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Dear IJONTE Readers,

IJONTE appears on your screen now as Volume 3, Number: 1. In this issue it publishes 13 articles. And this time, 24 authors from 5 different countries are placed. These are India, Iran, Nigeria, Turkey and Zimbabwe.

The first article is from TURKEY on "WEB 2.0 TOOLS IN LANGUAGE TEACHING: WHAT DO STUDENT TEACHERS THINK?" written by Paşa Tevfik CEPHE and Cem BALÇIKANLI from Gazi University, Education Faculty, Ankara.. The aim of this study was to explore ELT (English Language Teaching) student teachers' perspectives on the use of web 2.0 technologies in language learning contexts. In order to do so, 139 student teachers from a state university in Turkey were given training on web technologies along with their practical usages. Three months after this training, a questionnaire adapted from previous instruments was administered to participating student teachers. Moreover, the follow up interviews were carried out with only 20 student teachers in five groups, the aim of which was to take a deeper insight about the items in the questionnaire. Both the questionnaire and the interview results revealed that student teachers seemed to have positive feelings about the use of web technologies despite some challenges such as lack of technological devices encountered.

The second article came from Batman University, TURKEY. Article is titled as "ROLE OF ARTISTIC APPROACH ON LIFELONG LEARNING", written by Sedat CERECİ. Learning art depends on individual will of someone and learning art is never undertaken by offical organisations. But art education is a necessity for every society. Art education is not sufficient in official education for someone who need art and artistic approach in his life in some countries and so he has to use artistic facilities and opportunities in social life in national dimension and also in international dimension. Governments and also private sector must provide facilities and apportunities for people to arrive at art works and to learn artistic approaches.

The third article is from TURKEY. It is on "THE RELATIONSHIP BETWEEN ELEMENTARY STUDENTS' ATTITUDES TOWARDS MATHEMATICS AND STUDYING TO MATHEMATICS", conducted by Dilek ÇAĞIRGAN GÜLTEN, Cengiz POYRAZ and Gülşah BATDAL KARADUMAN from Istanbul University. In this research it was carried out to examine the relationship between elementary students' attitudes towards mathematics and studying to mathematics lesson. For this purpose, the relationship between elementary students 'attitudes towards mathematics and studying to mathematics lesson of 500 primary school students in Istanbul is investigated. It is investigated whether there is a relationship between mathematics attitude and students' gender, and if there is someone that help to study lesson at home, and whether they have their own room and computer, and for what purpose the computer is used, and their family's economic level, and the duration of regular lesson study, and the duration of daily mathematics lesson study. To provide the data that is required for the purpose of the study; questionnaire containing demographic characteristics and "Mathematics Attitude Scale" that is developed by Baykul (1990), were used to collect data.

The fourth article which is entitled as "THE MEETING LEVEL OF STUDENTS' REQUISITIONS FROM SCHOOL AS A LEARNING ENVIRONMENT " written by Mehmet Arif ÖZERBAŞ from Gazi University, Education Faculty, Ankara, TURKEY. The aim of this research is to determine meeting level of student requests for teaching-learning process, physical environment and social activities of the school, called learning environment. In this descriptive research, 30 item- "Student Aspirations from School" were used as a means of collecting data. The sample of the research is consist of 904 6, 7 and 8 graders from the primary schools in the city center of Ankara.

The fifth article which is entitled as "VIRTUAL INSTRUMENTATION AS AN EFFECTIVE ENHANCEMENT TO AN ELECTRONICS LABORATORY EXPERIMENT" written by Yogendra B.GANDOLE from INDIA. This paper describes a tool to improve the electronics laboratory process. The tools really constitute a virtual electronic laboratory because it is made up of a set of virtual experiments with a user-friendly graphic interface and interactive simulated electronic instruments relating practical concepts with theoretical ones. The combination of the demonstration and the virtual electronic laboratory constitute a bridge between theoretical lessons and laboratory classes. The professor can use the experiments of the virtual laboratory in the classroom to improve student retention. Using this tool, undergraduate students improve their performance and increase their efficiency in the laboratory. A pilot experience has been implemented for Basic Electronics. This work demonstrates that instrumentation experience is greatly enhanced by integration Virtual Instrumentation into the Laboratory. The incorporation of computer data acquisitions into the undergraduate laboratory provides students with a valuable tool for data collection and analysis.

The sixth article arrived from NIGERIA, which is prepared on "EMPIRICAL STUDY OF THE INTEGRATION, APPLICATION AND UTILIZATION OF TECHNOLOGY SUPPORT LEARNING SYSTEM IN OBAFEMI AWOLOWO UNIVERSTY, ILE-IFE, NIGERIA" written by Sofowora Olaniyi ALABA from Obafemi Awolowo University. The specific objectives of this study are to;(i) investigate TSLS adoption and usage among the students of Obafemi Awolowo University, Ile-Ife for both distance and residential learning,(ii) determine the availability and adequacy of the facilities / infrastructures for TSLS,(iii) assess the level of implementation of TSLS (iv) determine the TSL format adopted by the University,(v) find out student's acceptance to use the type of TSL format adopted, and (vi)investigate the challenges facing the integration and utilization of TSLS .

The seventh article came from IRAN. Article is titled as "RELATIONSHIP AMONG THINKING STYLES OF MATHEMATICS TEACHERS AND THEIR USING OF PROCESS-BASED TEACHING METHODS ", written by Maliheh Nemati NEGHAD, Yahya KAZEMI and Zahra NIKMANESH. The aim of present study is investigation on relationship among mathematics teachers' thinking styles and amount of their using of process-based teaching methods. This research is to determine that which one of thinking styles is the strongest predictor for using of methods of Process-based teaching by math teachers. The method of this research is descriptive and correlation one.

The eighth article arrived again from ZIMBABWE and was written on "ASSESSING THE EFFECTIVENESS OF STUDENT REPRESENTATIVE COUNCILS IN OPEN AND DISTANCE LEARNING: A CASE FOR THE ZIMBABWE OPEN UNIVERSITY" by Richard BUKALIYA and Gift RUPANDE in Zimbabwe Open University. The present study aimed at establishing the effectiveness of the Student Representative Council in Open and Distance Learning institutions. A case study was undertaken at the Zimbabwe Open University, in the Mashonaland East region which the researchers selected to understand in depth regardless of number of there being 10 regions in the ZOU. In order to make an assessment of the effectiveness of the Student Representative Council at the Zimbabwe Open University, this current study sought to find out what services were being offered by the SRC, how beneficial these services were and how effective the SRC had been in addressing student concerns. The

Article nine is on "FACTORS THAT AFFECT STUDENTS' PROGRESS AND THE COMPLETION RATE IN THE RESEARCH PROJECT: A CASE STUDY OF RESEARCH STUDENTS AND THEIR SUPERVISORS AT THE ZIMBABWE OPEN UNIVERSITY" which is written by Caleb KANGAI and Tichaona MAPOLISA, Zimbabwe Open University. The question of why some distance education students in the Department of Education at the Zimbabwe Open University (ZOU) successfully complete their studies while others do not is becoming increasingly important as distance education moves from a marginal to an integral role in the provision of higher education. In order to unravel this issue and initiate some academic debate, the Department of Education at the ZOU mounted a national survey between June 2008 and July 2010 aimed at ascertaining the reasons for low completion rate among research students studying for the Bachelor of Education in Educational Management .

International Journal on New Trends in Education and Their Implications
January, February, March 2012 Volume: 3 Issue: 1 From Editors ISSN 1309-6249

The tenth article is titled as "ANALYZING PRE-SERVICE ELEMENTARY TEACHERS' PEDAGOGICAL BELIEFS" from TURKEY and was written Vesile Gül BAŞER and Neşet MUTLU. The major aim of the study was to reveal prospective elementary teachers' pedagogical beliefs. The following research questions were addressed in the study: "What are prospective elementary teachers' teaching beliefs?" and "Do their teaching beliefs differ based on their gender?. Data were gathered by using the adopted version of Teacher Beliefs Survey developed by Benjamin (2003).

The eleventh article is titled as "METACOGNITIVE AWARENESS OF PRE-SERVICE TEACHERS" from TURKEY and was written Emine ŞENDURUR, Polat ŞENDURUR, Neşet MUTLU, and Vesile Gul BASER. The purpose of the study is twofold: (1) to investigate the pre-service teachers' levels of "metacognitive awareness" and comparison of sub-awareness scores, and (2) to explore relationships among metacognitive awareness factors and other independent variables including gender, GPA, course grades, and graduated high school type

Article twelve arrived from TURKEY. The subject of the article is "INVESTIGATING TURKISH EFL LEARNERS' BELIEFS ABOUT GERMAN, ITALIAN AND FRENCH AS A SECOND FOREIGN LANGUAGE " and written by Ufuk ATAŞ from Middle East Technical University, Faculty of Education, Ankara. This paper reports on a study that investigated beliefs about second foreign language learning of Turkish EFL learners, compared their beliefs about learning German, Italian and French as a second foreign language and explored within-group variation in these learners' beliefs.

The last article is from ZIMBABWE. It is entitled as "THE POTENTIAL BENEFITS AND CHALLENGES OF INTERNSHIP PROGRAMMES IN AN ODL INSTITUTION: A CASE FOR THE ZIMBABWE OPEN UNIVERSITY" and written by Richard BUKALIYA from Zimbabwe Open University, Marondera. The study focussed on two of the university`s faculties: the Faculty of Science and technology and that of Applied Social Sciences. Most of the students on internship were from these faculties. Being quantitative in nature, the study employed the use of the questionnaire to solicit data from the 50 respondents chosen through convenience sampling. Results showed that the majority of the students preferred the attachment programme because it exposed them to the real expectations of the world of work. However, a number of challenges militated against the effectiveness of the programmes. Challenges include some fulltime employees being reluctant to disclose important information to students. A number of supervisors are too busy to provide effective supervision. Current duration of attachment is not sufficient for all the disciplines. Moreover, some employees regard interns as a threat to their position and in some cases some supervisors possess inferior qualifications than the student interns.

Cordially,

Editors
Prof. Dr. Zeki KAYA, Gazi University, Ankara, TURKEY
Prof. Dr. Ugur DEMIRAY, Anadolu University, Eskisehir, TURKEY.

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

I am very glad to write a 'Foreword' to the first issue of the third volume on *The International Journal of New Trends in Education and their Implications* (IJONTE).

As you all know IJONTE has started to be published in 2010 and it has been striving to meet the continuing education needs of practitioners and educators by providing a forum for the discussion of extended learning strategies, policies and practices, and trends in information technology.

Since 2010, authors from many different countries have sent articles to IJONTE and I hope they will continue to contribute in the future. I would like to thank all authors for their valuable contributions. Had it not been possible to publish IJONTE if they would not have carried out research and shared their findings with the researchers around the World.

I would also like to thank the members of the Editorial Board and assistant editors for their support and hard work. My special thanks go to our Editors for their dedication and hard work. Without their enthusiasm, IJONTE would not have been successful.

You will find research papers on Web 2.0 tools, lifelong learning, technology in learning, open and distance learning, learners' beliefs, metacognitive awareness and teacher education in this issue. Papers in these areas further enrich the coverage of the journal, and provide researchers a platform to present their studies. I am sure you will enjoy reading these papers, use their implications in your practice and be motivated to share your work with other researchers via this journal.

I wish you all a prosperous and productive New Year.
Assist. Prof. Dr. İlknur İstifçi
Associate Editor of IJONTE

Dr. Ilknur ISTIFCI holds both MA and Ph.D. degrees in English Language Teaching. She is currently teaching at the School of Foreign Languages, Anadolu University. She has published articles and participated in various national and international conferences. Her research interests include teacher training, discourse analysis, speech acts, cross-cultural studies, teaching language skills and distance education.

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WEB 2.0 TOOLS IN LANGUAGE TEACHING: WHAT DO STUDENT TEACHERS THINK?

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ABSTRACT

The aim of this study was to explore ELT (English Language Teaching) student teachers' perspectives on the use of web 2.0 technologies in language learning contexts. In order to do so, 139 student teachers from a state university in Turkey were given training on web technologies along with their practical usages. Three months after this training, a questionnaire adapted from previous instruments was administered to participating student teachers. Moreover, the follow up interviews were carried out with only 20 student teachers in five groups, the aim of which was to take a deeper insight about the items in the questionnaire. Both the questionnaire and the interview results revealed that student teachers seemed to have positive feelings about the use of web technologies despite some challenges such as lack of technological devices encountered.

Key words: Web 2.0 Technologies, ELT Student Teachers, Language Learning.

INTRODUCTION

Globalization has always been the subject of profound debate and concern in a number of circles (Tollefson, 1991; Pennycook, 1995; Tsui & Tollefson, 2007; Yim, 2007). In his influential book, Friedman (2005) analyzes globalization, primarily in the early 21st century and defines ten flatteners that he recognizes as leveling the global playing field. One of the most important flatteners, he claims, is "the steroids" which include wireless, voice over Internet, and file sharing. Furthermore, personal digital devices like mobile phones, iPods, personal digital assistants, instant messaging, and voice over Internet Protocol can be classified, according to Friedman (2005) as the new technologies that cause the world to be flattened each day. Tsui and Tollefson (2007) maintain that "globalization is effected by two inseparable mediation tools: technology and English to respond to the rapid changes brought about by globalization" (p.1). In other words, technology and English are two pioneering aspects of the current age that bring about societal and political changes.

New technologies and services are among recent developments that foster participation in formal and informal networks, giving individuals and groups access to global communities (Jewitt, 2005; Gura & Percy, 2005). Application of these technologies is, obviously, manipulating different dimensions of people's lives, such as the way they think, communicate, learn and teach (Hewson & Hughes, 2005; Johnson, 2007). In a sharp contrast with Web 1.0 applications including browsing and searching on the net and reading an operation, Web 2.0 technologies allow users to construct, that is, to write to the web. This shift from a tool of passive reference to one of collaboration to active exciting opportunities for individuals in a variety of ways has been commented in various levels thus far (Thomas, 2009). In order to accommodate this shift, many adults struggle with the use of new technologies in their own lives. Because once the world has been flattened and the new forms of

collaboration made available to more and more people, the winners will be those who learn the habits, processes and skills of digital age most quickly. As far as education is concerned, Web 2.0 technologies seem to have profound potentials in education due to their open nature, ease of use and support for effective collaboration and communication (Kayler & Weller, 2007; Moura, 2007; D'Souza, 2007). It is a fact that today's students, as Prensky (2001) calls "digital natives", employ technology differently and learn differently from their parents and teachers. Digital natives are technology savy, and confident in the positive value of technology. They believe in the importance of technology as "an essential and preferred component of every aspect of their lives (US Department, 2004, p. 9). In order to teach these digital natives properly, it is mandatory that teachers themselves be aware and proficient users of technology.

In recent years, teacher technology preparation has been given more importance as "the single most important step toward integrating technology into education". A lot of studies carried out on teachers' perceptions about the use of technology indicate that most teachers are somewhat aware of the importance of using technology in their classrooms to address 21st century students, but this awareness is not reflected in practice (Lei, 2009). There is a lot of evidence that the majority of teachers do not use technology when they teach with the exceptions of using PowerPoint presentations and email exchanges (Bullock 2004; Kiridis, Drossos & Tsakiridou 2006; Lim 2007; Tezci 2009; Yalın, Karadeniz & Şahin 2007; Yıldırım 2007; Goktas, Yıldırım, & Yıldırım (2008). Then, teacher education programmes are obliged to provide pre-service teachers with recent innovations that occupy key roles in education. This way it is expected that teacher trainees are likely to utilize technologies in their own future classrooms to cater for the increasing needs of 21st century kids. Otherwise, there would be unfilled gaps between teachers and learners.

Turkish Education and Technology: A LINK TO ENGLISH LANGUAGE LEARNING

In recent years, Turkish education has undergone various changes in line with the economic and social developments in the country. As an inevitable consequence of the alterations made in 1997 when The Turkish Ministry of National Education (MoNE) decided to integrate primary and secondary education into a single stream, the duration of the primary education was extended from 5 to 8 years. One major change in this aspect was that the subject "English" was included in the fourth grade. Thus, English became a compulsory school subject in October 1997, and started to be taught to young learners in Grade 4 and 5. The stated objectives of the MoNE curriculum are primarily based on recent innovations in language learning, namely language awareness, reflection, motivation, learning strategies, autonomy, and use of games and so on. According to Kırkgöz (2007), "the 1997 curriculum stands as a landmark in Turkish history because, for the first time, it introduced the concept of the communicative approach in ELT" (p. 221).

There were influential attempts to better teacher education programs in Turkey. Obviously, the world was changing at a breathtaking pace and teacher education had to do its part to keep up with this fast-changing world. Upgrading the curriculum of education faculties to better the quality in the programs offered by them and more importantly to meet the needs of the 21st century opened up other revolutionary acts in Turkish higher education. Along those lines, education faculties increased the number of methodology courses and extended the teaching practice time in primary and secondary schools (Kırkgöz, 2005). In 2005, the new curriculum for English (4 and 5th grades) was constructed in accordance with innovative approaches such as communicative language teaching, constructivism, and learner autonomy and like. This curriculum was developed by a team of teacher educators working in a state university in Turkey. When the objectives of the curriculum are examined, one can easily recognize that the use of technologies in language education is mostly emphasized so as to meet the demands of the twenty-first century. Likewise, in line with this new curriculum, the textbooks called "Time for English 4 and 5" were written by the same educators in 2005. By taking into account the basic principles of the CEFR (Common European Framework of References), the teacher educators wrote the English textbooks. The textbooks aimed at guiding language learners to make use of web technologies such as multimedia labs that allow language learners to employ for their own language learning

purposes and like. That is to say, the new curriculum as well as the textbooks seems to be leading to a new approach for 21st century kids.

There have been studies investigating how teachers and teacher educators from all disciplines perceive the use of web technologies in learning environments in Turkey. For instance, using a survey design about teacher educators' perceptions about ICT (information and communication technologies) integration into teacher education programs, Göktaş, Yıldırım and Yıldırım (2009) found out that 111 teacher educators expressed positive opinions concerning the integration of ICT into teacher education programs. Gök and Erdoğan (2010) analyzed the perceptions of the students in the Department of Primary Education, Hacettepe University about technology through metaphor analysis. Employing a mixed method including quantitative and qualitative techniques, the researchers concluded that pre-service teachers developed one hundred metaphors on technology during the study and these metaphors led them to become competent users of technology for educational purposes. Gülbahar (2008) investigated the level of usage of preservice teachers' and instructors' utilization of ICT. Using data from a a private university gathered through questionnaires, the study indicated that teacher education programs fail to provide appropriate instructional technologies and computer facilities for both in and out of class activities. Preservice teachers, though, are in favor of using technology in and out-of-class activities. This positive attitude is an important indicator of willingness and first step in effective integration. As for language learning contexts, Yaratan and Kural (2010) investigated the current state of instructional technology use in English language classes at middle schools in North Cyprus. With the participation of 80 middle school English language teachers, the research revealed that although teachers are mostly positive about technology use in language classes, instructional implementation is below the desired rates due to some restrictions mainly lack of technological means and of time. This finding is particularly critical because it is evident that what they believe and what they actually do is not the same. In other words, a mismatch between their perceptions and practices exists within the system. It is highly suggested that English language teaching be supplemented through web technologies mainly because language learning is more than a classroom experience. Language-learning experiences occur outside the classroom informally in a way. Language learners, then, should be capable of taking responsibility for their own learning, which can be considered to be the most essential aspect of lifelong learning. This can mostly be achieved through the use of web technologies. In order to make use of web technologies at the service of language learning, both language teachers and learners should be aware of limitless opportunities such technologies offer. In relation to pre-service language teachers, this becomes more significant because studies simply indicate that teachers' beliefs evolve mostly during their initial teacher training (Peacock, 2001; Borg, 2009, 2011; Wong, 2010). Külekçi (2009) investigated the attitudes of pre-service English teachers towards the use of the Internet. She administered "Pre-service Teachers' Attitudes towards the use of and needs for Internet Applications" questionnaire to 195 third and fourth year students from an ELT program in Turkey. The findings reveal that most student teachers are eager to use Internet applications and hold positive beliefs about the use of the Internet. In a similar vein, Usluel, Mazman and Arikan (2009) investigated ELT student teachers' awareness of collaborative web 2.0 tools. Focusing specifically on wikis, blogs and podcasts in language learning, the study concluded that prospective teachers are not mostly aware of web 2.0 tools that can be used in language learning. However, it became clear that pre-service language teachers need training in using Internet applications for language learning/teaching purposes. There is still a need to investigate student teachers' perspectives of the use of Web 2.0 technologies. This study highlights pre-service English language teachers' perspectives on the use of Web 2.0 technologies with a specific focus on the integration of technology into language learning.

METHODOLOGY

The main purpose of this study was to explore what ELT student teachers' beliefs were about the use of Web 2.0 tools for language learning/teaching purposes. To answer this research question, there were some actions taken before the study. 139 student teachers from an ELT Program (English Language Teaching) in Turkey received a three-week-instruction on web technologies. This includes topics related to the use of technology, and the integration of Web 2.0 technologies into pre-service language teacher education as part of the regular classroom curriculum in the Materials Evaluation and Adaptation Class. 4th grade student teachers were trained about web technologies and the possible application of these technologies. The instructor introduced several interactive web applications such as Second Life, Livemocha, Voicethread, Ted, Kerpoof and Storybird. The student teachers explored the interactive web sites to take a closer look into how these sites can be employed in language learning/teaching. Next, the student teachers were asked to prepare an activity using any kind of Web technologies both in and outside the classroom. Finally, they were expected to display the activities they designed and to share them with their classmates. Three months later, the questionnaire consisting of 20 statements concerning the potential of Web 2.0 tools for language teaching/learning was administered to participating student teachers to investigate their perspectives on web 2.0 technologies in language learning. The questionnaire was adapted from previous instruments used by authors in studies regarding the educational use of Web 2.0 technologies (Coutinho, 2006; Coutinho & Bottentuit Junior, 2007; Coutinho & Bottentuit Junior, 2008a; Coutinho & Bottentuir Junior, 2008b). The questionnaire was in the format of a five-point likert scale of agreement (1= Strongly disagree; 2=Disagree; 3=Neutral 4=Agree, 5=Strongly agree). While the quantitative data were gathered via the questionnaire concerned, the qualitative data were collected through follow up interviews. All descriptive statistics (the percentages of responses) and the results of the statistical analysis were generated using SPSS 15 for Windows**.** The follow up interviews were carried out with only 20 student teachers in five groups, the aim of which was to take a deeper insight about the items in the questionnaire.

