items were also projected. As displayed in table 4 below, L1 was used the most to explain new/unknown nouns, phrases, verbs, adjectives, and adverbs respectively.

Table 4
The distribution of L1 use according to weeks and parts of speech is presented

week	noun		verb		adjective		adverb		Phrase		Total	
	n	*%*	n	*%*	n	*%*	n	*%*	n	*%*	n	%
1	3	*18*	4	*24*	3	*18*	2	*12*	5	*28*	17	*20*
2	13	*81*	1	*6*	--	--	2	*13*	--	--	16	*19*
3	19	*73*	4	*15*	1	*4*	--	--	2	*8*	26	*31*
4	3	*19*	5	*31*	1	*6*	1	*6*	6	*38*	16	*19*
5	4	*44*	1	*11*	--	--	1	*11*	3	*33*	9	*11*
Total											84	

What is striking is that half of the overall use of L1 to deal with unknown vocabulary items aimed to explain nouns, which is quite understandable given that noun phrases in the subject position together with verbs constitute the two most important elements of the clause. As displayed in table 4, teachers' use of L1 to explain phrases and verbs has also a high percentage, which shows the participant teachers' careful and systematic preference for L1 use. Another interesting finding is that this systematic use of L1 could be seen to some degree in the distribution of L1 use to deal with unknown vocabulary items throughout the weeks. Overall, a gradual decrease in the amount of L1 use across the weeks was seen, since L1 was used the least in the final week. This steady decline can be clearly seen in the amount of L1 use to deal with especially nouns, adjectives, and adverbs, which is quite understandable given the low proficiency level of the students. A slight decrease in the use of L1 to explain phrases and verbs was also seen. Yet, this decline seems to have a fluctuating nature.

As has already been underlined, L1 was used the most to deal with unknown nouns. As such, one is tempted to ask whether there are any common features of these nouns. Interestingly enough, a great majority of nouns for the explanation of which L1 was used referred to concrete nouns, denoting physical objects mostly, which could have easily been explained or described by simply showing the objects themselves, if no other way had worked. The only two nouns denoting mental phenomena were '*possession*' and '*dream*'. Thus, it seems that the rationale behind using L1 in the explanation of these nouns is not related with the difficulty or ease of explanation. The same thing can be said to be true for the verbs. Most of the verbs which were explained using L1 were verbs expressing physical actions. Only three of the verbs were phrasal verbs, the explanation of which can be said to be difficult. When the prepositions and phrases/chunks are examined, the instructors' use of L1 for their explanations could be appreciated, since at times it can be rather difficult for an instructor to get the meaning of some prepositions like '*via*' across the learners, especially at beginner level learners.. Similarly, most of the phrases/chunks such as *'What's up?', 'It's my turn', It sounds fun*' and the likes were explained in

the mother tongue which may be rather difficult to explain, especially students with insufficient target language proficiency.

DISCUSSION

The role and use of L1 in the instructed second/foreign language classroom by both language instructors and learners alike has been a controversial issue throughout much of the history of research into second/foreign language teaching. While some have viewed the use of L1 in the foreign language classroom as a valuable resource, some others have seen it as an overestimated and overvalued, yet abused resource/matter. Despite a century-long contentious nature of the issue, not enough research with satisfying results concerning the right time to use L1 for sound but functional purposes in the foreign language classroom have been done. Although a number of studies have been conducted on the attitudes of both language teachers and learners towards L1 use in the foreign language classroom, very few studies have been carried out on the relationship between the amount of L1 use in the foreign language classroom and its effects on the proficiency gains of students. Another gap in the relevant research is related with the purposes of L1 use in the foreign language classroom. With this need in mind, this descriptive study was conducted to investigate the purpose(s) of L1 use by language instructors in the foreign language classroom.

Overall, the major finding of the study is that L1 use by language instructors was mainly communication facilitative. The participant language instructors used L1 by far the most to facilitate teacher-student communication and relationship. They also resorted to L1 to facilitate the learning of L2, incomparably less, though. These two observations support some of Eldridge's (1990) findings in that L1 use is a purposeful phenomenon which facilitates communication. Another interesting observation is related to the systematic and judicious use of L1 by the participant instructors. L1 use by the participant instructors was systematic in that its use showed a gradual decrease across the weeks, having been used the least in the final week of the five-week study period. L1 use was systematic and judicious in that it was used by all of the participant instructors to deal with unknown nouns the most, followed by unknown phrases, verbs, adjectives, and adverbs respectively. The distribution of L1 use across the weeks also shows that the instructors used L1 lesser and lesser as the weeks progressed. This systematicity shows that the participant instructors are well aware of the importance of the functions of the content words in written and spoken discourse.