FINDINGS AND DISCUSSION

Table 1: Descriptive Statistics (Student teachers' perspectives on web technologies in language learning)

	Minimum	Maximum	Mean	Std. Deviation
cooperative/collaborative work	3,00	5,00	4,4820	,54311
use of technology to learn and to communicate	3,00	5,00	4,5683	,53906
students participation	3,00	5,00	4,5252	,54282
emergence of new ideas	3,00	5,00	4,5180	,59408
students' motivation to learn	2,00	5,00	4,5540	,56687
knowledge sharing	3,00	5,00	4,6403	,49647
technology capabilities	3,00	5,00	4,4676	,60556
excellent strategy	3,00	5,00	4,7698	,45551
teacher's professional repertoire	3,00	5,00	4,4748	,59382
not suitable for cooperative/collaborative work.	1,00	5,00	1,7626	,83911

collaborative knowledge construction.	3,00	5,00	4,4245	,53809
emergence of learner-centered instructional models	3,00	5,00	4,4101	,58747
peer communication.	2,00	5,00	4,3022	,70869
my future classroom with my students.	3,00	5,00	4,5108	,54330
not the potential of Web 2. 0 tools in education	1,00	5,00	1,5468	,66183
isolate students from one another.	1,00	4,00	2,2878	,82747
new technologies.	1,00	5,00	4,3525	,70055
help my teaching in the future	1,00	5,00	4,5827	,60072
help me teach better.	3,00	5,00	4,6547	,49214
help my students learn better	3,00	5,00	4,5899	,50809
N= 139				

Overall findings of the research reveal that overwhelming majority of the student teachers seem to hold positive attitudes towards the possible use of Web 2.0 technologies in language learning/teaching contexts. As is easily discerned from table 1, the most striking issues namely facilitating cooperative/collaborative work, providing learning opportunities via learner-centred modes outside the class, increasing student participation, enhancing motivation, sharing knowledge, developing awareness of digital literacy, helping student teachers teach better in the future and expanding their professional repertoire stand out in our study. Our findings confirm that participating student teachers believe that the use of Web 2.0 technologies at the service of language learning/teaching support the applications of trends in language learning/teaching such as informal learning, social constructivism, learner involvement and cooperative learning. One of the most effective learning theories today, coperative learning can be described as “a set of processes which help people interact together in order to accomplish a specific goal or develop an end product which is usually content specific” (Panitz, 1996, p. 2). As an inevitable consequence of the shift from teacher-centered instruction to learner-centered instruction, teachers tend to share the authority with their own learners. This obviously fosters the development of collaboration and cooperation between learners and the teacher. In this connection, the use of web technologies at the service of education allows learners to access any kind of information, ideas, documents, and experiences regardless of the border and the time. This, without a doubt, triggers collaborative learning among learners (Frederick, Lillie, Gordon, Watt, & Carter, 1999). The second-generation net tools like blogs, wikis, podcasts, RSS (Really Simple Syndication) and social networking sites have a great contribution to collaborative learning environments where learners co-work on different kinds of projects (Selwyn, 2007). The concept of informal learning is all that is learned throughout life in day-to-day processes at home, work and leisure (Mason & Rennie, 2007). Employing two main categories namely intentionality and consciousness, Schugurensky (2000, p. 2) offers three various forms of informal learning, namely self-directed learning, incidental learning, and socialization. Once the characteristics of informal learning are considered, it is evident that Web 2.0 technologies create great opportunities for learners to experience this kind of learning. New technologies facilitate the design of online communication and information exchanges to empower the learners and create an enriched social learning landscape (Bartlett-Bragg, 2006). Language learners are reported to mostly spend most of their time online doing a lot of language learning tasks outside the classroom. Student teachers also report that Web 2.0 tools can increase students’ involvement in the learning

process. As Dam (1995) argues that, involving learners in the decisions concerning the course content and giving them a share of responsibility for planning and conducting teaching –learning activities may lead to better learning. In other words, through the use of web 2.0 technologies, students are given opportunities to exercise learner autonomy by taking responsibility for their own learning in planning, monitoring and evaluating their own learning activities online. It is more than a fact that getting engaged in web 2.0 activities triggers learners' awareness of digital literacy. The student teachers are of the opinion that the use of Web 2.0 technologies in language learning/teaching settings helps their future students develop their awareness of computer and digital literacy. It is highly believed that sharing knowledge through web 2.0 technologies enhances students' motivation to learn a language as most students today take their times online doing a variety of things. In other words, what students do outside the classroom during their daily lives appear in the classroom during the instruction, which is an inevitable aspect of effective learning processes. It is critical that the activities carried out online outside the classroom be reflected in classroom environments. This obviously helps to develop students' motivation to study a foreign language because the activities done to study a language are much alike what they do outside the class in their daily lives. Felix (2002, p. 3) alleges that "learners are active constructors of knowledge who bring their own needs, strategies and styles to learning, and that skills and knowledge are best acquired within realistic contexts and authentic settings, where students are engaged in experiential learning tasks". It is the student teachers' belief that the use of web 2.0 technologies provides an effective environment where language learners construct their own learning process through social interaction. Vygotsky (1978) put a very emphasis on the social interaction at the center of effective learning process. Thus, web 2.0 technologies can offer learners a good context for social interaction to emerge in a non-threatening way. Web 2.0 technologies, according to student teachers, expand teachers' professional repertoire. This finding is important mainly because language teachers bring a variety of interesting classroom activities to their teaching contexts. It is quite often that learners will be more motivated to learn as long as learning environments are meaningful and interesting for them (Csikszentmihalyi, 1987, 1990).

Wan and Gut (2011) indicate that the 21st century teachers need to be prepared for the 21st century kids, who are themselves competent users of Web 2.0 technologies. In our findings, the student teachers mention that there is a new demand for them to be able to put new skills into their own teaching repertoire. To put it more clearly, they should adjust their teaching competencies in order to keep up with the changing landscapes of the current technological innovations. Another important finding concerning teacher competencies, the student teachers assert that using web 2.0 technologies will help them teach better and prepare their future students for the 21st century more properly. Similarly, Jenset (2011) concludes that student teachers are positive toward using technology, in order for them to keep their positive attitudes; they need to actually use web technologies in their own learning contexts. According to Li and Ni's research (2011), Chinese EFL student teachers hold positive attitudes toward the value of technology for teaching and learning but their use of technology is mostly based on instructional delivery and similar things. Yusuf (2011) alleges that student teachers seemed to have positive attitudes towards the use of ICT and they are competent in the use of few basic tools.

INTERVIEW RESULTS

As mentioned earlier, the qualitative data were collected through follow up interviews. The follow up interviews were carried out with only 20 student teachers in five groups, the aim of which was to take a deeper insight about the items in the questionnaire. The interview questions were formulated through language learners' and teachers' experiences in an online environment. In the first place, 6 questions were formulated from the questionnaires and they were sent to two experts on language learning with technologies. These six questions were piloted with 15 student teachers that represent the subjects of the study. It turned out that 3 out of them were understandable enough for student teachers to answer. In response to the question 'What do you think about the use of web technologies in language learning?' student teachers had the following views.

…We should definitely use web technologies because students are technologically more advanced (than we are).
…. Authenticity. We do not have the opportunities to speak with native speakers. Technologies make it possible.
…. Fun, it is actually enjoyable because it is not like traditional teaching in a way.
… For instance, playing computer games. When you play computer games, you really enjoy it. If you use them for learning purposes, it is much better.
'How can you make use of web 2.0 technologies in language learning?' the following extracts from the student teachers' interviews captured some of the significant responses to this question.
… Web 2.0 technologies should be used when we give homework. They can increase students' attention when they do their homework.
…. Web technologies are used to make the class more interesting. I suppose in the class.
…. Web technologies should be integrated into language learning. Both inside and outside the classroom activities.
In relation to the question "Is it possible to use Web technologies in your future teaching?, the student teachers have the opinions below.
…I think we need to integrate web technologies into language learning. I'd love to do so in the future.
…It depends on where I will be teaching. If it is a village, no way.
…I will do my best to use web technologies to make my teaching more interesting for my students. However, I do not know as yet.
… It is more a question of what kind of facilities my future school will have. I do not think I will be able to use them.

In light of the interview data, one can easily argue that student teachers regarded the use of web technologies in language learning/teaching and their classroom applications as favorable by continuing with modern approaches. To illustrate, they seem to have a very-well constructed notion of web technologies with strong positive beliefs and moderate interests. Authentic language, real-life-like experiences, enjoyable language learning are some of the advantages of web technologies student teachers mentioned during the interview. It seems that student teachers are of the opinion that web technologies offer greater opportunities than anything else in terms of aforementioned dimensions in a way. Despite strong beliefs that web technologies should be integrated into language learning/teaching contexts, the picture is rather gloomy for some participating student teachers. They strongly believe that there will not be easy access to web technologies in their future classrooms due to lack of technological equipment. No matter how much eager they would be, it looks like that there are likely to be some cases that inhibit the use of web 2.0 technologies for language learning/teaching purposes.

CONCLUSION

This study set out to investigate the perceptions of ELT student teachers on the use of Web 2.0 technologies at the service of language learning/teaching. The questionnaire results indicate that most participants find the use of web 2.0 technologies essential for the effectiveness of language learning. They mostly focus on several aspects of learning such as involvement, motivation, and 21st century skills. However, student teachers report some drawbacks they are likely to encounter when they start their teaching such as lack of technological devices.

On the whole, student teachers seemed to feel that web technologies should be employed in language classrooms due to following reasons. First, they offer authentic language. In other words, web technologies allow individuals to be exposed to authentic language, which is much too difficult in EFL contexts. Second, web technologies are fascinating in that they capture learners' attention. It is more than a fact that learning is more meaningful if learning environments are interesting enough to attract learners' attention. Third, learners in a

way are involved in their learning processes as web technologies offer great opportunities for constructivist instruction. Fourth, it is a must to address 21st century learners with developing technologies simply because they are far more different than their parents and teachers in the realm of digital literacy. Student teachers' beliefs on web technologies are very important components of their future teaching practices. This is in line with the assumption that if ESL teachers have to use technology effectively with their own students, they must use it for learning when they are already students (Kamhi-Stein, 2000). Therefore, teacher educators play a salient role in student teachers' experience with web technologies by offering more opportunities for greater motivation, negotiation and decision-making.

In light of the findings gathered, certain important steps should be taken to encourage ELT future teachers to make use of web technologies both for their future professional development and their classroom teaching. First, it is mandatory that technology be integrated into pre-service language teacher education as technology and English are meditation tools. What this means is that each instructor should seek ways for this integration related to their fields. Second, each student teacher is encouraged to create a website where they are expected to upload every kind of language teaching materials. This way they are likely to be mostly exposed to digital literacy.

Despite the positive attitudes towards web technologies at the service of language learning/teaching, one dilemma still remains unexplored: Will these student teachers later keep believing in the importance of web technologies despite the drawbacks they are likely to encounter? Or will they find themselves in a position where they address digital natives least effectively through traditional teaching methods? There should be an investigation of (possible) mismatch between theory and practice in terms of language teachers' attitudes and practices of web technologies.

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REFERENCES

Bartlett-Bragg, A. (2006). *Reflections on Pedagogy: Understanding the adult learners' experience of Weblogs*, Conference proceedings BlogTalk. Vienna.

Borg, S. (2009). English language teachers' conceptions of research. *Applied Linguistics, 30*(3), 355-388.

Borg, S. (2011). The impact of in-service teacher education on language teachers' beliefs. *System,* 39(3).

Bullock, D. (2004). Moving from theory to practice: An examination of the factors that preservice teachers encounter as they attempt to gain experience teaching with technology during field placement experiences. *Journal of Technology and Teacher Education* 12 (2), 211–37.

Coutinho, C. P. (2006). Utilização de blogues na formação inicial de professores: um estudo exploratório. In Panizo et al (Eds.) *Proceedings of the 8th International Symposium on Computers in Education*, 2, 157164.

Coutinho, C. P & Bottentuit Junior, J. B. (2007). Collaborative Learning Using Wiki: A Pilot Study With Master Students In Educational Technology In Portugal. In C. Montgomerie & J. Seale (Eds.). *Proceedings of World Conference on Educational Multimédia, Hypermedia e Telecommunications (ED-MEDIA*). pp. 1786– 1791. Vancouver, Canadá.

Coutinho, C. P. ; Bottentuit Junior, J. B. (2008a). Web 2.0 in Portuguese Academic Community: An ExploratorySurvey. In K. McFerrin, R. Weber, R. Carslen & A. Willis (Eds), *Proceedings of the 19th International Conference of the Society for Information Technology & Teacher Education*, (SITE 2008), pp.1992-1999.

Coutinho, C. P.; Bottentuit Junior, J. B. (2008b). Portuguese Postgraduate Teachers´ Opinions About Using Social Bookmarking: a descriptive study In a Master Course in Educational Technology. In K. McFerrin, R. Weber, R. Carslen & A. Willis (Eds), *Proceedings of the 19th International Conference of the Society for Information Technology & Teacher Education,* pp.3307-3.

Csikszentmihalyi, M. (1987). The flow experience. In M. Eliade (Ed.). *The Encyclopaedia of Religion.* (pp. 361-363). New York: Macmillan.

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper Perennial.

Dam, L. (1995). *Learner Autonomy 3: From Theory to Classroom Practice*. Dublin: Authentik.

D'Souza, Q. (2007). *100 Web 2.0 Ideas for Educators.* Retrieved from http://www.TeachingHacks.com, 25 October 2011.

Felix, U. (2002). The web as a vehicle for constructivist approaches in language teaching. *ReCALL*.14 (1), 2-15.

Frederick, K.A., Lillie, M., Gordon P.L., Watt L.D., & Carter, R. (1999). *Electronic Collaboration: A practical guide for educators*. Retrieved from http://www.alliance.brown.edu/pubs/collab/elec-collab.pdf 21 October 2010.

Friedman, L. T. (2005). *The World is Flat: The Globalized World in The Twenty-First Century.* New York: Penguin Books.

Gök, B. & Erdoğan, T. (2010). Investigatıon of Pre-Service Teachers' Perceptions About Concept of Technology Through Metaphor Analysis. *TOJET: The Turkish Online Journal of Educational Technology*, 9 (2), 145-160.

Göktaş, Y., Yıldırım, Z., & Yıldırım, S. (2008). A Review of ICT related courses in preservice teacher education programs. *Asia Pacific Education Review, 9*(2), 168-179.

Göktaş, Y., Yıldırım, Z. & Yıldırım, S. (2009). Investigation of K-12 Teachers' ICT Competencies and the Contributing Factors in Acquiring these Competencies. *The New Educational Review, 17*(1), 276-294.

Gülbahar, Y. (2008). ICT Usage in Higher Education: A Case Study on Preservice Teachers and Instructors. *The Turkish Online Journal of Educational Technology*. 7(1). 32-27.

Gura, M., & Percy, B. (2005). *Recapturing technology for education: Keeping tomorrow in today's classrooms*, Lanham, Maryland: ScarecrowEducation.

Hewson, L., & Hughes, C. (2005). Social processes and pedagogy in online learning. *AACE Journal, 13* (2), 99-125.

Jenset, G. B. (2011). Student attitudes toward teaching English with Technology. *Seminar.net - International journal of media, technology and lifelong learning*, 7 (2), 59-68.

Jewitt, C. (2005). *Technology, Literacy, Learning: A Multimodal Approach*. Routledge London.

Johnson, H. (2007). *Dialogue and the construction of knowledge in E-learning: Exploring students' perceptions of their learning while using blackboard asynchronous discussion board*, Retrieved from http://www.eurodl.org/materials/contrib/2007/Henry_Johnson.htm, 21 October 2010.

Kamhi-Stein, L. D. (2000). Looking to the future of TESOL teacher education: Web-based bulletin board discussions in a methods course. *TESOL Quarterly, 34*, 423-455.

Kayler, M. & Weller, K. (2007). Pedagogy, self-assessment, and online discussion groups. *Educational Technology and Society, 10* (1), 136–147.

Kırkgöz, Y. (2005). English Language Teaching in Turkey: Challenges Towards the 21st Century, *Teaching English to the World History, Curriculum and Practice,* ed. G. Braine, pp. 159-169, Lawrence Erlbaum, London.

Kırkgöz, Y. (2007). Language Planning and Implementation in Turkish Primary Schools, *Current Issues in Language Planning*, 8, 2, 174-191.

Kiridis, A., V. Drossos, & H. Tsakiridou (2006). Teachers facing information and communication technology (ICT): The case of Greece*. Journal of Technology and Teacher Education* 14 (1), 75–96.

Külekçi, G. (2009). Assessing the Attitudes of Pre-Service English Teachers towards the Use of the Internet. *Journal of Kirsehir Education Faculty*. 10 (3), 153-160.

Lei, J.(2009). Digital Natives as Preservice Teachers: What Technology Preparation Is Needed? *Journal of Computing in Teacher Education,* 25 (3), 87-97.

Li, G. & Ni, X. (2011). Primary EFL Teachers' Technology Use in China: Patterns and Perceptions. *RELC Journal,* 42(1) 69–85.

Lim, C.P. (2007). Effective integration of ICT in Singapore schools: Pedagogical and policy implications. *Educational Technology Research and Development* 55 (1), 83–116.

Mason, R., & Rennie, F. (2007). Using web 2. 0 for learning in the community. *The Internet and Higher Education*, 10(3), 196-203.

Moura, A. (2007). A Web 2.0 na aula de língua materna: relato de uma experiência. In António B. Alves (org.) *Actas do Encontro Internacional "Discurso, Metodologia e Tecnologia*. Miranda do Douro: CEAMM, pp. 9-24.

Panitz, T. (1996). *Collaborative versus cooperative learning- A comparison of the two concepts which will help us understand the underlying nature of interactive learning*. Retrieved from http://home.capecod.net/~tpanitz/tedsarticles/coopdefinition.html, 29 October 2009.

Peacock, M. (2001). Pre-service ESL teachers' beliefs about second language learning: a longitudinal study. *System,* 29, 177-195.

Pennycook, A. (1995). English in the world/The world in English. In J. Tollefson (Ed.), *Power and inequality in language education* (pp. 34-58). Cambridge, UK: Cambridge University Press.

Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, 9(5), 1-4.

Schugurensky, D. (2000). *The Forms of Informal Learning: Towards a Conceptualization of the Field*. Retrieved from https://tspace.library.utoronto.ca/bitstream/1807/2733/2/19formsofinformal.pdf,15 October, 2011.

Selwyn, N. (2007). *Web 2. 0 applications as alternative environments for informal learning – A critical review*. OECD-KERIS Expert Meeting. Alternative Learning Environments in Practice. Retrieved from http://www.oecd.org/dataoecd/32/3/39458556.pdf, 10 October 2011.

Tezci, E. (2009). Teachers' effect on ICT use in education: The Turkey sample. *Procedia Social and Behavioral Sciences,* 1, 1285–94.

Thomas, M. (2009). Handbook of Research on Web 2.0 and Second Language Learning. Hershey, PA., New York & London: IGI Reference.

Tollefson, W. J. (1991). *Planning language, planning inequality: Language policy in the community.* London, UK: Longman.

Tsui, A. B. M., & Tollefson, J. W. (2007). *Language policy, culture, and identity in Asian contexts.* Mahwah, NJ: Lawrence.

U. S. Department of Education. (2004). *The National Educational Technology Plan. Toward a new golden age in American education: How the Internet, the law and today's students are revolutionizing expectations*. Washington DC.

Usluel, Y. K., Mazman, S. G., & Arikan, A. (2009). Prospective teachers' awareness of collaborative web 2.0 tools. *The IADIS International Conference WWW/Internet 2009*.

Vygotsky, L. S. (1978). *Mind and society*. Cambridge, MA: Harvard University Press.

Wan, G.,& Gut, D. (Eds.). (2011). *Bringing schools into the 21st century.* New York: Springer.

Wong, M. S. L. (2010). Beliefs about language learning: A study of Malaysian pre-service teachers. *RELC Journal, 41*, 123-136.

Yalın, H.I., Karadeniz, Ş. & Şahin, S. (2007). Barriers to information and communication technologies integration into elementary schools in Turkey. *Journal of Applied Sciences* 7 (24), 4036–9.

Yaratan, H. & Kural, C. (2010). Middle School English Language Teachers' Perceptions of Instructional Technology Implementation in North Cyprus. *TOJET: The Turkish Online Journal of Educational Technology*, 9 (2), 161-174.

Yıldırım, S. (2007). Current utilization of ICT in Turkish basic education schools: A review of teacher's ICT use and barriers to integration. *International Journal of Instructional Media* 34, (2), 171–86.

Yusuf, O. M. (2011). Student-Teachers' Competence and Attitude towards Information and Communication Technology: A Case Study in a Nigerian University. *Contemporary Educational Technology*, 2(1), 18-36.

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ROLE OF ARTISTIC APPROACH ON LIFELONG LEARNING

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ABSTRACT

Art is an indispensable compenent of human life for his spirit like breath for his body and it is a civilisation criterion for social life like economical improvements or like political dynamics. Art education has a special situation in offical education policies even in preschool process and involves special instruments to provide growing of a child. Human always need artistic approach and art works to feel humanistic senses in his life during his life and he always need to learn contemporary artistic approaches to innovate his life and to realing his life to contemporary conditions. People who can understand existence and who can explore mean of life perceive that learning art is requirement of life. Learning art provide man a spiritual energy which is actually source of life. Everybody has not equal facilities about art in the world because of locations and conditions of countries but eveybody can reach his own artistic facilities and knowledges in his society. Learning art depends on individual will of someone and learning art is never undertaken by offical organisations. But art education is a necessity for every society. Art education is not sufficient in official education for someone who need art and artistic approach in his life in some countries and so he has to use artistic facilities and opportunities in social life in national dimension and also in international dimension. Governments and also private sector must provide facilities and apportunities for people to arrive at art works and to learn artistic approaches.

Key words: Lifelong learnig, art, artistic approach, aesthetics, artist.

INTRODUCTION

Learning is not limited by only official education and traditional education process because of continiuty of life and need of man. The earth moves and lives on the earth changes and philosophies and approachs reshape

lives of people. Because of technological improvement, many new informations are generated and many contemporary approachs conduct social life. Comminication technologies transfer a great number of messages from west to east, from north to south in the world and people excuss all these and wonder others. This moving life involves more knowledges and more messages to live in this world and people absolutely need much knowledge to accord contemporary conditions. They need to learn new knowledges and they need to understand new approaches to conceive their lives. Move has continuity in universe and life involves lifelong learning in parallel.

Man, who is a main compenent of life and world must be equipped with knowledges which he need about aorld and life and has to have an affirmative philosophy to live in confidence. Art provides people to watch life liveable because of its aesthetich approach and provides inspire people creative opinions for their lives (Thornton and Gordon, 1921, 24). Beside providing a positive view, art also enables people to live in sophisticated conditions in life and helps man in his problemeatic world.

In a way, art is a kind of conjuration which take people to a spiritual world and makes a therapy there and debugs all his troubles of man. This curative effect constitutes a close relation between man and art.

"According to archeological datas, art was a natural compenent of man's life because of its humane function since the first man and people constituted their original life style by using art" (Bain, 1945, 340). Art is the unique most effective instrument that was explored by human to tell everthing in the world. Art became an instrument of social life after man constituted a civilized lifeand used art to define himself and to communicate the others and to reveal accumulation of man (Connell, 1940, 190). Man worked for art to reveal his energy and also to tell his expressions to others. Because of this, he always need to learn artistic approaches and artistic works during his life. Man tried to constitute art workshops and art galleries that mostly he did not aware.

Art is not only aesthetics production but it is a kind of language to convey opinions of someone to onother one. Its approach is concerned with existence of man and tells people many realities which can not be watched easly about universe. Artist is a discoverer who investigates world and life and discover hidden realities and converts them catching opinions and uses in his work. Art works are expressions of realities of universe via vision of artist and people learn them via approach of artsist.

The earth where is the unique place for man to live on never subsisted without art because of its ineluctable sense and people never live without art on the earth because of its imperative necessity since the first man (Locius, 1995, 429). There are not much remains about first people of the world but the oldest remains reveal that first people thought art as much as they thought their need. Art is a way to connote expressions and power of man's intellect. Different eras moot different art approaches and people conveyed accumulation of their era to future by art (Cereci, 2008, 79). Every era has its own art approaches and people in any period tried to reach knowledges about contemporary atristic approaches and art works to discern continuity of life.

Source of universal art is local art and local artistic approaches always cause universal approaches. Local art and local artistic approaches firstly generates local identity and local art is mostly learnt in traditional ways. Locality never disappears in the world though universal contemporary conditions and traditions always provide local art to survive and there are always some instruments that teach local art.

Art is concerned with history, and with etnography, and with nature, and with psychology of man and also with all entities in universe (Pagani, 2001, 197). In a way, art contains the universe and universe contains art. Every compenent of the world can be use as a material for art works and artistic approaches. Everything inspires man some opinions or some expressions and man tries to steps one more to arrive at a far target and art is the most available way to step (Hanrahan, 2000, 408). Human need art to live healthy and to live healthy with art involves learning art and artistic approachs continuously.

Nutriments are base of life anf art is a great nutriment for human spirit and man need artistic approaches to live in spiritual health. Art help man with its asthetics and provides man many inspirations to get into therapy. It is a way to travel to a recreative world and provides man to leave his problemeatic world.

"After man realised that art is the most available instrument to tell his expressions, he began to built his house in an artistic form and furnished his house with expressive things and bedecked his life with art works" (Winton, 2004, 392). Man used art to tell his expressions, and to convey his accumulation to next generation and also to watch attractive face of life. Life involves a great deal of knowledges to do necessities of life and learning never finishes.

Artistic approach is sometimes base of city planning like Antoni Gaudi's Barcelona and people who were born or who live in that city thrive in arttistic approaches and have healthy spiritual assets.

Art has a social function which arouses social movements. Activists know that art is important for their movements, yet social movement scholars have paid little attention to this topic. Many movements use art,

and movement art comes in many forms (Adams 2002, 54). Function of art serve to aggregate people around collective opinions and expressions and to enable being society.

The world has changed profoundly in the past 50 years, but approaches to educating artists have not. Traditional principles of art did not mostly changed and many artists still work in traditional approaches (Grady, 2006, 89). But art instruments changed and technology presented many new instruments for artists. Technology eased to display art works but also to make art in some disciplines. Meaning of art works naturally changed in tecgnological development as art forms changed (Sayre and Wetterlund, 2008, 92). Viewpoint of artsits were also naturally reformed and adapted. Contemporary people naturally need to learn all these new developments and methods to aware of life.

ARTISTIC AFFECT IN LIFELONG LEARNING

There was art in the earliest period of man in the world on walls of caves or on stones and people used art as a language to convey their impressions about life or used art to prove their expressions about life. Man used anxiety and search and beauty in his own world to tell himself and art arised at the end of the process. After a few time, art became a compenent of man's life and life and art accreted on point of expression. In the beginning, man learnt to form natural materials in his genuine character and artistic approach emerged in the beginning in natural life of man.

As nutrition is need of human body, art is certainly need of spirit of human to be in health and art is a facilitator compenent of life. Function of art involves to learn artistic approach to suit contemporary conditions (Teichmann vd., 2006, 151). People who can understand existence and who can explore mean of life perceive that learning art is requirement of life.

People always look for some methods to ease life and to move away problems of life. In a way, life is a complex process and human was created to analyse life and to understand it. Man tries to understand life in different ways and reveals his analyses in different ways too, like art. It is not a unique way to tell life and human but it is the most attractive and consuming way to inspire people many messages.

Art is a message that covers all lives and all universe with its approaches and with its drawings. Whatever exists in life is material of art like math and like physics and etc. and artistic approaches naturally conducts life. Life is a kind of art anyway because of its complex roads (Kowalchuk ve Stone, 2000, 36). In a way, someone can understand life and mysteries of life by watching an art work and someone can understand art works by observing details of life. There is a vital relation between art and life.

In a different viewpoint, art is a summary of life that includes all mysteries of life. Life is not a monotonous process and someone can encounters many events that he can not expect in life. There are a great number of circumstantial mysteries in life and someone who can learn much of these lives by feeling himself in confidence. Complexity and enigma of life scare human but man feels himself in confidence how much he knows. Learning mysterious of life makes people happy and someone who always learns contemporary knowledges about world feel himself more self-confident. Concern of learning carries people to new ways of universe even to queer matters.

Russian author and poet Leo Tolstoy decided to learn Hebrew language and Judaism though he was old and he insisted on his decision and lastly he became pneumonia. His unique aim was to understand his universe and to evaluate details of life in many dimensions (Ortaylı, 2011, 88). He revealed that knowledge was always a deprivation of human and he had to follow it until he reached it. As all artists, he always learnt and evaluated his knowledges and than produced his art works.

Knowledge has been base of life since the first man and everything was constituted on knowledge, even love. Man can understand what he knows and he can touch what he knows and he can use what he knows and etc. life is lived in knowledge shortly. Knowledge has to be learnt to use. Learning begins in uterus and lasts in familial environment with parents and than developes in offical education and than matures in conditions of life with many factors but it never eases.

Lifelong lernaing is a process that administers someone with main knowledges of life and also technical knowledges of the world (Jongbloed, 2002, 429). Someone firstly learns simple knowledges to live and than learns some more complex knowledges to have an character and than has to learn more circumstantial knowledges to produce and to be a man with sway and continues... Man mostly do not observe that he lives in art or with art and he naturally learn art's mean to live and to understand life.

"*Art blooms with social developments in parallel. Social dynamics and social hopes shape art and conduct artistic approaches*" (Steinhof, 1937, 17). Art and society are always in an interaction and someone in society can never abstain of affects of art. Believes and consuetudes particularly form art. In an organised society, everybody tries to follow affects of art and orientation of art to live in comfort in society.

In a society, eveybody is influenced from the others and also affects the others. Someone who has extraordinary opinions and approaches uses art to tell himself and to affect the others and art sometimes turn into a social message instrument. Every man has an individual character and every character uses a different language to tell himself. Characters are affected by artistic approaches because of their original expression.

Artistic approaches and art works are naturally concerned with officical policies and every government has an art policy. Governments can confirm different dynamics to provide development or to have a say and stand to have an international showcase. Art is an available alternative to get this aim and national arts are sometimes known as identity of a government in international area (Buren, 1929, 11). A conscious citizen contributes art works of his country and at least he knows what his government's art policy is.

Art is not a compenent which is independent from actuel life but reverse it is directly in life and it is nourished by life. In a civilised society, it is impossible to abstain art for someone and nobody can ignore art because of his spiritual need. In artistic circle, human cultivates art and art cultivates human as a mutual relation. Art need not humanistic knowledges much but human actually need artistic approaches and has to learn deatils of approaches because of adhering to life.

Eveything is related to another in universe and a healthy man is interested in everything in universe even horror. Art is the most charming compenent on the earth and art is the most effective language to tell everything (McKenna, 2006, 57). This is the first reason to be interested in art and to follow artistic approachs. Artistic approaches causes anxiety about realities of life and teach people to understand realities. Beside this, artistic approaches teach people democratic though in its individual character.

Realities of life can be perceived differently, some can perceive rain as a complication and some can perceive as fun. Perception can change according to character of man but character can be teached and conducted. Knowledge is not to value to do something for someone but it is source of a absract energy. Character of man emerges with his need and environmental culture forms character.

Man always need to have fun and art is an available relaxing entertainment which shows th effect of relaxing by only watching or listening. "*In this sense art is a vital compenent of life and a indispensable part of daily life*" (Mignonneau ve Sommerer, 2001, 305). When people perceive art as their daily need, they always need to know artistic approaches too and they enrich their lives with art.

A child is edified by his parents after he was born and his family naturally teach child many traditional or modern artistic approaches in growth of child. When child grows up he naturally need artistic approches that were taught by his parents and he constitutes a natural life on his knowledges.

Art is a sociological concept that covers many social relations and affects and provide a society how they organize and how they grasp civilisation (Goldfarb, 2005, 289). This approach naturally involves art education and to learn artistic approaches. Social life developes via artistic approaches and social activities feed artistic works.

CONCLUSION

Learning begins in uterus and lasts during life and man need to learn as much as he need learning. Man has to learn every knowkedge what he need in his life and he has to learn not only knowledges but also opinions and approaches. Learning mysterious of life makes people happy and learning contemporary knowledges about world makes people to feel himself more self-confident. Man need art to live because of its spiritual affect and cultural energy. Artistic approaches are mostly taught a child by his parents and child constitutes his life on an artistic approach in his personal will. Art is a compenent of life and it changes period by period and artists embrace genuine approach to accord contemporary conditions. People who live by trying to understand life follow artistic improvements and approaches and try to learn new evolutions about art. Art facilitates life and shows some ways to solve problems. In a way, people have to learn artistic knowledges not to leave sense of life, because art arises in sense of life. Lifelong lernaing is a process that administers someone with main knowledges of life and also technical knowledges of the world. Human actually need artistic approaches and has to learn deatils of approaches because of adhering to life and he has to learn artistic approaches during his life. Art has always been in man's life and in social life since the beginning and will never dissapear. Art has enriched lives of people and people have learnt artistic approaches to revive their lives. Artistic approach is a powerful dynamic in social life and eveyone tries to follow artistic imrovements because of participation in society.

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REFERENCES

Adams, Jacqueline (2002). "Art in Social Movements: Shantytown Women's Protest in Pinochet's Chile". Sociological Forum. Vol. Vol. 17. No: 1. Pp. 21-56.

Bain, Read (1945). "The Ages of Man". American Sociological Review. Vol. 10. No: 3. Pp. 337-343.

Cereci, Sedat (2008). Story of Image from Cave to Screen. Ankara: Nobel.

Connell, James P. (1940). "Man and Society". The American Catholic Sociological Review. Vol. 1. No: 4. Pp. 186-191.

Goldfarb, Jeffrey C. (2006). "Dialogue, Culture, Critique: The Sociology of Culture and the New Sociological Imagination". International Journal of Politics, Culture and Society. Vol. 18. No: ¾ . Pp. 281-292.

Grady, Michael (2006). "Art and Conciousness-The Pedagogy of Art and Transformation. Visual Arts Research. Vo. 32. No: 1. Pp. 83-91.

Hanrahan, Nancy Weiss (2000). "The Institution of Art in Postmodernity: Autonomy and Critique". International Journal of Politics, Culture and Society. Vol. 14. No: 2. Pp. 401-409.

Jongbloed, Ben (2002). "Lifelong Learning: Implications for Instutions". Higher Education. Vol. 44. No: ¾. S. 413-431.

Kowalchuk, Elizabeth A. ve STONE, Denise L. (2000). "Art Education Courses for Elementary Teachers: What Really Happens?". Visual Arts Research. Vol. 26. No: 2. Pp. 29-39.

Locius, Gerals L. (1995). "Art". The Journal of American Folklore. Vol. 108. No: 430. Pp. 413-431.

Mckenna, Stacey (2006) "Art is Possible". Visual Arts Research. Vol. 32. No: 1. Pp. 53-63.

Mignonneau, Laurent & Sommerer, Crista (2001). "Creating Artificial Life for Interactive Art and Entertainment". Leonardo. Vol. 34. No: 4. Pp. 303.307.

Ortayli, İlber (2011). Portraits from My Notbook. İstanbul: Timaş

Pagani, Jacqualine (2001). "Mixing Art and Life: The Conundrum of the Avan-Garde's Autonomous Status in the Performance Art World of Los Angeles". The Sociological Quarterly. Vol. 42. No: 2. Pp. 175-203.

Sayre, Scott and Wetterlund, Kris (2008). "The Social Life of Technology for Museum Visitors". Visasl Arts Research. Vol. 34. No: 2. Pp. 85-94.

Steinhof, Eugene G. (1937). "Art and Society". Parnassus. Vol. 9. No: 6. Pp. 15-19.

Teichmann, Mare, Murvee, Mart,& Saks, Kai (2006). "Spiritual Needs and Quality of Life in Estonia". Social Indicators Research. Vol. 76. No: 1. Pp. 147-163.

Thornton, Alfred & Gordon, Ronald (1921). "Art in Relation to Life I". The Burlington Magazine for Connoisseurs. Vol. 39. No: 220. S. 23-24+26-28.

Winton, Alexandra Griffith (2004). "'A Man'a House is His Art': The Walker Art Center's 'Idea House'. Project and the Marketing of Domestic Design 1941-1947". **Journal of Design History**. Vol. 17. No: 4. Pp. 377-396.

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THE RELATIONSHIP BETWEEN ELEMENTARY STUDENTS' ATTITUDES TOWARDS MATHEMATICS AND STUDYING TO MATHEMATICS

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ABSTRACT

In this research it was carried out to examine the relationship between elementary students' attitudes towards mathematics and studying to mathematics lesson. For this purpose, the relationship between elementary students 'attitudes towards mathematics and studying to mathematics lesson of 500 primary school students in Istanbul is investigated. It is investigated whether there is a relationship between mathematics attitude and students' gender, and if there is someone that help to study lesson at home, and whether they have their own room and computer, and for what purpose the computer is used, and their family's economic level, and the duration of regular lesson study, and the duration of daily mathematics lesson study. To provide the data that is required for the purpose of the study; questionnaire containing demographic characteristics and "Mathematics Attitude Scale" that is developed by Baykul (1990), were used to collect data. It has been seen that there is significant differences, among students using the computer to prepare homeworks and all other students on behalf of using the computer to prepare homeworks. It was found a significant differences in mathematics attitude on behalf of the students who study regulary every day lesson; by comparison of students those study regulary lesson every day and the students those don't study regulary every day. Significant differences were found between the students who study lesson more than 2 hours a day and all other students,on behalf of the students who study lesson more than 2 hours a day. Also significant differences were found between Also a significant differences were found between children of 800-2000 TL-income families and children from other families, on behalf of children of 800-2000 TL-income families.

Keywords: Primary education, mathematics, mathematics attitude, study the lesson.

INTRODUCTION

As known, the basic feature that separates human from other creatures is; thinking, ability of the evaluating the events and reorganisation conditions suitable to himself. The tool of developing of this skill and turning into action is verbal and numerical language. In this context, the Mathematics, one of the most important tools that develops thinking. Therefore mathematics education builds one of the important blocks of basic education or perhaps creates the most important one (Umay, 2003). Mathematics, as in science also as well as one of the important tools used to solve the problems of daily life. The expression of word "problem" includes not only

the numerical problems, in general, the word "challenge" so-called problems. Because of its importance, mathematics related behaviors is located in every area and at all levels; in elementary curriculum, even from pre-school education curriculum to higher education curriculum (Baykul, 2001). Obtained achievements related to mathematics of the individual depends on many factors. These factors are effective in acquiring skills related to mathematics (Altun, 1994). These are some of the factors that may affect the success in mathematics of individual, in positive or negative way: the individual's age, developmental level, interests and needs, level of intelligence, health, living environment, the teacher factor, the school starting age and attitudes towards mathematics (Şahin, 2000).

In this study; it is tried to examine the effect of attitude on studying mathematics lesson, from the above mentioned factors. Attitude is a complex mental state involving beliefs and feelings and values and dispositions to act in certain way of individual's choice (Senemoğlu, 2001). Attitude according to Thorsten is the density of negative or positive feelings towards a psychological object. This psychological object can be a symbol person, expression and slogan or idea. According to Wagner, conceptually, attitude refers to affective, cognitive, and behavioral components that correspond, respectively, to one's evaluations of, knowledge of, and predisposition to act toward the object of the attitude (Gable 1986; Trans. Tekindal 2009). Attitudes have a great role in being successful or unsuccessful in mathematic lesson, to love mathematics (Çoban,1989; Trans. Taşdemir, 2009) and related to this issue to study mathematic lesson. Many researchs indicate that students' attitudes towards mathematics influence mathematics achievement (Minato and Yanase, 1984; Ethington and Wolfle, 1986; Cheung,1988; Ma, 1999; Baykul, 1990; Yenilmez and Özabacı, 2003; Tapia and Marsh, 2000; Peker and Mirasyedioğlu, 2003).

Successful students defined as "students that recognize their own properties and in this context, use effectively variety methods of studying and learning" (Yıldırım et al., 2000). Learning and academic success of students are associated with use of studying time effective and efficient (Arsal, 2007). Students' study habits are the habits that they developed from mostly their own private life, their own methods, within their own value system (Yılmaz, 1987; Trans.Özbey, 2007). The people who lives at the environment of individual, has also a significant impact on formation of mathematics attitude (Beswick, 2006). Among these, there are individual's teachers, family and friends (Yücel and Koç, 2011).

We can observe usually in the literature, studies to determine the relationships between mathematics attitudes and work of students with the achievement. However it is obviously significant that situation of studying lesson and attitude to the lesson influence the success of the students. In this context, the relationship between mathematics attitudes and mathematics study is necessary to study and this research was designed considering to contribute to the literature.

PURPOSE

In this research it was carried out to examine the relationship between elementary students' attitudes towards mathematics and studying to mathematics lesson. For this purpose; it is investigated whether there is a relationship between mathematics attitude and students' gender, and if there is someone that help to study lesson at home, and whether they have their own room and computer, and for what purpose the computer is used, and their family's economic level, and the duration of regular lesson study, and the duration of daily mathematics lesson study.

METHOD

In this research, survey (descriptive-survey) model was used. Survey model aims to describe the existing situation as it stands in the past or currently (Karasar, 2005).

Universe And Sample

The universe of the study consists of primary schools in Bakırköy district of İstanbul province. The sample of the study consists of primary schools students in the district of Bakırköy, studying in classes 4, 5 and 6, who are composed of 500 students selected randomly. 261 (52.2%) females and 239 (47.8%) male students are forming the sample of study.

Data Collection Tools

To measure students' attitudes towards mathematics, "Mathematics Attitude Scale" that is developed by Baykul (1990) were used to collect data. Mathematics Attitude Scale is 5-Likert-type scale consisting of 30 items. Validity and reliability of the scale has been done and cronbach alpha coefficient has been determined as 0.96 (Baykul, 1990). With this scale, in order to determine the demographic characteristics of students, a demographic characteristics questionnaire was used. This questionnaire was prepared by researchers and consists of questions about grade level, mathematics achievement, family economic status, the status of computer use and the duration of mathematics lesson and lesson study.

Data Analysis

For the general purpose of this research necessary statistical solutions for data collected with the attitude scale, were analyzed using the software package SPSS13.0 (Büyüköztürk, 2003). The level of significance of these statistics was taken as 0.05. To analyse data; t test, analysis of variance (ANOVA) and in cases of analysis of variance significant the LSD technique were used.

RESULTS AND CONCLUSIONS

After analysis of collected data, the findings are presented under the headings of the table according to the order of purpose.