The purposes of many of the instances of L1 use by the participant instructors seem to aim to address the students with linguistic deficit of one kind or another: linguistic and structural. This deficiency could be due to a number of reasons, which are beyond the scope of this study. No matter how complete the reasons may sound, one cannot but question how rational it is to use L1 in this kind of an intensive program, so to speak, waste these invaluable times and stages during which learners are most liable to break down barriers and feel the need for the bits and pieces of classroom language. In underlying the inevitability of using L1 in the L2 classroom, Ellis (1984:133) draws attention to the crucial importance of using the target language, based on just assumptions not on sound evidence, for both language and classroom management related issues revealing that:

…In the EFL classroom, however, teachers sometimes prefer to use the pupils' L1 to explain and organize a task and to manage behavior *in the belief that this will facilitate the medium-centered (language-related) goals of the lesson*. In so doing, however, *they deprive the learners of valuable input*. (Italics added)

In a similar vein, upon stressing two important features of natural communication; the former being purposeful such as greeting, apologizing, criticizing, enquiring, informing and so forth and the latter being unpredictable involving slips and hesitations, creativity, spontaneity, economy, intonation and stress, comprehension and checks, and turn taking, Cross (1995) underlies that managerial roles creates countless opportunities for meaningful language use. Resorting to the mother tongue at such moments, according to Cross, gives the impression that the foreign language is for *practice alone* (Italics added). In drawing attention

yet to another voluble dimension of using the target language in the foreign language classroom, Wong-Fillmore (1985) emphasizes the role of the use of the target language in the foreign language classroom noting that 'an integral part of the foreign language learning is trying to 'figure out' what others are saying and adds that 'translation short-circuit this process'.

At first glance, the use of L1 by the language instructor in the foreign language classroom where the language instructors are almost the sole source of input may well sound justifiable, even appreciable, considering its communication facilitative nature and the insufficient foreign language proficiency level of the students. However, many of the instances of the observed teacher-student communication and relationship facilitation situations, let alone using L1 to facilitate the learning of L2, are meaningful, contextualized, genuine and authentic opportunities for students to pick up the target language. What is more, these are contextually rich real-life situations by the help of which students can easily need, see and appreciate the communicative functions of the target language. By making use of these contextually rich and genuine occasions, students may feel that they are learning the target language as a means of communication, not just an end in itself, which is rather rare given the learners are considered.

CONCLUSION

This study confirms previous research (Elridge, 1999) which has shown that L1 use in the instructed second/foreign language classroom appears to be purposeful and functional which notably facilitates communication and relationship between the teacher and the student. These particular research findings along with some literature and some earlier studies show a judicious use of L1 in the foreign language classroom. However, given the fact that the teacher is the sole source of foreign language input in this kind of intensive program, one is tempted to question how rational and useful it is to use L1, especially in speaking courses, let alone other skills. What is more, we, as language instructors, need to consider two crucially important questions: does the functionality of L1 use in the foreign language classroom, especially in intensive ones, justify wasting invaluable but limited time using L1 given that every instance of L1 use could be functional? And to what extent is it possible to have a solid agreement among so many language instructors with different educational and characteristic features on the relative parameters of judicious L1 use?

In view of the limited scope of this study, its findings in no way can be generalized to either the home setting of the study or any other similar institutions in Turkey, though it may present a very small view of the whole picture. Therefore, more in-depth studies with representative participants on the benefits of L1 use in the four skills are needed. Further research may focus especially on the impact of L1 use in the foreign language classroom on the linguistic gains of students.

Pedagogical implications

Taking into consideration the reality that language instructors from diverse backgrounds may have different conceptions of the role of L1 and its judicious use, especially in intensive foreign language programs, consciousness raising on this delicate issue is worth exploring. First and foremost, given the diverse backgrounds of language teachers, a consensus on the pros and cons of L1 use in the foreign language classroom should be analyzed. It is a necessity to underline the fact that L1 use in the foreign language is not a taboo subject in itself, as long as it helps enhance foreign language learning. It is also essential to stress the need to use the target language at every opportunity in the foreign language classroom. For one thing, the foreign language classroom presents many various occasions for language learners to practice the foreign language, though naturally most times it appears to be artificial. Given the very few opportunities available for learners to practice their language outside class, we cannot underestimate the importance of the use of the target language in the classroom. Hence, it would be worthwhile to focus on L1 contribution towards this end.

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