Table 1. Unrelated Group t Test Results, Done to Determine, Whether Mathematics Attitude Scores of Students Differ According to The Gender Variable

Point	Groups	N	Average	SS	$Sh_{\bar{x}}$	t Test		
						t	*Sd*	p
Gender	Female	261	111,7625	25,37665	1,57077	,066	498	,947
	Male	239	111,6151	24,06387	1,55656			

If we look at results of independent group t test in Table 1; done to determine whether mathematics attitude scores of students differ according to the gender variable, we can see the arithmetic average of the difference between the groups was not statistically significant.

Table 2. Unrelated Group t Test Results, Done to Determine, Whether Mathematics Attitude Scores of Students Differ According to Getting Help to Study Lesson at Home Variable

Point	Groups	N	Average	SS	$Sh_{\bar{x}}$	t Test		
						t	*Sd*	p
Getting Help to Study Lesson at Home	Yes	378	111,1587	24,57881	1,26420	-,848	498	,397
	No	122	113,3443	25,23633	2,28479			

If we look at results of independent group t test in Table 2; done to determine whether mathematics attitude scores of students differ according to getting help to study lesson at home variable, we can see the arithmetic average of the difference between the groups was not statistically significant. For this variable of the research, it was expected high positive attitudes for the students that get help. However, as shown to get or not get help does not seem very effective. In this case, independent from getting help, it can be considered the students' study habits are more important.

Table 3. Unrelated Group t Test Results, Done to Determine, Whether Mathematics Attitude Scores of Students Differ According to Ownership of Study Room Variable

Point	Groups	N	Average	SS	$Sh_{\bar{x}}$	t Test		
						t	*Sd*	p
Ownership of Study Room	Yes	417	112,4508	25,11929	1,23010	1,540	498	,124
	No	83	107,8795	22,44799	2,46399			

If we look at results of independent group t test in Table 3; done to determine whether mathematics attitude scores of students differ according to ownership of study room variable, we can see the arithmetic average of the difference between the groups was not statistically significant. It can be expected that a separate study room will help to be more successful and depending on this issue the attitude will be higher in positive sense. However, it can't be reached the data that support this issue in this research,altough at this age not having a separate room in the house; organization properly any place of the house to study lesson or use of the room with the the siblings would not effect attitude.

Table 4. Unrelated Group t Test Results, Done to Determine, Whether Mathematics Attitude Scores of Students Differ According to Ownership of Computer Variable

Point	Groups	N	Average	SS	$Sh_{\bar{x}}$	t Test		
						t	*Sd*	p
Ownership of Computer	Yes	441	111,0998	24,99989	1,19047	-1,465	498	,143
	No	59	116,1186	22,33992	2,90841			

If we look at results of independent group t test in Table 4; done to determine whether mathematics attitude scores of students differ according to ownership of computer variable, we can see the arithmetic average of the difference between the groups was not statistically significant. The sample group of students who do not have a computer at home is a tiny amount in the state; looking at this situation, we can say the prevalence of computer usage increases and computer ownership is not anymore a privilege. It is natural condition that the usage of a tool which is not anymore a privilege, does not create differences. In this research although it was aimed to test this variable, significantly increased prevalence was not taken into account. Although the

research does not aim to measure the rate of computer use, but having an acquired idea with this research on this issue may show the way for future researches.

Table 5. One-Way Analysis of Variance (ANOVA) Results, Done to Determine, Whether Mathematics Attitude Scores of Students Differ According to Purpose of Computer Usage Variable

N, SS and X Values					ANNOVA RESULTS					
Point	Group	N	X	SS	Var. K.	K.T.	Sd	K.O.	F	p
Purpose of Computer Usage	homework preparation	142	110,90	23,67	Among-Group	7397,463	3	2465,82	4,106	0,007
	Lesson Study	119	117,51	22,50	Inter-Group	297857,105	496	600,518		
	Game	110	106,23	24,82	Total	305254,568	499			
	multi-purposeful use	129	111,84	26,79						
	Total	500	111,69	24,73						

If we look at results one-way analysis of variance (ANOVA) results, done to determine, whether mathematics attitude scores of students differ according to purpose of computer usage variable: difference between the purpose of the computer usage variable and the arithmetic average of the groups is found statistically significant. After this (ANOVA), complementary post-hoc analysis techniques were applied to determine due to which group significant differences are based on. After the the one-way analysis of variance (ANOVA) results, carried out to determine mathematics attitude scores according to the variable of the purpose of the computer use differ between which sub-groups, we have seen that as a result of post-hoc LSD test scores among students who use the computer for homework preparation was significantly higher than all other students. There was no statistically significant difference between the other sub-dimensions.

Review of the research in this area did not give the expected result. It was expected not to have a significant relationship between mathematics attitude and different purposes of using the computer or playing games by computer. However, attitudes may be low by the students who use the computer with the aim of studying mathematics due to property of mathematic lesson. Because studying mathematic lesson occur as problem solving and the students prefer to use books by problem solving. It affects their attitude. However, preparing homework by utilizing technology it is possible to support the homework with cleaner writing and more regular shapes. With high positive attitude towards mathematics lesson students want to do their homework diligently and computer support in this situation is a natural condition.

Table 6. One-Way Analysis of Variance (ANOVA) Results, Done to Determine, Whether Mathematics Attitude Scores of Students Differ According to Average Income Of The Family Variable

N, SS and X Values					ANNOVA RESULTS					
Point	Group	N	X	SS	Var. K.	K.T.	Sd	K.O.	F	p
Average Income of the Family	More than 800 ytl	72	105,44	22,57	Among -Group	4376,716	2	2188,35	3,615	0,028
	800-2000 ytl	248	114,10	24,39	Inter -Group	300877,852	497	605,38		
	More than 2000 ytl	180	110,86	25,64	Total	305254,568	499			
	Total	500	111,69	24,73						

If we look at results one-way analysis of variance (ANOVA) results, done to determine, whether mathematics attitude scores of students differ according to average income of the family variable: the difference between the arithmetic mean of groups with an average income of the family is found statistically significant. After this (ANOVA), complementary post-hoc LSD test analysis techniques were applied to determine due to which group significant differences are based on. Scores of students, with family income 800-2000 YTL, was significantly higher than all other students. There was no statistically significant difference between the other sub-dimensions.

This finding of the research is expected. Sociological point of view, education is also an tool for vertical mobility. Generally, the middle class's motivation is much higher to benefit from these vehicles. Because the human beings want to rise up from the curent position to the higher position and middle classes are positionally closer to the next level. Students coming from the lower level families see themselves away from the target to rise up to the next level. The students at top-level are already at the top and may not care much for the power of education. The students of the middle class families by 800-2000 YTL income have higher mathematics attitude scores and it supports findings in this situation.

Table 7. Unrelated Group t Test Results, Done to Determine, Whether Mathematics Attitude Scores of Students Differ According to Every Day Regular Mathematics Lesson Study

Point	Groups	N	Average	SS	$Sh_{\bar{x}}$	t test		
						t	*Sd*	p
Every Day Regular Mathematics Lesson Study	Yes	375	115,9520	23,49110	1,21308	6,983	498	,000
	No	125	98,9120	24,03761	2,14999			

If we look at results of independent group t test in Table 7; done to determine whether mathematics attitude scores of students differ according to every day regular mathematics lesson study variable, we can see the arithmetic average of the difference between the groups was statistically significant. The average of mathematics attitude scores of the students that study every day regular mathematic lesson were significantly higher than the students that does not study every day regular mathematic lesson. This finding of the research is expected. If we consider the sequence of the subject, it is expected that the attitudes of students will be higher who use the time correct and dissipate lacks in time.

Table 8. One-Way Analysis of Variance (ANOVA) Results, Done to Determine, Whether Mathematics Attitude Scores of Students Differ According to Daily Mathematics Lesson Study Time Variable

N, SS and X Values					ANNOVA RESULTS					
Point	Group	N	X	SS	Var. K.	K.T.	Sd	K.O.	F	p
Daily Mathematics Lesson Study Time	Less than half an hour	146	102,42	25,08	Among -Group	21379,623	3	7126,54	12,452	0,000
	1 hour	236	115,18	22,80	Inter -Group	283874,945	496	572,329		
	2 hours	77	112,14	25,75	Total	305254,568	499			
	More than 2 hours	41	123,73	22,36						
	Total	500	111,69	24,73						

If we look at results one-way analysis of variance (ANOVA) results, done to determine, whether mathematics attitude scores of students differ according to daily mathematics lesson study time variable: difference between the daily mathematics lesson study time with the arithmetic mean of groups was found statistically significant. After this (ANOVA), complementary post-hoc analysis techniques were applied to determine due to

which group significant differences are based on. As a result of LSD test, scores of students who are working more than 2 hours homework, were significantly higher than all other students. There was no statistically significant difference between the other sub-dimensions. This finding of the study provides information about the time needed by the students for studying mathematics lesson. This means that using the time correctly can be considered to be more effective than very less study or much study than needed.

CONCLUSION AND DISCUSSION

As a result of this research, it is seen that there is not a relationship between mathematics attitude and students' gender, if there is someone that help to study lesson at home, whether they have their own room and computer. It has been seen that there is significant differences, among students using the computer to prepare homeworks and all other students on behalf of using the computer to prepare homeworks. It was found a significant differences in mathematics attitude on behalf of the students who study regulary every day lesson; by comparison of students those study regulary lesson every day and the students those don't study regulary every day. Significant differences were found between the students who study lesson more than 2 hours a day and all other students,on behalf of the students who study lesson more than 2 hours a day. Also significant differences were found between. Also a significant differences were found between children of 800-2000 TL-income families and children from other families, on behalf of children of 800-2000 TL-income families.

In many studies it has been revealed that gender difference does not have any impact on the mathematics attitude. (Çelik and Bindak, 2005; Ursini and Sanchez, 2008; Yücel and Koç, 2011; Yılmaz, 2006). There is also studies which emphasize the effect of gender on attitudes and change of mathematics attitudes of male and female students' (Tapia and Marsh, 2000; Yenilmez and Özabacı, 2003). So the studies examining the relationship between attitudes and gender disclosed not a exact result. As a result of this finding, the factors that build up mathematics attitude can be said to have the same impact on male and female students. Yucel and Koç (2011) stated; mathematic lesson is a basic course that all students face in their learning lives, has a significant weight in determining success in most exams and towards mathematics for all students irrespective of gender shows that a similar approach.

With the introduction of technology in education environments, computers started to use in math class effectively. Studies show us that the use of technology effectively in mathematics lessons helps to improve the motivation and self-confidence of students (Tapia and Marsh, 2000). The current studies show that technology-supported mathematics teaching having a positive effect on attitude (Pierce, Stacey and Barkatsas, 2007). In this respect, in the study, students using the computer to prepare homework can turn abstract concepts in mathematics into concrete concepts by using the computer visualization features. According to research finding, there is a significant difference between the students using the computer for the purpose of preparing homework and the other students, but no significant difference was found between the presence or absence of a computer at home. It is expected, emergence of these two comparisons, to support each other. However, it is not seen a difference in attitude between students who have computer at home and who does not have a computer at home. The reason for this is; having not a computer at home does not carry the meaning that students can not reach a computer. Because, today the use of computers is quite widespread; at school and outside school students have the opportunity of easily access to computer. If we look in sample group, the ratio of the students who does not have a computer at home is very low. As can be seen in Table 4, 441 students have a computer at home, only 59 students does not have a computer at home. In this case, it can be said that the students have the opportunity of access to the computer outside the home and use technological possibilities in preparing homework as needed.

Another finding of this research is; the family's socio-economic level effects to develop students' attitudes toward mathematics lesson. The results of the research made by Yılmaz (2006) and Çoban (1989) (Trans. Yımaz, 2006) seem to support this finding. Researchs shows us that the attitudes towards mathematics lesson

of students with high-and middle-level of socio-economic status more positive than students with low socio-economic status. In addition, the research of Yenilmez and Duman (2008) and Şengönül (1995) achieved the results that school achievement levels of students coming from middle or high income families are higher than students coming from low income level. In this context, the family's income level affects the student's mathematics attitude, also play an important role in the mathematics success. Mathematics learning is composed of consecutive issues. It may be too difficult to learn higher-digits of issues for the child who can not learn a lower-digits of any issues. This strain can cause to develop negative attitudes towards mathematics. However, families with middle-and high-level income interest more closely with the education of their children and may help to overcome the lack learning aid in time. Students who overcome the lack in time, fully comprehend the previous issues, are more likely to work fondly. In this case they develop positive attitudes towards mathematics.

In addition, according to the findings of this research, family socio-economic status is associated with mathematics attitude but the student's who own a study room at home and who get help to study lesson at home was not a statistically significant difference between mathematics attitude. As mentioned above, it is important to help in time to overcome the lack in case when the lack is realized. On time helps will lead to win self-study habits and at the same time increase the student's self confidence. Students, who can not study by himself and constantly in need of an assistant, can not be successful real terms. Also to have a own room might not be much important for the students who assumed the habit of self-study.

An important finding of this study, which was carried out to examine the relationship between elementary students' attitudes towards mathematics and studying to mathematics lesson, is there is a significant differences between the students who study lesson more than 2 hours a day and all other students,on behalf of the students who study lesson more than 2 hours a day. It has not been encountered a research with this finding done by similar sampling. This finding of the research, the issue of studying mathematics associated with the mathematics attitude can not be ignored, is considered original and a problem to be investigated. However, it was found out in the research made by Arsal (2007) that students who are successful in mathematics lesson use more often time management strategies and unsuccessful students do not use these strategies in sufficient level. As expressed by Arsal (2007), it may be considered that students who are successful in mathematics lesson plan studying time, study regularly each day and use of time more efficient in terms of learning.

RECOMMENDATIONS

According to the research results the following recommendations can be made:
Recommendations for those who work in this field;

- In the future researchs, factors determining mathematics attitude of primary school students can be investigated with a larger sample groups.
- Research including the opinion of students towards computer usage in mathematics attitudes and mathematics learning can be done.
- The relationship between the mathematics attitude, socio-economic levels and individual's studying environment should be investigated.
- Extensive research can be done examining the impact of computer usage forms on mathematics achievement and attitude.
- Extensive research can be done examining the relationship between studying lesson and mathematics and mathematics achievement and attitude.

Recommendations for practitioners in the field and families;

- Teachers and parents should consider that the need to remedy deficiencies in a time, develop positive attitudes towards mathematics.

- They must be conscious by using the technology and the computer and students should be guided in this direction.
- Teachers should guide the students to set out their own creativity and productivity.
- Working with different materials help students to concretize the subject more easily. Taking this into account; teachers should facilitate the achievement of the necessary materials and encouraged students to work with these materials.
- Students should be helped effectively to develop the right studying habits.
- It would be advisable for teachers and guidance teachers who make time planning with students to consider the finding that students need to study mathematics lesson at least two hours daily.

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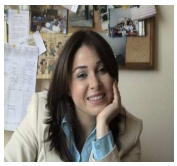

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REFERENCES

Altun, M. (1994). Matematik Öğretimi (2.Baskı), Bursa: Ak Ajans Matbaacılık.

Arsal, Z. (2007). Matematik Akademik Başarısı Yüksek ve Düşük İlköğretim Örgencilerinin Çalışma Stratejilerinin Karşılaştırılması. AİBÜ Eğitim Fakültesi Dergisi, 7, 1, 1-11.

Baykul, Y. (1990). İlkokul Beşinci Sınıftan Lise ve Dengi Okulların Son Sınıflarına Kadar Matematik ve Fen Derslerine Karşı Tutumda Görülen Değişmeler ve Öğrenci Seçme Sınavındaki Başarı ile İlişkili Olduğu Düşünülen Bazı Faktörler. Ankara: ÖSYM Yayınları.

Baykul, Y. (2001). İlköğretimde Matematik Öğretimi. (5. baskı) Ankara: Pegem A Yayıncılık.

Beswick, K. (2006). Changes İn Pre-Service Teachers' Attitudes And Beliefs: The Net İmpact Of Two Mathematics Education Units And İntervening Experiences. School Science and Mathematics, 106(1), 36–47.

Büyüköztürk, Ş. (2003). Veri Analizi El Kitabı, Ankara: Pegem A Yayıncılık.

Cheung, K.C. (1988). Outcomes Of Schooling: Mathematics Achievement And Attitudes Toward Mathematics Learning İn Hong Kong. Educational Studies in Mathematics. 19, 209-219

Çelik, H. C., & Bindak, R. (2005). Sınıf Öğretmenliği Bölümü Öğrencilerinin Matematiğe Yönelik Tutumlarının Çeşitli Değişkenlere Göre İncelenmesi. Kastamonu Eğitim Dergisi 13(2), 427–436.

Ethington, C.A., & Wolfle, L.M. (1986). A Structural Model Of Mathematics Achievement
For Men And Women. American Educational Research Journal, 5-75.

Karasar, N. (2004). Bilimsel Araştırma Yöntemi, 13. Baskı, Ankara: Nobel Yayın Dağıtım.

Ma, X. (1999). A Meta-Analysis Of The Relationship Between Anxiety Toward Mathematics And Achievement İn Mathematics, Journal for Research in Mathematics Education, 30, 5, 520-540.

Minato, S., & Yanase, S.(1984). On The Relarionship Between Students Attitudes Toward School Mathematics And Their Leves İntelligence. Educational Studies In Mathematics. 15, 313-320.

Özbey, N. (2007). İlköğretim Öğrencilerinin Ders Çalışma Alışkanlıklarının Bazı Değişkenler Açısından incelenmesi. Eskisehir Osmangazi Üniversitesi Fen Bilimleri Enstitüsü Yayınlanmamış Yüksek Lisans Tezi.

Peker, M., & Mirasyedioğlu, Ş. (2003). Lise 2. Sınıf Öğrencilerinin Matematik Dersine Yönelik Tutumları ve Başarıları Arasındaki İlişki. Pamukkale Üniversitesi Eğitim Fakültesi Dergisi, 14(2),

Pierce, R., Stacey, K., & Barkatsas, A. (2007). A Scale For Monitoring Students' Attitudes To Learning Mathematics With Technology. Computers & Education, 48, 285–300.

Senemoğlu, N. (2001). Gelişim Öğrenme ve Öğretim. Ankara: Gazi Kitabevi

Şahin,Y.F. (2000). Matematik Kaygısı, Eğitim Araştırmaları, (1) 2, 75-79.

Şengönül, T.(1995). İzmir' de Ortaöğretim Kuruluşlarında Öğrenci Başarısını Etkileyen Sosyo- Ekonomik Faktörler. Yayınlanmamış Yüksek Lisans Tezi. İzmir: Ege Üniversitesi.

Tapia, M., & Marsh, G. E. (2000). Effect Of Gender, Achievement İn Mathematics, And Ethnicity On Attitudes Toward Mathematics. Annual Meeting of the Mid-South Educational Research Association, Bowling Green, KY, USA.

Taşdemir, C. (2009). İlköğretim İkinci Kademe Öğrencilerinin Matematik Dersine Karşı Tutumları: Bitlis İli Örneği. Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi, 12, 89-96

Tekindal, S. (2009). Duyuşsal Özelliklerin Ölçülmesi İçin Araç Oluşturma, Ankara: Pegem Akademi.

Umay, A. (2003). Matematiksel Muhakeme Yeteneği. Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 24, 234–243.

Ursini, S., & Sanchez, E. G. (2008). Gender, Technology And Attıtude Towards Mathematics. Mathematics Education, 40(5), 559–577.

Yenilmez, K., & Özabacı, N. Ş. (2003). Yatılı Öğretmen Okulu Öğrencilerinin Matematik İle İlgili Tutumları Ve Matematik Kaygı Düzeyleri Arasındaki İlişki Üzerine Bir Araştırma. Pamukkale Üniversitesi Eğitim Fakültesi Dergisi, 14, 132–146. http://egitimdergi.pamukkale.edu.tr adresinden 15 ocak 2011 tarihinde indirilmiştir.

Yenilmez, K., & Duman, A. (2008). İlköğretimde Matematik Başarısını Etkileyen Faktörlere İlişkin Öğrenci Görüşleri. Sosyal Bilimler Dergisi. (19): 251-268.

Yıldırım, A,, Doganay, A., & Türkoglu, A. (2000) Okulda Basarı İçin Ders Çalısma Ve Ögrenme Yöntemleri, Ankara: Seçkin Yayıncılık.

Yılmaz, M. (2006). İlköğretim Altıncı Sınıf Öğrencilerinin Matematik Dersine İlişkin Tutumlarının Bazı Değişkenlere Göre İncelenmesi. Milli Eğitim Dergisi, 172: 240-249.

Yücel, Z., & Koç, M. (2011). İlköğretim Öğrencilerinin Matematik Dersine Karşı Tutumlarının Başarı Düzeylerini Yordama Gücü ile Cinsiyet Arasındaki İlişki. İlköğretim Online, 10(1), 133-143. [Online]: http://ilkogretim-online.org.tr

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THE MEETING LEVEL OF STUDENTS' REQUISITIONS FROM SCHOOL AS A LEARNING ENVIRONMENT

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ABSTRACT

The aim of this research is to determine meeting level of student requests for teaching-learning process, physical environment and social activities of the school, called learning environment. In this descriptive research, 30 item- "Student Aspirations from School" were used as a means of collecting data. The sample of the research is consist of 904 6, 7 and 8 graders from the primary schools in the city center of Ankara. For statistical resolutions of the data gathered during the research; frequency distribution, mean, standard deviation, T test, single direction variance analysis were employed. Significance level for difference tests was used as $p<.05$. Findings show that student aspirations from school are met in general. When examined in terms of dimensions, expectations are met at the highest level in teaching and learning activities, at the lowest level in the physical environment and capacity of the school. The level to meet the needs of the female students about teaching and learning process is higher than the males', but there is no significant difference between genders in physical environment and social activities dimensions.

Keywords: Learning environment, social activities, teaching and learning process.

INTRODUCTION

The school is one of the concepts that come to mind when mentioned education. The school, accepted synonym with education in all times in spite of criticism and remonstrance, maintains its existence as an educational institution. School is the most effective and critical one among the subsystems in educational system. It is multi dimensional, moreover it is directly related with the development, progress and improvement of the country (Açıkalın, 1998:2). In fact, the school is interactive and complex set of events, ceremonies, views, roles and activities and so on. At the same time, schools are basic units of change. School is a place that teachers come together and learning needs and demands of students and needs of the society are met. The education system has a steady relationship and interaction with the socio-economic, political and cultural systems around it. The changes and developments in these systems effects the school which is basic production units of education system. School is a resource center which meets the needs of the society and environment. Therefore, it has to realize itself according to the needs of the environment (Aytaç,2000:4). The general aim of the teaching and educational activities at school is to help children, the future of a country, develop themselves in a healthy manner in terms of knowledge, ability and behavior.

In spite of all the improvement efforts, students face many problems at school. If there are the things that can reduce students' confidence in learning environment, learning is blocked and the problems can continue. Therefore, the positive emotions of children in school also increases the desire to learn. When teachers and administrators arrange the school environment, they should support emotional life such as love, desire and hope. Some problems occur at schools. Teachersmay have problems, students may have problems and parents may have problems about the life of their children. The main point in solutions of the problems is to carry out students' aspirations. Students are in an environment that they do not prepare it by themselves, just find it ready. Sometimes students may have many problems at schools that are not suitable for their development. This can cause students get alienated from school environment.

Students' life at school, where they spent most of their time, the quality of their life, students' desire from school, and their problem at school effect the quality of education. We have to create a model school for our children to whom we will entrust our future. The quality at school refers to totality. When mentioning qualified school environment, we have to understand both the effectiveness of the physical site and a successful education environment (Ensari,2000:20). The most effective investment is for children. Because, in the future, a healthy children will be a citizen that is creative, productive, multidimensional thinker, effective communicator, happy and aware of his responsibilities and rights. The environment and the quality of the education determine students future success and indirectly their life quality.

The physical structure of the school should be suitable and attractive for view, usage and health requirements. Clean, well-kept and well equipped schools effects positively not only morale and also behaviors. As place, school or physical environment can effect their health, emotions, and performances negatively or positively. It can be very effective to make required arrangements at schools. Therefore, in educational institutions, these physical environment items should be considered: layout, number of students, color harmony, level of light and temperature, cleanness, noise and aesthetic.

As requests increase, schools get into the process of change. As basic item of the school, students are the most effected item of the change process. The basic requirement for the success of modernization efforts designed for student centered education is the meeting the student aspirations from school. Children are more successful in school when they feel themselves confident and happy. One of the factors that help children come school with happiness is the chance to present their creativity. Today, in parallel with the changes in technology, the student aspirations from school change. School organizations have to meet these aspirations and revise themselves. As a result of their mission, if education environments prepare individuals for the future have to be organizations that start and manage the change and development beside capturing the change(Özdemir, 2009:54). The mission of the education is to teach the requirements of life and new technologies, to make adaptations, to prepare children for the needs of information age, and to make new technologies usable (Sağlam 1998). This can just be performed by the help of qualified schools. As stated by Richard and Wallace in 1992, students are goals of educational institutions. Educational institutions should adopt suitable education for the needs of their students. If educational institutions can not understand these needs and requests and can not reply and produce resolutions for them, they will have problems to survive cited in: Cafoğlu,1996:134).

If some students can be successful even in a system having failure and defectiveness, we should identify individual failures resulting unsuccessfulness. Just in this way, we can educate students that can set goals, behave in parallel with these goals, like searching, productive and modern. They should be requested what they can do. The students that gain success easily control their fear and anger. They feel that they are important. So, they have reasons to love the school much. The higher level of the meeting the expectations of the students having bigger expectances from school make them more dependants to school.

Students, who are social individuals, need extracurricular activities in the times they spend at school. Students also want to meet these needs. Extracurricular activities are the most significant elements of teaching process. Social club activities are activities that can be performed at free times and they need to be performed voluntarily. At schools, these activities are student social clubs that we can identify them as extracurricular activities or social activities. Social clubs are expected to fill a big gap in education with this function. Today, education carry out the continuous information transfer, but social education reflected in behaviors is of secondary importance. Social club activities are activities that can be performed at free times and they need to be performed voluntarily (Pepe and Mamak,2005:53).

In our schools, we do some curricular or extracurricular activities to perform this goal. In our educational institutions, we should not ignore the attributions of extracurricular activities on education. However, in our

educational institutions extracurricular activities are of secondary importance. Because pupil personnel services are set of various services that examine the students in all dimensions and help them develop to a suitable level. Pupil personnel services cover the activities that give importance on individuals about individual differences, the efforts for meeting the needs, attitudes, values, emotions and personal goals. Social cultural activities are the activities covered by pupil personnel services (Yeşilyaprak,2004:4).

The basic function of the schools is to help students adapt the society they live in and to educate them suitable for the requirements for the age. In this context, in the curriculum of a modern school, there should be mandatory courses, guidance towards physical and mental health, food and health care services, and social and cultural activities attributing multidimensional development (Gültekin; 2007:72). One of the problems in Turkish educational system is that students do not feel themselves happy at school. Students should come to school excitedly, they should take part in the extracurricular activities and the school should be the start point of the friendships that continue for lifelong (Özdemir; 2009:4).

School is an open system. It is effected by the changes in itself and in the environments. Because researchers often state that students' aspirations are related to academic performance, being healthy and the education including leadership skills (Bickel, R &Lange, L. 1995). There are many factors for students to love school and to be happy. School is multidimensional and we should look at three dimensions to search the meeting level of students' aspirations from school. These are physical environment and facilities of the school, social activities, and teaching and learning process. Thus, the main problem of this research is that students have various desires about the school that they spent an important part of the day, and what level do today's schools meet these desires?"

Depending on this main problem, we will try to answer following six questions:

1. What are the students' views about the meeting level of their desires from teaching – learning dimension?
2. What are the students' views about the meeting level of their desires from physical environment and facilities dimension?
3. What are the students' views about the meeting level of their desires from social activities dimension?
4. Is there any significant difference between genders about students' perception on teaching – learning process, physical environment and facilities, and social activities dimensions?
5. Is there any significant difference between grades about students' perception on teaching – learning process, physical environment and facilities, and social activities dimensions?

METHODOLOGY

Model of the Research

This research is a descriptive study in scanning model on identifying the meeting level of students' aspirations about teacher, teaching – learning process, physical environment and facilities, and social activities. Scanning models are research approaches that aim to describe a situation existed in the past or in present as what they are. The event, individual or object are tried to be described in its own terms, and without any attempts to change or effect (Karasar, 2005, s.77).

Universe and Sample

The universe of this research is 6,7, and 8 graders attending secondary stage of state primary schools in city center of Ankara. Among 581 schools from the central districts of Ankara, two schools from each district – Çankaya, Yenimahalle, Mamak, Altındağ and Keçiören – were selected randomly. In total, we applied questionnaire in 10 schools in Ankara city. In each school, we performed study in one classes of each of 6, 7 and 8 grades. In total, 904 students, of which 442 (48.9%) were male and 462 (51.1%) were female, attended

the study applied in the randomly chosen branches. 308 (34.1%) of the students were 6 graders, 314 (34.7%) of them were 7 graders and 282 (31.2%) were 8 graders.

Data Collecting Tools

The researcher developed a questionnaire to collect the needed data for statistical analysis of the sub problems of the research. The data collecting tool is formed of two sections. In the first section, personal information of the attendants such as gender, school, and class took place. In the second section, "The Scale of Primary School Students' Aspirations from School" about the meeting level of their aspirations from school took place. The scale is formed of five point likert scale. The grading in the scale is "I never agree =1", "I disagree =2", "I am not sure=3" "I agree=4" and "I absolutely agree= 5".

In order to form the dimensions used in the research, we asked "what are your aspirations from school?" to the students attending primary schools in city center of Ankara. The answers given by the students were recorded and their views and statements were taken into consideration. At the end of the process, we formed an item pool consist of the students' statements. After scanning local and foreign literature, we prepared a 48 – item rough scale stated in 1) Physical environment and facilities, 2) Social Activities and 3) Teaching and learning dimensions of school. These items were examined in terms of content validity and 8 of them were removed from the scale in directions of the experts. This rough scale was read to a number of classroom teacher and 6, 7, and 8 graders and then, if there, unaccountable points were corrected. After the needed corrections, there were 30 items in the scale and pilot scheme of the scale was applied.

In order to conduct validity and reliability studies, pre-application studies were conducted in two primary schools excluded from the scope of the research. 192 students from two primary schools in Ankara attended this pilot scheme (6 graders: 70, 7 graders: 64 and 8 graders: 58). 76 (39.6%) of students were male and 116 (60.4%) of them were female.

Data from the pilot scheme entered on the computer and factor analysis was performed using SPSS 15.0 program. Before the factor analysis for construct validity of the scale, data from the pre application were controlled against incorrect coding. Then, missing plot analysis was conducted; and, we set value to randomly blanked items via EM algorithm. The structure validity of the scale was tested by exploratory factor analysis. Principal Components Analysis as extraction and Varimax as rotation technique were used. As a result of analysis, 10 item, of which factor loads are under .30 and which load more than one item, were removed from the scale and then the analysis was repeated. "The Scale of Primary School Students' Aspirations from School" has a structure with three factors. The total variance identified by these factors is about 49%.

The first factor of the scale is named "teaching-learning process". This factor is consisting of six items. The factor loads of the items have values between .52 and .77and the explained variance is about 12%. The second factor is "physical environment and facilities" which is formed of 8 items. The factor loads of the items in this factor have values between .44 and .67. the total variance explained by this factor were found as 11%. The third factor of the scale was named as "social activities". There are six items in this factor and the factor loads of the items have values between .47 and .71. The variance explained by social activities factor is about 9%. Cronbach's Alpha internal consistencies for the factors in the scale are .85 for teaching-learning process factor, .74 for physical environment and facilities factor and .73 for social activities. As a result, twenty items representing the three factors took place in the scale. These items were renumbered in the process of finalizing the scale. Thus, the scale took its final form based on the pre application results and the main application started. Explained total variance is about 49%. KMO=.87, Bartlett's test of Sphericity=2352.713(p<.001).

The Analysis of the Data

After the data collected from the research were transferred on the computer, the data set was checked against incorrect coding. The incorrect coding was corrected. We conducted outlier analysis and 17 questionnaire were

removed from the questionnaire set because of the outliers. Thus, the number of the questionnaires used in the research was identified as 904.

After the questionnaires administered on students were considered as valid, the data collected from 904 students were transferred on SPSS For Windows 15 packet program to be analyzed statistically. After transferring process, the percentage and frequency values were counted according to personnel characters of the students replying the questions. Distributions of Students' aspirations from school were determined according to replies. For these calculations, the means of students' replies and standard deviations were used. We used T test to determine whether there is a meaningful difference between means of dependent variables according to independent variables such as gender and grade. On the other hand, one direction variance analysis (ANOVA) to determine the effect of other multiple independent variables on dependent variables. In order to determine between which grades there is meaningful difference according to the variables of grade, Tukey-HSD multiple comparing test were conducted. In the process of commenting the analysis results, mean (X), standard deviation (S) and meaningfulness (p) values were studied.

FINDINGS AND COMMENTS

All the sub problems were analyzed one by one, and the findings and comments about analyses took place in this section of the research.

Findings and Comments on the First Sub Problem

We used mean and standard deviation and the analyses to find an answer to the sub problem "What are the students' views about the meeting level of their desires from teaching – learning dimension?"

Table 1: Mean, Standard Deviation, And Order Of Importance Values Of The Items In Teaching – Learning Dimension.

Items	X	S	Order
1. The activities related to research and thinking are applied in the lessons.	3.95	1.12	2
2. Applications and experiments related to the subject are conducted in the lessons.	3.61	1.25	6
3. We apply new projects in the lessons.	3.63	1.20	5
4. Lessons are processed actively.	3.85	1.11	3
5. Our teachers explain the aim of the lessons at the beginning of the lesson.	3.77	1.25	4
6. Teachers give lectures suitable for the lessons.	4.35	.93	1
General mean of the dimension	**3.86**		

In teaching-learning dimension, there are six items in order to measure the meeting level of the students' aspirations. The general mean of the dimension is measured as 3.86. For this dimension, some of the items show that the meeting level of students' aspirations is high; on the other hand, some of them show the meeting level of students' aspirations is low. According to Table 1, students agree on I6 "Teachers give lectures suitable for the lessons" (X=4.35) more than the other items. Because each subject has a unique method of teaching, adequate meeting of students' aspirations for this item provides students a better understanding. Students highly agree on I1 "The activities related to research and thinking are applied in the lessons" (X=3.95). The main aim of the new curriculum for primary schools is not to store knowledge in students' minds, but to show the ways to reach other knowledge by using the existing knowledge. The reason why this item is highly agreed on is that students consider the activities related to research and thinking in the lessons enough. The other item students highly agree on is I4 "Lessons are processed actively" (X=3.85). Processing the lessons actively both attracts their attention and helps them learn the subject better.

Students' agreement is low on I5 "Our teachers explain the aim of the lessons at the beginning of the lesson"(X3.77), I3 "We apply new projects in the lessons"(X=3.63) and I2 "Applications and experiments related to the subject are conducted in the lessons" (X=3.61). Students want to learn at the beginning how they will learn the course and what they will do in the course. The meeting level of their aspirations is under the general mean of the dimension. Application of new projects in the courses increases students' motivation and creates a new excitement. With the beginning of new curriculum, application of new projects has become one of the main goals of the courses. We can state that the students' aspirations are not met by teaching-learning dimension. In this dimension, the item students agreed on lowest level is applications and experiments related to the subjects. Students learn best if they learn it by doing it. Teachers should do experiments to support this item.

Findings and Comments on the Second Sub Problem

We used mean, standard deviation and analyses to find a reply for the sub problem "What are the students' views about the meeting level of their desires from physical environment and facilities dimension?" We considered the school buildings and the order of these buildings in physical environment and facilities.

Table 2: Mean, Standard Deviation And Order Of Importance Values Of The Items In Physical Environment And Facilities Dimension.

Items	X	S	Order
7. I do P.E. lessons in our school's sports center easily.	3.24	1.58	6
8. School corridors can meet our needs.	3.60	1.37	1
9. Our science lab is suitable for our course.	3.48	1.51	2
10. Our school library is usable and sufficient.	3.43	1.40	4
11. Our computer lab is sufficient.	3.45	1.46	3
12. Our multipurpose hall is suitable for us to perform our activities.	3.31	1.48	5
13. Our desks are comfortable.	2.74	1.49	8
14. Our canteen is sufficient to meet our needs.	2.93	1.54	7
General mean of dimension	**3.27**		

The general mean of the "physical environment and facilities" dimension is X= 3.27 in the data related to the students' views. The physical environment of the school should be rearranged according to the results of these data. According to Table 2, the highest agreement of students is on I8 "School corridors can meet our needs" (X= 3.60). The crowded populations of the schools need broad corridors. National Ministry of Education has some studies on this subject and broad corridors are needs of students. Moreover, students have some expectations for this. We can state that students' aspirations on this item are met. The following item is I9 "Our science lab is suitable for our course" (X=3.48). the science labs are physical site that students can do experiments related to topic besides the theories of the courses. With the new curriculum, experiments have bigger importance in the courses; thus, science labs have greater importance than the past. By considering the replies, we can state that the existing labs meet the needs of students.

I11 "Our computer lab is sufficient" is of third highest agreement. Our age is communication age. So, computer labs are the main environments of our schools. The computer labs at schools help students know the technology and use it. So, this increases students' expectations from school. In recent years, National Ministry of Education support schools with computer labs and sufficient materials. Thus, the meeting level of students' aspirations is high. I10 "Our school library is usable and sufficient" is partly met because students do not read very much. Students need rich libraries that they can easily benefit and they have easily chance to read. Because it is not enough for them to emphasize the importance of reading at schools.

In physical environment and facilities dimension, the meeting level of I12 "Our multipurpose hall is suitable for us to perform our activities" is (X=3.31). Students want to exhibit the drawings, paintings and technological and designed productions and to perform poem concerts and theatre with their friends. Multipurpose halls meet the students' aspirations. The following item is I7 "I do P.E. lessons in our school's sports center easily" (X= 3.24). Students are very active in this age. So, they want to relaxed after boring courses in the classrooms. The P.E.courses students can do sports regularly and the sports center is a subject that students highly have highly expectations. The students participated in the research state that the physical environment and facilities dimension meet their desires.

Students agreement is low on I14 "Our canteen is sufficient to meet our needs" (X=2.93) and I13 "Our desks are comfortable" (X= 2.74). The food need of students who spend most of their time at school cannot be met sufficiently. The reason is that there is not enough place for canteens at school, there is much ready-made food and the brakes are very short. So the meeting level of their needs is low. The lowest agreement in this dimension is on I13 "Our desks are comfortable". The students are not happy with the desks at the schools. There are some deficiencies on this subject because they want comfortable desks and relaxed sitting order. To overcome the deficiencies help them meet their aspirations from school.

The schools are sufficient to meet the students aspirations such as broad corridors, science labs, computer lab, library, multipurpose hall and sports center. School canteens and desks are not sufficient to meet their aspirations. It is useful to design the canteens to meet their needs and to revise the desks.

Findings and Comments on Third Sub Problem

We used mean, standard deviation and analyses to find a reply for the sub problem "What are the students' views about the meeting level of their desires from social activities dimension?". We searched for the attributions of social activities - apart from classic teaching programs – on teaching. We searched how we can transfer information without memorizing. There are six items in this dimension.

Table 3: Mean, Standard Deviation And Order Of Importance Values Of The Items In Social Activities Dimension

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Items	X	S	Order
15. I can participate in the club activities in our school.	3.83	1.30	2
16. I express myself in curricular and extracurricular activities.	3.91	1.13	1
17. The club activities in our school are sufficient.	3.61	1.33	4
18. There are activities such as cinema, theatre and so on in our school.	3.36	1.52	5
19. We do community services in social activities.	3.27	1.36	6
20. Teachers and students work actively in social activities.	3.67	1.32	3
General mean of the dimension	**3.61**		

The average value of this dimension is X=3.61. When we consider all the items in this dimension we can state that the meeting level of students' aspirations is clearly high. According to the Table 3, the highest agreement is on I16 "I express myself in curricular and extracurricular activities" (X=3.91). The students, who spend most of their time at school, want to have curricular and extracurricular activities that they can express themselves. We can state that the aspirations of students are met by the schools with the help of new Social Activities Regulations. Thus, students participate in these activities. The more students express themselves, the more they meet their needs.

The second item is I15 "I can participate in the club activities in our school" (X=3.83). Students state that the activities are not just written ones so, they can participate in these activities actively. Considering the replies, we can state that this item is also sufficient to meet their needs. The following item is I20 "Teachers and

students work actively in social activities" (X=3.67). The value of this item is above the general mean of the dimension. That teachers give importance to the social activities and they work actively help students be interested in these kind of activities.

I17 "The club activities in our school are sufficient" (X=3.61). After the school starts and the class represents are chosen, the needed social clubs should be established according to the type of institution, the level, facilities, the economic, social, cultural and geographical characteristics of the environment in a meeting. Students consider the social clubs sufficient.

There are two items below the general mean of dimension: I18 "There are activities such as cinema, theatre and so on in our school" (X=3.36) and I19 "We do community services in social activities" (X=3.27). The lack of teacher educated on theatre and cinema in our schools results in low meeting level of students' aspirations on this items. According to the Social Activities Regulations, community services are performed according to the work plans or projects prepared individually or in groups in the cover of social clubs suitable for their age and level. There are these kinds of activities. However, because of the lack of teachers who can guide these activities, and the limitations of possibilities and the lack of students volunteer for these activities, they cannot be performed sufficiently. The meeting level of these items is under the general mean of the dimension.

The data collected in the direction of students' views show us that students need to perform activities such as community services and theatre at schools in order for students to change behaviors as requested and to evaluate the meeting level of their aspirations from school. In order to meet their aspirations, extracurricular activities should be more and they should do studies that help them develop their imaginations and skills apart from memorizing. Thus, they can learn by doing, seeing and amusing.

Findings and Comments on Fourth Sub Goal

In the fourth sub problem of the research, we try to search whether the gender of the students is a variable according to the level of meeting their aspirations. The T test results of their perception - according to their gender - related to teaching and learning process, physical environment and facilities and social activities are shown in Table 4.

Table 4: T Test Results According To Gender

Factors	Gender	N	X	S	t	p
Teaching learning process	Male	442	3.75	.85	-3.937	.000
	Female	462	3.96	.74		
Physical environment and facilities	Male	442	3.28	.96	.279	.780
	Female	462	3.26	.94		
Social activities	Male	442	3.56	.93	-1.576	.115
	Female	462	3.66	.91		

When we consider Table 4, there is a meaningful difference between genders about teaching learning process (t=-3.937, p<.05). the mean of the views of male students on teaching and learning dimension is 3.75; on the other hand, this is 3.96 for female students. Thus, we can say that female students have a positive perception about teaching and learning process. According to the data in Table 4, there is not a meaningful difference between genders about the evaluation of students about physical environment and facilities (t=.279, p>.05). ın other words, the students' views about physical environment and facilities do not change according to being male or female. The meeting level of male students' aspiration from school about physical environment and facilities is 3.28, the value of female students' meeting level is 3.26. In the same way, there is no meaningful

difference between genders about social activities. The average value of male students is 3.56; on the other hand, the value of female students is 3.66. The difference is not meaningful statistically. We can state that the students' views about performing social activities do not change up to genders.

Findings and Comments on Fifth Sub Goal

In the six sub problem of the research, we study the difference of meeting level of students' aspirations from school according to the grades. We think that the meeting level of students who are in different grades and different developmental age also changes. The descriptive data according to students' perceptions about teaching- learning process, physical environment and facilities, and social activities is on Table 5 and single direction variance analysis (ANOVA) is given on the Table 6.

Table 5: Descriptive Data According To Grade Variable

Factors	Grade	N	X	S
Teching learning process	6th grade	308	4.06	.76
	7th grade	314	3.86	.80
	8th grade	282	3.64	.79
	Total	904	3.86	.80
Physical environment and facilities	6th grade	308	3.58	.87
	7th grade	314	3.16	.96
	8th grade	282	3.05	.94
	Total	904	3.27	.95
Social activities	6th grade	308	3.88	.84
	7th grade	314	3.54	.92
	8th grade	282	3.38	.92
	Total	904	3.61	.92

308 student from 6th grades, 314 students from 7th grades and 282 students from 8 grades participated in the research (904 in total). 6th grade students have the highest level of meeting their aspirations in teaching learning process, physical environment and facilities and social activities; on the other hand, 8th grade students have the lowest level of meeting their aspirations.

Table 6: ANOVA Results According To Grade Variable

Factors	Resource of variance	KT	Sd	KO	F	p	Difference (Tukey)
Teaching learning process	Inter groups	25.931	2	12.965	21.068	.000	6>7
	Inside the groups	554.473	901	.615			6>8
	Total	580.403	903				7>8
Physical environment and facilities	Inter groups	47.685	2	23.843	27.938	.000	6>7
	Inside the groups	768.915	901	.853			6>8
	Total	816.600	903				
Social activities	Inter groups	40.177	2	20.089	25.145	.000	6>7
	Inside the groups	719.809	901				6>8
	Total	759.986	903	.799			

When we consider Table 6, according to grade variable, there is a meaningful difference in their views on meeting level of their aspirations about teaching – learning process (F=21.068,p<.05). The average value of perception scores of 6th graders from teaching – learning process dimension is 4.06; on the other hand, this value decreases 3.86 for 7th graders and 3.64 for 8th graders. The higher the grades of students, the meeting level of students' aspirations from teaching – learning dimension decreases. 8th graders think that their needs about teaching and learning process are met lower than 6th and 7th graders.

There is a meaningful difference in their views on meeting level of their aspirations about physical environment and facilities of schools (F=27.938, p<.05). According to the results of Tukey-HSD multiple comparison test, 6th graders (X=3.58) have a more positive perception of physical environment and facilities dimension than 7th (X=3.16) and 8th (x=3.05) graders. The higher grades, the students' perception about physical environment and facilities decreases. This finding resembles the fact that the higher grades, students' perception about teachers and teaching-learning process decreases. In the research, we can state that 8th graders have a more negative perception about school environment.

Students' perception about the meeting level of their aspirations about social activities shows a meaningful difference in terms of grade variable (F=25.145, p>.05). While the mean of perception scores of 6th graders about social activities is 3.88, this value is 3.54 for 7th graders and 3.38 for 8th graders. The results of the multiple comparison tests show that 6th graders consider the social activities applied at school. The students' perceptions about social activities get negative as the grade gets high just as in the perceptions about teaching –learning process and physical environment and facilities.

DISCUSSION AND RESULT

The following is the summary of the results suitable for sub goals.

The items having the lowest meeting level are about the comfort of the desks and efficiency of the school canteens. Students think that the desks are not comfortable. Students who spend most of their time at school and spend most of this time by sitting on these desks want comfort. We conclude that the canteens where food needs of students are met are under the expectations. Canteens are the place students' aspirations are met in a low level. We can state that giving lectures suitable for the courses, the activities towards research and applications, and actively given courses meet the expectations in teaching –learning dimension. In this dimension, doing applications and experiments in the courses, applying new projects in the courses and giving the aim of the courses at the beginning meet the students' expectations in a lower level.

We can state that students think the school corridors meet the need, science and computer labs are sufficient in physical environment and facilities dimension. In this dimension, students state that students' desks are not comfortable and school canteens are insufficient. Moreover, students state that the elements such as lightening, heating, the colors on the walls and cleanness of the canteens and the classes are insufficient. However, the researchers claim that the colors of the wall in classes and labs help visibility and identity; and increase the success (Hamilton, L. C.& Seyfrit, C.L. 1993). The main aim of the lightening of canteens and classes is to support a good education environment. Heating and the distribution of heat at schools is significant. Because, one of the most important problems in teaching - learning process is the heating of the classrooms. The temperature of the classrom environment is important for a healthy teaching - learning process. Because, the temperature produced by the instruments in the classroom, lights and the radiation of the sun produce the needed temperature for learning, even if the weather outside is under 25 celcius. Thus, we should determine the temperature of the classroom by considering the temperature produced by the instruments in the classroom and the weather outside (Dick, W., & Carey, L. 1985).

Students' expressing themselves in curricular or extracurricular activities, their participation in social club activities show that students' aspirations are met in social activities dimension. We conclude that the items under the mean of the dimension are sufficient, there are cultural activities and community works meet the students' aspirations. 6th graders have a higher meeting level on the question "Is there any significant difference between genders about students' perception on teaching – learning process, physical environment and facilities, and social activities dimensions?" than 7th and 8th graders. Moreover, as the grade of the students gets higher, the meeting level of their aspirations gets lower. In recent years, in the theories researchers and theoreticians claims, if students' aspirations from school are met, there will be significant improvement in their mental development and their academic success (Gardner, 1940; Kirsch, 1986; Lewin Dembo Festinger & Sears, 1944). We can see that students feel themselves happy and they improve their leadership skills when their aspirations are met.

Another sub problem of the research is whether there is a difference between genders about the meeting level of the students' aspirations. According to this question, the meeting level of female students' aspirations from school in teaching – learning dimension is higher than male students'. However, there is no meaningful difference between genders in physical environment and social activities dimensions. We formed these suggestions based on the results of the research: the students' desks can be designed in a more modern way in terms of students' physical characteristics. The desks can be varied according to the grade level of the students. The desks which have to be maintained can be mended before they result in discomfort. We should support rich libraries that students can use easily, prepare their project and performance works, and study individually in curricular or extracurricular times. During office hours, the computer labs should be used by students in controlled way for them to use computers in all fields easily.

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REFERENCES

Açıkalın, A. (1998). Social and Theoretical Aspects of the School Management. (Fourth Edition) Ankara, Pegem Publishing.

Alacapınar, F. (1999). Private and Public School Teachers' Classroom Activities. (Unpublished Master Thesis), Hacettepe University, Ankara.

Alıcıgüzel, İ. (1999). Contemporary school of Education and Training. Systems Publishing 2 Print, Istanbul.
Başar, H. (2002). Classroom Management. (Sixth Edition): Pegem A, Ankara.

Başaran, İ.E. (2000). Educational-Management and School Skilled. Feryal printing, Ankara.
Bickel, R.& Lange, L. (1995). Opportunities, Costs, and High School Completion in West Virginia: A replication of Florida Research. The Journal of Educational Research, 88, 363-370.

Bursalıoğlu, Z. (2000). Understanding in Education Management System to analyze Pegem A, Ankara.

Cafoğlu Z. (1996). Total Quality Management in Education. Foundation of Hope İstanbul.

Çelik, V.(2002). Classroom management. Nobel, Ankara.

Çınkır, Ş. (2004). Effective teacher-student relationships at school. number 161 Journal of Management Education, Ankara.

Demirel, Ö. (1995). General Teaching Methods. USEM, Ankara.

Dick, W., & Carey, L. (1985). The Systematic Design of Instruction. Glenview, IL: Scott Foresman.

Doğan, E. (2002). Total Quality Management in Education. Academyplus, Ankara.

Dönmez, H. (2006). Expectations of parents of students at grade, the views of primary school. Unpublished Master's Thesis of Afyon Kocatepe University, School of Social Sciences.

Erden, M. & Altun, S. (2006). Learning Styles Morpa, Istanbul.

Gardner, J.W. (1940). The Use of The Term “Level of Aspiration.” Psychological Review, 47, 59-68.

Göksoy, S. (1997). Characteristics of the Goals of Education. Journal of Modern Education, pp: 229 Ankara, Turkey.

Hamilton, L. C.& Seyfrit, C. L. (1993). Town-village Contrasts in Alaskan youth Aspirations. Arctic, 46, 255- 263.

Karasar, N.(2005). Scientific Research Method. (On the fifth edition), Nobel, Ankara.

Karslı, D.M. (2003). Introduction to Teaching Profession. Pegem A, Ankara.

Kemiksiz, Z.(2002). More loved by the students of a school's Properties (Ankara Province Haymana County Case). Unpublished Master Thesis, Hacettepe University Institute of Social Sciences.

Lanford, D. P. & Barbar, C. (1999). Kalder Quality Management in Education Publishing No: 29, Istanbul.

MEB (2005). Primary Education Institutions Primary and Secondary Social Activities Regulation.

Memişoğlu, S.P. (1995). Individual and Society School. Function (unpublished master's thesis), Inonu University, Malatya.

Özden, Y. (2005). Re-establish a school of translation Nobel, Ankara.

Özgüven İ.E. (1999). Contemporary Education Counseling and Guidance Pdrem, Ankara.

Pepe, K. & Mamak. H. (2002). Views on physical education and sports teachers and participation in leisure activities between levels 7.international Sports Sciences Congress, Antalya, Turkey.

Sağlam, M. (1998). Education in the Information Age. Journal of the New Turkey (19) 794-797. Ankara, Turkey.

Sarı, M. & Cenkseven F. (2008). Elementary school students, the quality of life and self-concept. www.insanbilimleri.com 5:2 International Journal of Human Sciences.

Sarp, N. (2000). What Should be method's school Children?. Cukurova University Journal of Education Volume: 2 Issue: 18 h :110-116, Adana, Turkey.

Senemoğlu, N. (2004). Developmental Learning and Instruction. 10, Gazi Bookstore print, Ankara.

Şendur, P. (1999). Atmosphere, and the motive of''Class. Unpublished Master Thesis, 9 Eylul University, Izmir, Turkey.

Şimşek, N. (1991). Use effectiveness of secondary education. Unpublished Thesis, Ankara University School Buildings.

Varış, F. (1997). Training Program Development Alkım, Istanbul, Turkey.

Yılmaz, K. (2007). 6,7 and 8 Elementary School Feedback on Students' School Life class. Kastamonu Education Journal Volume: 15 h :485-490. were taken on 17 April 2009 at http://www.ksef.gazi.edu.tr.

Yalın, H.İ. (2001). Instructional Technologies and Material Development. 4. Print, Nobel, Ankara, Turkey.

Yeşilyaprak, B. (2002). Educational Guidance Services 4. print Ankara, Turkey.

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VIRTUAL INSTRUMENTATION AS AN EFFECTIVE ENHANCEMENT TO AN ELECTRONICS LABORATORY EXPERIMENT

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ABSTRACT

This paper describes a tool to improve the electronics laboratory process. The tools really constitute a virtual electronic laboratory because it is made up of a set of virtual experiments with a user-friendly graphic interface and interactive simulated electronic instruments relating practical concepts with theoretical ones. The combination of the demonstration and the virtual electronic laboratory constitute a bridge between theoretical lessons and laboratory classes. The professor can use the experiments of the virtual laboratory in the classroom to improve student retention. Using this tool, undergraduate students improve their performance and increase their efficiency in the laboratory. A pilot experience has been implemented for Basic Electronics. This work demonstrates that instrumentation experience is greatly enhanced by integration Virtual Instrumentation into the Laboratory. The incorporation of computer data acquisitions into the undergraduate laboratory provides students with a valuable tool for data collection and analysis.

Keywords: Virtual Instrumentation, Laboratory Experiments, Learning Tool, Computer Technology.

INTRODUCTION

The computer technology has the potential to provide a highly interactive and powerful learning environment for science and engineering disciplines. As Education and technology merge, the opportunities for teaching and learning expand even more. However, the very rapid rate of change in the fields of technology poses special problems for academic institutions, specifically for the science and engineering disciplines. There is of course a continual need to update and augment the content of curriculum to keep pace with this change, but it is in the area of science education and experimental work where major concerns arise. The central problem still remains the same; providing for students meaningful and relevant practical experiences while being limited by very finite resources in the provision of laboratory hardware and infrastructure. One solution to this problem is to use computer based techniques to interface the students with the physical world, with suitable front end design to provide increasing sophistication and increased flexibility. Although a number of computer-based customized engineering courses and test systems [Pudlowski, (1995)] ,have been developed within the past ten years to replace conventional engineering courses, they have a number of limitations such as inflexible and unfriendly programming structure, excessive cost, hardware limitations, short and long-term incompatibility issues. However, due to recent technological advances in computer technology and software, it is now feasible to implement more advanced, more efficient, highly interactive and very user-friendly systems without using very costly custom-written software and tools. Virtual Instrumentation is an important technology that is making a significant impact in today's industry, education and research. Virtual instrument software can be used for simulation, and with appropriate interfacing, it can also be applied to data acquisition and control. Any instrument that has a GPIB capability includes in its manual a listing of GPIB commands. These commands can be used in LabVIEW environment to build a custom instrument driver whose functionality satisfies individual

needs. As needs change, these drivers can be easily modified and expanded. An additional benefit of the custom tailored instrument driver is the inclusion in the same software package specific data processing tasks that a commercial package will not have. The VI that integrates instrument control and data processing can be modified and expanded with relative ease to include other instruments as well as additional processing tasks. For example, the waveform that an oscilloscope is displaying in process monitoring operation can be imported into a GPIB VI over the GPIB bus. The data can then be displayed on a waveform graph or stored to a file for future reference. The data can also be applied to immediate signal processing such as displaying its frequency spectrum in order to assess process performance in real time. This paper describes this type of instrument control for three different instruments with data processing.

The literature reviews indicate that LabVIEW is one of the primary choices in designing control and analysis solutions in the area of engineering technology and education. Some of the exceptional LabVIEW user solutions are reported, as `user solutions' by the National Instruments Corp. (1999), which all are multidisciplinary engineering solutions. The reference [Virtual Instrumentation in Education, Conference Proceedings, (June 1997)] contains many papers and covers: mechanical engineering, electrical and nuclear engineering, physics, biomedical engineering, chemistry and chemical engineering, and data acquisition and instrument control over the Internet. Lee (1996), integrated LabVIEW software into an instrumentation and experimental methods course for mechanical engineering students. Other researchers have developed LabVIEW applications for students in agricultural and biological engineering (Sumali, (2002)). mechanical and industrial engineering (Crist(2001)), and engineering technology (Bachnak(2002),Chen(1998),Chickamenahalli *et al*(1998), Krygowski (2001),). Some specific instances of LabVIEW-based experiments in introductory chemistry laboratory courses have been reported by others [Drew (1996), Muyskens *et al* (1996), Beasley *et al* (1999).

An advanced teaching/learning laboratory can be developed by purchasing completely new equipment. However, this approach is the most expensive solution for academic institutions. An alternate cost-effective solution is to take the old laboratory, proven systems, and retrofit them with the computer data acquisition systems and develop custom-written software to suit the existing experimental modules.

Furthermore, when technology-intensive teaching tools become widely available, the traditional roles of the university lecturers will change from pure classroom-based teaching to one of consultation, advice and direction giving. However, it is believed that the technology-based course will not eliminate the educators; instead it will change the type of activities the educators carry out. In the technology-based teaching/learning practice, the major activities of the lecturers may include preparation of the software packages, adopting new concepts and new teaching practices, modifying existing materials to suit the changes introduced in the latest version of the multimedia tools, and above all these they can spend time to continuously evaluating the teaching/learning outcomes.

This paper is a result of my development effort to include virtual instrumentation experiments in the electronics laboratory of the undergraduate programme of B.Sc. Electronics.

EXPERIMENTAL SETUP

In the laboratory applications, from the technical point of view, all the science problems deal with some physical quantities such as temperature, speed, position, current, voltage, pressure, force, torque, etc. A computer equipped with the suitable interface circuits, data acquisition systems and software, can give a visual look to these quantities, and can process the acquired data. Figure 1 illustrates the common features of a computer-assisted real-time experimental module.

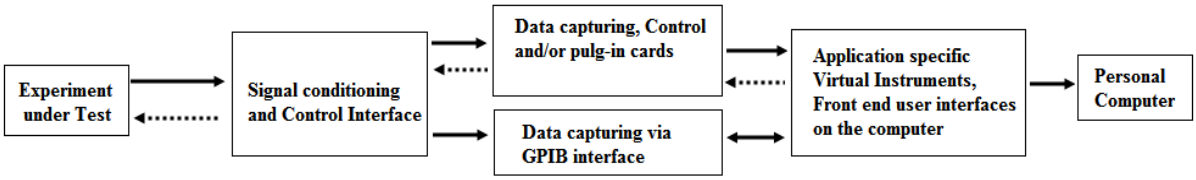

Fig. 1:The general block diagram of a Virtual Instrumentation -based laboratory system.

DEVELOPMENT OF SOFTWARE

A number of interactive computer-delivered simulation, control, and scientific visualization software solutions are available in the market, and many application-specific tools have already been reported in the literature [Pudlowski, (1995)], which use diverse software, such as Hypertext, Authorware, Director, Labtech, Visual C.., Visual Basic,Matlab/Simulink, and LabVIEW. It is found that the following criteria may be contemplated [Dehne, (1995)] for selecting application software to build virtual instrumentation used in Science and engineering education:

- Modularity, allows to test individual modules easily and to develop applications quickly.. Multi-platform portability enables designers to work on separate parts and compile them on one platform.
- Compatibility with existing code, allows incorporating with previous applications, and also with the previous versions of the software.
- Compatibility with hardware, to be able to gather data from different interface hardware.
- Extendable libraries, to let the designer build libraries of low-level routines to link them in higher level systems.
- Advanced debugging features, to optimize product design and to determine a defect in the code.
- Executables, to avoid alteration, to hide the code or to create standalone applications.
- Add-on packages, which indicate the market acceptance of the product and speed the development.
- Performance, to ensure that the end product meets the required performance.
- Intuitive Graphical User Interface (GUI), enables a user to look at it and see what needs to be done.
- Multimedia capabilities, for future developments.

However, due to the diverse nature of the lectures and the laboratory courses in every institution, custom-built software and hardware development is required most of the time. In addition, due to the fast developments in technology, the choice of the software and hardware should be considered carefully along with the cost. The ideal software tool should have all the features listed above. However, the commercial packages available in the market for the science and engineering courses are either very complex to use or do not provide all the necessary functions to achieve the certain tasks, or are too expensive. The LabVIEW software allows for the creating of application-specific templates (sub-virtual instruments) to reduce the production time for the identical subjects. Many useful functions can be incorporated with the LabVIEW programs to perform very useful tasks in a laboratory virtual instrumentation system design. Some of these useful functions [National Instruments, (May 1999)] are listed below:

- adding warning/message sounds or voices;
- providing instructions, pre-practical tutorials and/or interactive short-tests [Ertugrul, (1998)];
- generating a test report or a data file in a common text format;
- printing a specific chart or a part of the user front panel;
- linking to other currently available systems and software;
- inclusion of passwords to limit the access;

- animating the system or subsystem operation for easy understanding;
- providing GUI that mimics the real instruments;
- playing a video.

The modularity of LabVIEW programming allows the designer to simplify the programming structure by using sub-virtual instruments (sub-VIs), which may require thousands of lines of codes in other programming software tools. All LabVIEW graphical programs , called Virtual Instruments or simply VIs, consist of a Front Panel and a Block Diagram. Front Panel contains various controls and indicators while the Block Diagram includes a variety of functions. The functions (icons) are wired inside the Block Diagram where the wires represent the flow of data. The execution of a VI is data dependant which means that a node inside the Block Diagram will execute only if the data is available at each input terminal of that node. By contrast, the execution of a traditional program, such as the C language program, follows the order in which the instructions are written. LabVIEW incorporates data acquisition, analysis and presentation into one system. For acquiring data and controlling instruments, LabVIEW supports IEEE-488 (GPIB) and RS-232 protocols as well as other D/A and A/D and digital I/O interface boards. The Analysis Library offers the user a comprehensive array of resources for signal processing, filtering, statistical analysis, linear algebra operations and many others. LabVIEW also supports the TCP/IP protocol for exchanging data between the server and the client. LabVIEW v.5 also supports Active X Control allowing the user to control a Web Browser object.

STUDENT LAB EXPERIMENTS

A very important part of Electronics education are student lab experiments, where students carry out their own experiments. The experience to make an experiment and to observe, measure and acquire data is essential for a deep and thorough understanding of physical processes. Doing lab experiments, the students are learning experimental techniques and begin to understand the inherent limitations of precision in measuring relevant parameters. Different types of sensors are used to track and measure variables during a student lab experiment. We use LabVIEW and E-LAB -080 in this domain for the following main reasons:

- The appropriate use of E-LAB-080 and LabVIEW-based instrumentation to acquire signals gives the student more time for observation and investigation of physical and electrical processes.
- The possibility to modify and adapt, as well as the versatility of virtual instrumentation, saves time and funds, and allows maintaining a large number of dedicated to individual experiments.

The investigator developed the software using “mixed” design methodology. The programme modules were developed using Visual Basic 6.0, Visual C++, Multisim-8 , LAB-VIEW-9 and SPICE programming language in Window 2007 environment. It provides multimedia presentation platform to attract the sense of learner for easy and happy learning. The investigator had seen that the frames were unambiguous, brief, simple and straightforward. An associated instrumentation, have been piloted with over 100 undergraduate Electronics science students affiliated to Sant Gadge Baba Amravati University, Amravati.. The design of the Computer Software for each of these experiments was divided along pedagogical lines into three sections which are presented consecutively to the students:

1. Introduction

In this section, the students were given an overview of the experiment to be undertaken, an animation showing how it worked, what was being measured and how it related to real applications.

2. Procedure and Data logging

In this part of the experiment students perform the experiment and see the data logged and graphed on the PC as they progress though the experiment.

3. Theory and Calculations

In this section, the students work through their calculations manually and calculate the result being sought from the experiment. They then enter their own values into the computer and receive immediate feedback of how these compare to the automatically calculated values from the Virtual Instrumentation and simulation techniques.

Figure 2(a-b) shows the sample block diagram and front panel for the experiment, study of piezoelectric transducer.

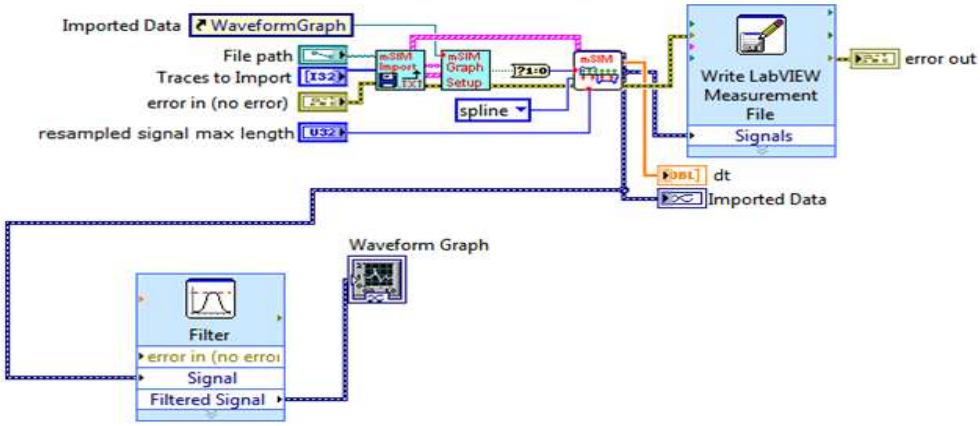

Fig.2- (a)

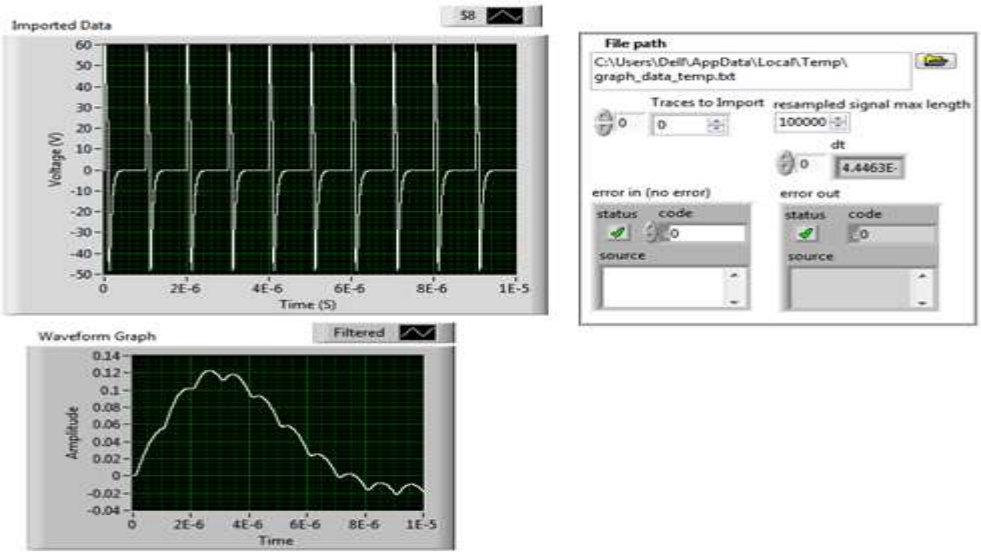

Fig.2 (b) GUI for Chracteristics of Piezoelectric transducer using LABVIEW.

E-Lab 080 (Dynon Instrument) is another alternative for data acquisition. It consists of Digital storage oscilloscope, Logic analyzer, arbitrary waveform generator, clock generator and Programmable Power supply. The E-Lab 080 model and GUI front panel is shown in figure 3 (a-b) respectively.

International Journal on New Trends in Education and Their Implications
January, February, March 2012 Volume: 3 Issue: 1 Article: 5 ISSN 1309-6249

Fig. 3 (a) Model of ELAB-080

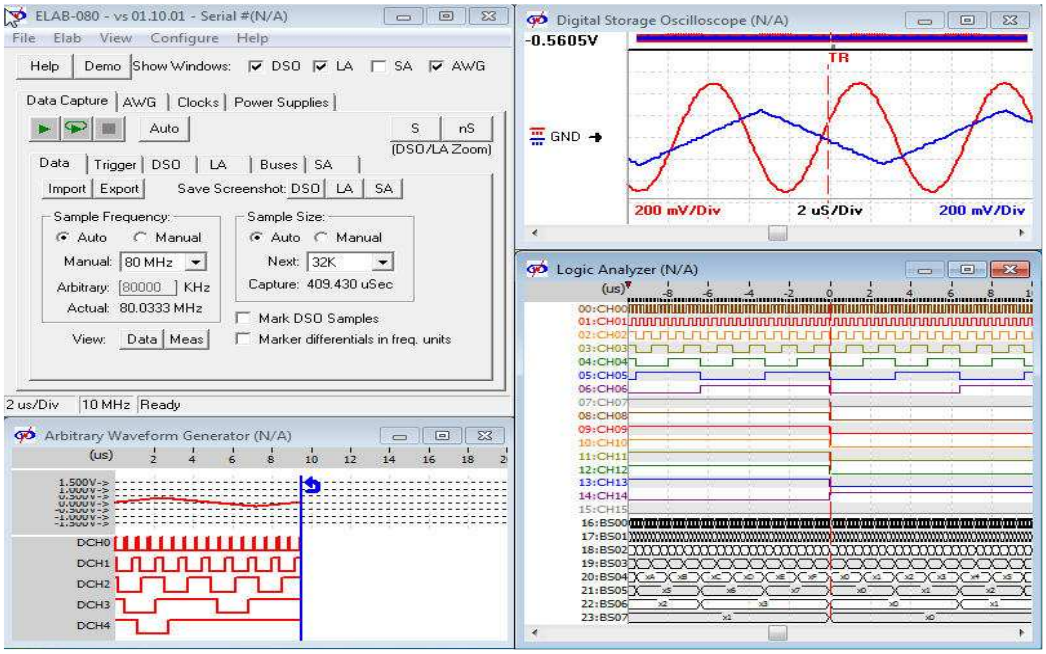

Fig 3 (b) GUI front panel for ELAB-080

SIMULATION MODULE

Multisim is a comprehensive circuit analysis program that permits the modeling and simulation of electrical and electronic circuits. It provides a large component database, schematic entry, analog/digital circuit simulation, and many other features, including seamless transfer to printed circuit board (PCB) layout packages. Multisim is interactive and offers a number of user-friendly features. A major feature of Multisim is that the schematic diagram is created on the screen using a mouse and various windows options. The type of analysis desired is then applied to the circuit, and the results can be observed in a number of ways

One of the most valuables features of Multisim is that the source excitation and instrumentation functions closely parallel those of a basic electronics laboratory, and the procedures that are used in obtaining data are very similar to those of the "real world." Hence, it closely approaches the concept of an ideal "virtual

laboratory." For example, the test and measurement models contain voltmeters, ammeters, a multimeter, a function generator with several output waveforms, a two channel oscilloscope, a frequency counter, a distortion analyzer, and other instruments. These instruments must be wired into the circuit in essentially the same fashion as in an actual laboratory. Thus, good laboratory skills can be taught very easily using a computer and the software.

NI ELVIS, an integral part of the NI electronics education platform,combines simulation and measurements from NI ELVIS inside the NI Multisim capture and SPICE simulation environment. Students transfer concepts taught in a textbook to Multisim, where they can learn through modeling circuit behavior and interactive circuits. They can compare simulation and real measurements with a single mouse click using NI ELVIS instruments inside the Multisim environment and achieve more complex analysis using LabVIEW or LabVIEW SignalExpress.

With the NI-ELVISmx driver, students can access their suite of 12 instruments through the NI-ELVISmx instrument launcher. These virtual instruments with their soft front panels provide an interactive interface to configure instruments.

NI ELVIS virtual instruments are open-sourced and customizable in LabVIEW. With the installation of the driver, students can use LabVIEW Express VIs and LabVIEW SignalExpress steps to program their devices.

This provides point-and-click configuration capabilities for the individual instruments, so they can achieve customized and more complex analysis of acquired data in LabVIEW. Those who are familiar with the DAQmx API can program general analog input, analog output, and timing functionality on NI ELVIS using NI-DAQmx.

CONCLUSIONS

The roles of teachers and students are changing, and there are undoubtedly ways of learning not yet discovered. However, the computer and software technology may provide a significant role to identify the problems, to present solutions and life-long learning. It is clear that the computerbased educational technology has reached the point where many major improvements can be made, and significant cost reductions can be achieved, specifically in the area of science and engineering education. The full-course (lecture . laboratory component) may replace the existing lecture-based courses, and the virtual instruments may provide a highly interactive user interface and advanced analysis facilities that were not deliverable in the conventional methods. From the educational point of view, it is expected that the new teaching/learning technology tools available in the market may provide common experiences to cater for students who are coming from increasingly diverse backgrounds, and whose learning is best achieved in a contextual setting. However, more designing, teaching and organizational skills are now required to establish a good course material utilising computer interaction and multimedia capabilities in engineering disciplines. Therefore, the selection criteria of a suitable software is the major issue, which should have a long life-cycle, easy interface with the hardware products, and be compatible with the existing development tools. However, it should be emphasised here that having proper equipment and technique will not ensure a problem-free system. The proper use of techniques, and methodologies are also critical in any technology intensive teaching/learning development system. In addition, it should be ensured that the designed work keeps up with the curriculum review and update, and the laboratory work should be relevant to the material taught in lectures. These may require continuous update of the material, which may change the role of the educator.

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REFERENCES

Bachnak, R. (2002). Design and Implementation of a Three Course Sequence in Control Systems, ASEE Annual Conference Proceedings. (http://www.asee.org/conferences/caps/document/2002-29_Paper.pdf)

Beasley, C. A.; Vitz, E. (1999), Toolbutton Data Acquisition into Spreadsheets for Educational Laboratories. *Abstracts of Papers,*218th National Meeting of the American Chemical Society, New Orleans, LA, Aug. 22.26, American Chemical Society:Washington, DC, CHED122.

Chen, C. (1998). Using LabVIEW in Instrumentation and Control Course. ASEE Annual Conference Proceedings. Available: http://www.asee.org/conferences/search/00612.pdf

Chickamenahalli, S. A., Nallaperumal, V., and Waheed, V. (1998). Labview based electric machines laboratory instrumentation. ASEE Annual Conference Proceedings. Available: http://www.asee.org/conferences/search/00355.pdf

Crist, S. C. (2001). A Laboratory-Based Instrumentation Course for Non-EE Majors. ASEE Annual Conference Proceedings. Available: http://www.asee.org/conferences/search/20385.pdf

Dehne T., (1995), "Putting Virtual Instruments to Work, Product Design and Development", Feature Report, No.360795A-01, National Instruments Corp.

Drew, S. M. (1996), Integration of National Instruments. LabVIEW Software into the Chemistry Curriculum. *J. Chem. Educ.* , *73,*1107-1111.

Ertugrul N. , (1998) ,"New era in engineering experiments: an integrated interactive teaching/ learning approach and real time visualizations", Int. J. Eng. Educ., 14, 5 pp. 344-355

Krygowski, F. R. (2001). Modernizing a Physical Measurements Laboratory in Engineering Technology. ASEE Annual Conference Proceedings. Available: http://www.asee.org/conferences/search/00695_2001.PDF

Lee, C. (1996). An active learning mode for laboratory education. ASEE Annual Conference Proceedings.Available: http://www.asee.org/conferences/search/01138.pdf

Muyskens, M. A.; Glass, S. V.; Wietsma, T. W.; Gray, (1996), T. M. Data Acquisition in the Chemistry Laboratory Using LabVIEW Software. *J. Chem. Educ.*, *73,* 1112.1114.

National Instruments, (May 1999), Computer-Based Measurement and Automation, (http://www.natinst.com).

Pudlowski Z. J., (1995), (Ed.) Computers in Electrical Engineering Education-Research, Development and Application, Monash Engineering Education Series, Monash University, Melbourne, Australia.

Sumali, H. (2002). An Instrumentation and Data Acquisition Course at Purdue University. ASEE Annual Conference Proceedings. (http://www.asee.org/conferences/caps/document/2002-1855_Paper.pdf)

Virtual Instrumentation in Education, Conference Proceedings, (June 1997), Massachusetts Institute of Technology and University of California at Berkley, National Instruments Corporation, Part Number 350357A-01.

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EMPIRICAL STUDY OF THE INTEGRATION, APPLICATION AND UTILIZATION OF TECHNOLOGY SUPPORT LEARNING SYSTEM IN OBAFEMI AWOLOWO UNIVERSTY, ILE-IFE, NIGERIA

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ABSTRACT

This study employed descriptive survey design. It discussed the adoption of and integration of Technology Support Learning Systems(TSLS) in teaching and learning for distance learning and full time students .It also discussed various concerted efforts at integrating web-based learning into the teaching and learning of Science and Technology Education at the Post-Basic Institutions (STEP-B) . The specific objectives of this study are to:
(i) investigate TSLS adoption and usage among the students of Obafemi Awolowo University, Ile-Ife for both distance and residential learning,(ii) determine the availability and adequacy of the facilities / infrastructures for TSLS,(iii) assess the level of implementation of TSLS (iv) determine the TSL format adopted by the University,(v) find out student's acceptance to use the type of TSL format adopted, and (vi)investigate the challenges facing the integration and utilization of TSLS .

The study sample consisted two hundred and fifty undergraduate students and fifty six staff selected from OAU Ife. The research instrument is made of 35items divided into 5 sections. The results showed that adoption and usage of TSLS in OAU Ife was very high. TSLS facilities and infrastructure are inadequate for both full time and distance learners. The students were enthusiastic to accept and use the new TSLS (Academic Blackboard and Multi-site teaching using the blended learning approach. The major challenges as ranked by the students are: techno-phobia, band with problem, epileptic power supply and insufficient infrastructure.

Keywords: Technology Support Learning System, Motivation, Integrated Technology, Millennium Development Goals (MDGs) ICT-driven, Globalization, Open-Distance Education (O-Del).

BACKGROUND

The major concern all over the universe today is how to provide quality education to all. This concern is reflected in the United Nations Declaration, Education for All (UNESCO 1990) and the Millennium Development Goals(OECD 2007). The interest in provision of quality education and the shift of interest to Information and Communication Technologies are not contradictory. This shift is necessitated because both ICTs and education are important agents of globalization and economic development (Monahan 2005). It is therefore not surprising to see that the major concern today is how to use ICTs to strengthen education and to provide better world. Nigeria as one of the developing countries is not left out the move to ensure self sufficiency in a highly competitive economy based on the technologies. To achieve this, Nigeria came up with a National Policy on Information Technology (2000). According to the strategic objectives:

- ICTs are to be used for education, Create wealth, poverty eradication and to create job opportunities (Egwu 2009),

To achieve the above, it was clearly stated in the new strategic plan for education that education at all levels would be restructured to respond to the challenges and the imagined impact of ICTs. It was also stated that ICTs will be integrated into the mainstream of education at all levels of education and training. It was based on the above that the Federal Ministry of Education came up with a Roadmap on Education in Nigeria. Other objectives to be achieved relevant to this study are:
- strengthen and expand e-learning to provide more access to quality education,
- restructure teaching and learning environment to be ICTs –driven ,and
- integrate ICTs into school's curriculum right from the primary schools.

Today there is greater demand for quality education in Nigeria than ever before. This is because of the need to resolve the challenges brought by the neglect of the youths who constituted majority of the Nigerian population. The neglect has led to the formation of insurgent youths and miscreants such as the Gboko Haram, the Almajiris in the Northern part of Nigeria and the Niger-Delta Youths in South-South Geo-political Zone. The gboko Harams are group of educational disadvantaged youths who are opposed to western education and have caused several unimagined destructions to the growth, development and economy of the country. Not only this, their activities have given the country a very bad image as a terrorist country.

In other to bring education to the door steps of those who could not get it and are qualified, the country decided to use ICTs as an effective and sustainable tool. ICTs were also adopted to unlock the doors of opportunity, skill acquisition, training and rehabilitation borrowing a leave from Kofi-Anan (2005). Obafemi Awolowo University, Ile-Ife took the giant step at integrating and application of ICTs for development. The University came up with its own ICT Strategic Plan that led to the expansion of the computer network (OAUNET) for regional and collaborative research development (Ajayi, 1996).It was embarked upon as a result of the need to improve teaching and learning, provide better qualitative education to qualified youths who would not gain admission due to lack of space through open distance learning (o-Del).The adoption of TSLS in the university was therefore welcomed with mixed feelings. Several enlightment programmes were embarked upon involving all the stake holders in the university. This was carried out to encourage and this new innovation and use it in teaching and learning. It is against this background that the present study was conceived to investigate students' acceptance, motivation and intension to use Technology Support Learning System in Obafemi Awolowo University, Ile-Ife. The specific objectives of the study therefore are:
(i) instigate the extent of the use of Technology Support Learning System among OAU students in Ile-Ife,
(ii) examine students' behavioral intention to use TSLS from a motivation point of view,
(iii) find out the level of students acceptance
(iv) find out the challenges/problems the students are facing in utilizing TSLS .

METHODOLOGY

The study employed survey design. The population for the study is made up of all the students of Obafemi Awolowo University, Ile-Ife .The sample were selected from four faculties, they are:
{i} Education.
[ii} Science
[iii] Arts
[iv] Environmental Science.

Three hundred and six participants were selected using stratified sampling procedure based on gender, course of study, departments and faculties. Only one structured questionnaire was developed and used for data collection. It was termed 'SAMTSLS'. It solicited for information on students' acceptance, motivation and

intention to use Technology Support Learning System. It was divided into five sections. The first section measured the demography of the students and usage, section ii solicited for information on faculties and equipment, section iii examined the TSLS format adopted in OAUIfe while section iv investigated level of utilization TSLS among OAU students. The last section, section v measured attitude and challenges faced by the sample. The instrument was validated using Duncan test and content validity. A reliability of O.67 was obtained. The questionnaire was rated on five point Likert scale [from strongly agreed to strongly disagreed] The data collected was analyzed using mean, standard deviation and Friedman Ranking Test.

FINDINGS AND DISCUSSION

The results of the findings n respect of the objectives are discussed

Table I: Adoption of WBLS among OAU Ile-Ife Students

Format Adopted	SA	A	UND	SD	D
e-learning	102(34.8%)	106 (36%)	18 (6.1%)	12 (4.1%)	54(18.4%)
Multi-media learning	104 (35.7%)	4 (32.3%)	20 (6.9%)	60 (20.6%)	13 (4.5%)
Tele-lecture	105 (36.3%)	94 (32.3%)	59 (20.3%)	22 (7.5%)	12 (4.1%)
Blended Technology	103 (35.3%)	97 (33.3%)	59 (20.3%)	13 (4.5%)	19 (6.5%)
CD Rom/Video Taped instruction	62 (21.1%)	166 (56.6%)	58 (19.7%)	3 (1.10%)	5 (1.7%)

The results obtained showed that the Web-Bsed Learning format the students adopted are:
(i) e-learning format (70.8%) while 22.5%) did not like e-learning format
(ii) for multi-media learning (68%) enjoyed using the format while 25.1% dislike the format and (6.9%) are indifferent.
(iii) With respect to tele-lecture 68.6% are in favour, 11% not in favour while 20.3% were skeptical about its usage. “With regards to blended technology 66.6% agree to utilize this format, 11% were not favourably disposed to using it.

However when it comes to video-taped instruction and CD ROM the number of students in favour are higher 68.3% while 27.8% are not in favour and 4.1% undivided. From the above data, it appeared that more students are actually interested in using non web-based learning system. This may not be unconnected to the availability of infrastructure and internet facilities that limits its utilization.

With respect to objective to the factors that motivated the students to use the TSLS learning system find the results obtained in Table 2.

Table 2: The motivating factors for using TSLS

Reasons	**SA**	**A**	**UND**	**SD**	**D**
Ability to decongest large class	108 (36.3%)	172 (56.2%)	11 (3.6%)	2 (.7%)	13 (4.1%)
Capacity for open Distance learning	88 (28.8%)	98 (32.0%)	42 (13.7%)	12 (3.9)	14 (4.6)
Improve teachings learning	10 (35.6)	114 (37.3%)	23 (7.5%)	9 (2.9%)	10 (3.3%)
Solve the challenges of space and infrastructure	104 (35.9%)	94 (30.7%)	60 (19.6%)	13 (4.2%)	15 (4.9%)

The factors that motivated the students to writing to utilize these learning formats are: the ability of the new system to reduce the problem of large classrooms and overcrowding 91.5% agreed, 4.9% disagreed and 3.6% remain indifferent.
Sixty point eight percent (68%) agreed that it is capable of enhancing distance learning. In addition 72.9% of the sample were of the view that the new format is a more effective and efficient toot for improving more qualitative and sustainable education that the old traditional lecture method (73.8%) agreed.

While 6.4% disagreed other students were motivated to use the new format because it is an efficient system that is not affected by the challenge of space and infrastructure (66.6%) agreed, 9.1% disagreed and 19.6% were indifference learning system was accepted more by students simply because of perceived reasons as rated by the students.

On the behaviour intention of the students to use the Web-based learning format, find the results of the data collected in respect of the objective (See Table 3).

Table 3: Behaviour intention of student to use the TSLS

	SA	A	UND	SD	D
I am favourably disposed to using TSLS	92 (30.01%)	136 (44.4%)	58 (18.96%)	15 (4.9%)	7 (2.28%)
I am motivated by the public enlightenment programme	159 (51.9%)	60 (19.6%)	62 (20.3%)	19 (6.21%)	8 (2.61%)
I accept to use it because it a better and more user friendly	172 (56.2%)	108 (35.2%)	13 (4.2%)	11 (3.5%)	2 (0.65%)

The students were unanimous in their acceptance to use the Technology Support Learning System, 74.05% were favourably disposed to it.In addition 71% of the students accepted to use the format because of the interest developed as a result of public enlightenment campaign at motivating students to use the new learning devices.

In summary, 81.4% of the students accepted the usage of the new format. Those who were not in support probably belong to the group who are resistance to innovation and those who are ignorant of the pedagogical advantages of the new system. It may also be due to student's indifference and lack of appropriate ICT skills.This is reflected in the data collected with respect to the problems/challenges encountered by students in utilizing the new innovative strategy (See Table 4).

Table 4: Ranking of the problems and challenges students encountered (Freidman Test)

Challenges	Mean Ranking $(\overline{XR})$
Resistance from students/staff	4.85
Poor maintenance culture	4.71
Lack of awareness of the pedagogical advantages	4.65
Inadequate facilities	4.49
Students indifference/negative attitude	4.41
Lack of faculty support	4.24

CONCLUSION

Based on the findings of the study, the following conclusion are made: that the students were motivated in using the new innovations strategy especially the e-learning format but the challenges of internet accessibility and epileptic power supply made them to prefer other forms of technology support learning system like multi-media presentation, tele-lecture and blended learning to e-learning format that is internet based. In addition, other factors that motivated the students to accepting this new strategy included the fact that it is user friendly, the public enlightenment about its advantages, capacity for open-distance learning its ability to decongest large crowded classroom and enhance quality teaching and learning.

RECOMMENDATION

In order to resolve the challenges and to ensure sustainable education, the issue of proper finding is essential. Since government subvention is not enough even to pay staff salaries not to talk of capital projects. The University should liase with Corporate Organization and industries to contribute to the growth and development of the education sectors. The problem of epileptic power supply should be addressed. The power sector should be deregulated. We should look for alternative source of power supply like solar power. More attention should be given to Distance Education by concentrating more on skill acquisition and entrepreneurial education as a way to reducing the high-rate of youth unemployment. International and transnational collaborations should be encouraged with emphasis on training and opening up more job facilities for the unemployed.

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REFERENCES

Ajayi, T(1996). Obafemi Awolowo University, Ile-Ife Net Work (OAUNET) .Computer Center,OAU Ife,Nigeria .12pp.

Egwu, S.O. (2009).Road map to the education sector.Federal Ministry of Education, Abuja. 35pp.

Faborode, M.O. (2009). Welcome to Obafemi Awolowo University, Ile-Ife, Nigeria's leading ICT University.Published by the Vice-Chancellor OAU Ife 35pp.

Impact (2009). An Appraisal of Carnegie Cooperation of New York grants at Obafemi Awolowo University, Ile-Ife. Vice-Chancellor's Office, Ile-Ife.28-29pp.

Monaham, T. (2005) Globalization, technological change and public education. New York, Routledge, Taylor and Francis 45pp.

Obafemi Awolowo University, Ile-Ife (2003). A strategic plan for Obafemi Awolowo University. Compiled by the strategic planning committee under the chairmanship of Prof. R.O. Makanjuola. 5p.

OECD (2007) Glossary of statistical terms Millennium Development Goals, meaning and indicators. Retrieved from the internet on the 20/5/2009 @ http:stats.oecd.org/glossarydetail.asp?ID=7331.

National policy for Information Technology (2001). Nigeria National Policy for information technology.Federal Ministry of Communication Abuja. Retrieved from the internet on 20/5/209 http://IT%20policy%20Nigeria(1)pdf

UNESCO (1990) World Declaration on Education, Needs and Framework for Action to meet the Basic Learning Needs. Adopted by the world conference on education forum. Dakar, Senegal.

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RELATIONSHIP AMONG THINKING STYLES OF MATHEMATICS TEACHERS AND THEIR USING OF PROCESS-BASED TEACHING METHODS

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ABSTRACT

The aim of present study is investigation on relationship among mathematics teachers' thinking styles and amount of their using of process-based teaching methods. This research is to determine that which one of thinking styles is the strongest predictor for using of methods of Process-based teaching by math teachers. The method of this research is descriptive and correlation one. The sample group is comprised of 103 mathematics teachers that are selected randomly, 55 female and 48 male. Instruments of research were questionnaires of Sternberg Thinking Styles and Process-based Teaching Methods (PTM). The Pearson correlation and analysis of regression are used. The results show that there is a positive relationship between thinking styles of Judicial, Liberal, External, Executive and Global with using of the PTM by math teachers. The Step wise regression analysis shows that for male teachers Liberal and Local thinking styles are the stronger predictors for using of PTM. But for female the only strong predictor was Liberal thinking style.

Keywords: Process-based, teaching methods and thinking styles.

INTRODUCTION

Teachers through the implementation of teaching methods provide appropriate learning environments. Teachers teaching methods are very diverse. In one categorizing they divided in result-based and Process-based Teaching Methods (PTM). In the PTM, enhancing of knowledge is not so important that abilities and skills. In these methods, students, in their selves, are considered as the fundamental base of education activities (Shabani, 2002). Therefore child-center methods can be considered a subset of the PTM. Constructivism methods which in them human is known as producer of his/her knowledge (Zahoric, 1995) are also in this category. In the PTM, in addition to activeness of students, social interaction of learners and creative thinking are important. Therefore in the PTM only the transfer of knowledge is not emphasized, but abilities such as communication, reasoning and characters of students are considered. The PTM are important because human perception from the world is critical, not passive (Shabani, 2002). In these methods students are more curious, responsible and creative (Armand, 1995). In this regard Freire (1989) suggested that teachers need to strengthen students' interest, challenges of intellectual processes, active thinking and discussion. Cooperative learning is one of the PTM that causes desirable changes in the characters of students.

Berliner and Gage (1975) also showed that in the PTM, quality of the learning is more than inactive teaching methods. Exploratory –teaching methods such as group discussion, guided, dialectic and problem solving methods can also be in the PTM subset. Cruickshank, Jenkins and Metcalf (2006) indicated that group discussion method increases motivation and changes learners' attitudes. The others exploratory teaching methods also make learners to think enhance their thinking skills and help them to find out that how knowledge is acquired.

A variable that can be related with the performance of teachers are thinking styles. Thinking styles are preference way for thinking (Kao, Lio and Sun, 2008). Experts agree that people have different patterns of thinking styles. Sternberg named these different methods of information processing as thinking styles. He believed that thinking styles changes during the life and they can be taught and people acquire their thinking styles through socialization (Razavi and Shiri, 2005). Thinking styles are not abilities but also they are preferred methods in information processing and the use of abilities (Zhang and Postiglion, 2001). In Sternberg's theory (1988 cited by Zhang, 2002) the metaphor of self- government is used to visualize how human mind works. Sternberg (1997 cited by Zhang, 2009) claimed that thinking style or self government of mind are13 that can be classified in five dimensions of functions, forms, levels, scopes and leanings. He also believed that Similar to different methods of governing over societies, there are different ways that people are using their thinking abilities (Kao, Lio and Sun, 2008 and Kastelz, 2001: 365).

Thirteen thinking styles have been classified into some category, according to their similarity. For instance, in one classifying they divided to the creative and non creative styles. The creative thinking styles are including legislative (being creative), judicial (evaluating the other people and their products), hierarchic (ranking their assignments), global (focusing on the totality of picture), and liberal (taking a new way for doing assignment) (Zhang and Higgins, 2008). Therefore, people that have a tendency to generate creativity and higher levels of cognitive complexity are placed in this category (Zhang, 2006). Non creative thinking styles are including, executive (implementing tasks according to commands), local (focusing on the details), monarchic (working on one task at any time) and conservative (using traditional methods of assignments) (Zhang and Higgins, 2008). Therefore, people that are more inclined to obey the norms and show lower levels of cognitive complexity are placed in this category (Zhang, 2006a). In another classification, Zhang and Sternberg re-conceptualize thirteen thinking styles in three categories. The first one is independent from context, generates creativity and has adaptability worth. Second kind is dependent to context, impulsive and has lower adaptability worth. The third one of styles is depend on specific demanded task and is dependent to content (Zhang, 2009).

Various factors such as culture, gender, age, parental styles, schools, various jobs, birth order and social-economic status can affect thinking styles (Imamipour and Seyf, 2003: 36). Culture plays a role in the evolution of thinking styles. Different cultures emphasize on different thinking styles. For example North America's culture gives more importance to innovation and legislative style and in Japan's culture executive and conservative thinking styles are emphasized. Gender also plays a role in thinking styles. For example Sternberg shows that men scores in legislative styles, global and internal styles are more than woman's scores but in judicial style men scores are less than women. Parents thinking styles are effective on development of thinking styles of their children. Different schools and jobs encourage different thinking styles. In most parts of the world, executive thinking style, local and conservative thinking style are encouraged (Yari, 1999). Correlation studies show that there is an overlap between thinking styles and personality characteristics (Zhang, 2001 and Zhang, 2002). Neuroticism positively associated with executive and conservative thinking styles but negatively related to the legitimate, hierarchical and liberal styles. Personality trait of extraversion positively associated with external style and negatively related with internal style. Agreeableness positively associated with legislative, judicial, liberal styles and external style. But it has a negative relationship with the legislative, judicial, liberal and internal styles. Conscientiousness positively was related to most of thinking styles but particularly was associated with the hierarchical style (Ibid). In another research personality trait of openness has had a positive relationship with the judicial, external, liberal and conservative thinking styles; neuroticism

with executive, local and conservative thinking styles; and dutifulness with legislative, hierarchical and external thinking styles (Shokri, Kadivar, Farzad, Sangari and Ganaei, 2006). Also thinking style 1 (production of creativity and complexity) positively is associated with the document that are involve with the compatibility values such as being open mind and conscientiousness (Zhang, 2009). Zhang in a study concluded that thinking styles are strong predictors for the development of identity. Also thinking styles that produce creativity, external style and hierarchic style are negatively correlated with the anxiety. However the conservative style was positively correlated with anxiety (Ibid). Sternberg suggests that thinking styles are related with creativity processes, problem solving and decision making (Imamipour and Seyf, 2003: 36). Mohammadi (2010) indicated that thinking styles of Liberal and Judicial predict 0.32 of creativity variance as a personality trait. In study of relationship between thinking styles and self-esteem and economic class, findings showed that with control of age there is overlap between thinking styles and self-esteem. Thinking style type1 was positively associated with self-esteem, while thinking style type 2 (executive) has had a negative relationship with self-esteem and economic situation (Zhang and postiglion, 2001). Kasravi, Kadivar, Farzad, Sangari, Zeinabadi and Ganaei (2006) showed that social-economic situation positively related with legislative, judicial, global, liberal, hierarchic and negatively related with executive, local and conservative thinking styles. Thinking styles and motivation of academic achievement are associated with behavioral outcomes (Fan and Zhan, 2009). Zhang and Sternberg showed that high academic achievement has positive correlation with conservative, hierarchic and internal styles and it has negative correlation with legislative, liberal and external styles. Also, thinking styles that cause creativity (type1) have had positive relationship with motivation for achieve success; and they have had a negative relationship with motivation for avoid failure. Thinking styles type 2 (executive) had a positive relationship with motivation for avoid failure; and styles type 3 (come along with task and position) was associated with motivation for achieve success (Ibid).

Zhang and Sternberg asserted that thinking styles can be taught (Zhang, 2006b).Therefore according to the effect of thinking styles on cognitive processes and individual performance, the main purpose of this study is to determine relationship between math teachers thinking styles and amount of their using from process-based teaching methods. Accordingly the research questions are as below: 1) is there any relationship between thinking styles and using of process-based teaching methods by math teachers? 2) Whether gender plays an effective role in relationship between thinking styles and the using of process-based teaching methods by math teachers?

METHODOLOGY

A correlational design was used to find out the pattern of relationship among the variables of research. Further, step-wise regression analysis was worked out to determine the most contributing predictors. Using of process-based teaching methods has been used as dependent variable and thinking styles as independent variables. The statistical population consists of 142 math teachers in Zahedan. The sampling was conducted by using a systematic random method. The sample size was determined by using Morgan's table equal to 103 math teachers. Mean while 53% of them were woman; 80.5% have had BA degree and 47.5% have had more than 20 years experience in teaching.

Instruments

1) Questionnaire of process-based teaching methods (PTM): This questionnaire is a researcher made one that determines amount of teachers' using of teaching methods such as exploratory methods, group discussion and skill learning; in which instead of increasing the student knowledge, they develop processes such as thinking skills, social skills and study skills in students. This test includes 18 questions that responders will offer their answer on the Likert scale. In this study, the internal consistency was obtained by Cronbach's alpha equal to .82 which indicates an acceptable internal consistency.

2) Thinking styles questionnaire: this questionnaire was designed by Sternberg but because the original questionnaire was too long (104 questions), Mohammadi (2010) reduced the questionnaire to 36 questions, 9 thinking styles and for each one 4 questions. This questionnaire evaluates Legislative, Executive, Judicial, Global, Local, Liberal, Conservative, Internal and External thinking styles. The estimation of reliability of each of these scales by using Cronbach's alpha is as follow: Legislative .74, Executive .62, Judicial .73, Global .61, Local .79, Liberal .82, Conservative .63, Internal .73 and External .83.

RESULTS

A summary of descriptive results are presented below.

Table 1: Descriptive results of research variables

Variables	Mean	Out of Mean	Std. Deviation
Using of PTM	65.04	54	7.2
Legislative	15.7	12	2.64
Executive	16.24	12	2.41
Judicial	15.7	12	2.58
Global	11.28	12	2.05
Local	12.02	12	3.2
Liberal	16.33	12	2.63
Conservative	9.99	12	2.14
Internal	11.12	12	2.38
External	15.23	12	2.24

Results of table 1 show that means of Liberal, Executive, Legislative and Judicial thinking styles are more than questionnaire's means. Conservative, Internal and Global thinking styles are below the mean of questionnaire. Results that related to research questions are presented below.

Question 1) is there any relationship between thinking styles and using of process-based teaching methods by math teachers?

Results table 2 indicate that using of PTM is significantly ($p \leq 0.01$) and positively correlated with thinking styles of Judicial ($r = .34$), Liberal ($r = .46$) and External ($r = .33$). Also, using of PTM is correlated positively with Executive($r = .17$) and Global ($r = .18$) thinking styles and these correlations were significant ($p \leq 0.05$).

Table 2: Results of correlation between using of PTM and thinking styles

Variables	**R**
Legislative	.10
Executive	* .17
Judicial	** .34
Global	* .18
Local	-.11
Liberal	** .46
Conservative	-.05
Internal	.08
External	** .33

**p ≤ 0.01 *p ≤ 0.05 N= 103

The result of the Durbin Watson test was 1.74. Therefore the Stepwise Regression Analysis test was used and the results are represented in Table 3.

Table 3: Summery of Stepwise Regression Analysis

Steps	**Std. Predictors**	**Adj. β**	**R^2 R^2**	**F Change**	**Partial Change**	**Correlation**
1	Liberal	** 0.46	0.20	0.21	**27.2 (1,101)	0.46
2	Liberal External	** 0.39 * 0.20	0.23	0.03	* 4.48(1,00)	0.39 0.21
3	Liberal External Local	** 0.41 ** 0.24 ** -0.21	0.27	0.04	** 6.13 (1,99)	0.41 0.25 -0.24

Durbin- Watson = 1.74 **p ≤ 0.01 *p ≤ 0.05
Dependent Variable: *using of process-based teaching methods*

The Table 3 shows that Liberal thinking style was the strongest predictor and entered the equation first, followed by External and then Local thinking styles. The first predictor accounted for 20% of the variance in using of PTM by math teachers (F = 27.2, df = 1, 101, p≤ 0.01). In the second step, the combination of the two predictors accounted for 23% of the variance in using of PTM (F = 4.48, df = 1, 100, p≤ 0.05). In the third step, the combination of the three predictors accounted for 27% of the variance in using of PTM (F = 6.13, df = 1, 99, p≤ 0.01).

According to the Standard Correlation Coefficient (β), the Regression Equation for the three standard variables is represented below:
Using of PTM = Z 0.41 «Liberal» + Z 0.24 «External» - Z 0.21 «Local»

To examine the unique contribution of each variable to prediction of using of PTM, a partial correlation was calculated. Findings showed that relationship between Liberal style and using of PTM was $r_{y1.23}$ = 0.41, even after removing variance associated with External and Local styles. Also a partial correlation between External and using of PTM was $r_{y2.13}$ = 0.25, after removing variance associated with Liberal and Local styles. A partial

correlation between Local and using of PTM was $r_{y3.12}$ = -0.24, removing variance associated with Liberal and External styles.

Question 2) whether gender plays an effective role in relationship between thinking styles and the using of process-based teaching methods by math teachers?

Table 4: Results of correlation between using of PTM and thinking styles of men and women.

	For men	For women
Variables	R	R
Legislative	17	0.02
Executive	.05	** 0.34
Judicial	** .35	** 0.37
Global	.04	* 0.29
Local	.12	** -0.40
Liberal	** .38	** 0.53
Conservative	-.05	-0.03
Internal	.18	-0.05
External	** .31	** 0.43

**p ≤ 0.01 *p ≤ 0.05 N= 103

Table 4 shows that the shared correlations for the two gender were between styles of Judicial (r = .35), Liberal (r = .38) and External (r = .31) whit using of PTM. But men are different from women in thinking styles of Local, Executive and Global. That is, in these variables the correlations were significant only for men: Local r = -.40 and executive r =.34 (p ≤ 0.01); Global r = .29 (p ≤ 0.05).

Separated analyses demonstrated two different prediction models for men (in the first step, for Liberal R^2 = 0.27 and in the second step, for Liberal + Local R^2 = 0.41, p≤ 0.01) and for women (in only one step, for Liberal R^2 = 0.13, p≤ 0.01).

DISCUSSION

The main purpose of this study was to determine the stronger predictors of using of PTM by math teachers. The results of statistical analysis of research question (1) showed strong positive relationship among the Liberal, Judicial and External thinking styles and using of PTM. The Liberal thinking style was the strongest predictor that predicted 20% of the using of PTM variance. The thinking styles of External and Local, respectively, add 3% and 4% to this prediction. Thus, these three variables predict 27% of using of PTM variance that is a good prediction. Therefore, when math teachers had more the Liberal, Judicial and External thinking styles, they have used more of process-based teaching methods. These results indicate some of teachers' traits that are associated with using of PTM through which teachers can develop some of fundamental ability and skills in students.

These findings confirm the general research results such as Sternberg suggestions that thinking styles are related with creativity processes, problem solving and decision making (Imamipour and Seyf, 2003, Mohammadi, 2010) and Zhang and postiglion (2001) results that showed thinking style type1 was positively associated with self-esteem. Fan and Zhan (2009) indicated that thinking styles are associated with behavioral outcomes. Also, Zhang (2002) indicated that conscientiousness positively was related to most of thinking styles. Regard to research question (2), gender differentiations showed that the stronger predictors for using of PTM by male teachers are Liberal and Local thinking styles. But for female the only strong predictor was Liberal

thinking style. Also in this study, Local, Executive and Global thinking styles were important factors only for men. This finding indicates that gender is important in decision about traits the effect teaching methods. Previous researches show some differences between men and women. For example, Sternberg shows that men scores in legislative styles, global and internal styles are more than woman's scores but in judicial style men scores are less than women (Yari, 1999). However there is not a lot of study about gender differentiation in the correlation or causal investigations.

Processes-based teaching methods are important (Shabani, 2002). In these methods students are more curious, responsible and creative (Armand, 1995). Therefore thinking styles of Liberal and Local are important in using of processes-based teaching method by men math teachers. Liberal thinking style is also important in women math teachers. Accordingly, these findings have to be considered in employment of teachers. Also, developing of specific thinking styles has to be put into workshops programs of teachers.

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REFERENCES

Armand, M. (1995). *Relationship of Attitude to Activated Teaching Methods with teachers Job and Personality Traits.* Articles of Conference of Education Situation- Teacher Training Role. Tehran: Tarbeiat Publication.

Cruickshank, D., Jenkins, D.B. and Metcalf, K.K. (2006) *The Act of Teaching***.** McGraw-Hill Humanities Social
Freire, p. (1989). *Teaching of Critical Cognition.* Translated by Kaviany. Tehran: Agah Publication.

Fan, W. and Zhang, L.F. (2009). Are Achievement Motivation and Thinking Styles Related? A visit among Chinese university students. *Learning and Individual Differences.* 19(2), 299-303.

Gage, N.L. and Berliner D.C. (1975). *Educational psychology*. Hopewell, NJ: Houghton Mifflin.

Imamipour S. and Seyf, A. (2003). A Study on Development of Thinking Styles in the Students of Schools and University and its Relation with Creativity and Academic Achievement. *Innovation in education Journal*, 10 (3), 35-45.

Kao, G.Y.M., Lei, P.L. and Sun, C.T. (2008). Thinking Style Impacts on Web Search Strategies. *Computers in Human Behavior*, 24 (4), 1330-1341.

Mohammadi, A. (2010). *The Study of Relationship between Thinking Styles and Entrepreneurship Personality Characteristics of School Principals*. M.A. dissertation. Zahedan: University of Sistan and Baluchestan.

Razavi A. and Shiri, A.A. (2005). Comparative study on thinking Styles of Boys and Girls of High school and their Academic Achievement. *Innovation in education Journal*, 12 (4): 35-45.

Shokri, O., Kadivar, P., Farzad,V., Sangari, A. and Ganaei, Z. (2006). Roles of Personality Traits and Thinking Styles on Students Academic Achievement. Journal of Iranian Psychology, 7 (1), 219-232.

Shabani, H. (2002). *Educational Skills*. Tehran: SAMT Publication.

Yari, K. (1999). *Comparison Between Thinking Styles of Male and Female Teachers of High School in Firozabad*. Thesis for Postgraduate degree. Shiraz: Planning and Management Organization.

Zahoric, J. A. (1995). *Constructivist Teaching, Bloomington*. Indiana: phi Delta kappa Educational Foundation.

Zhang, L.F. and Postiglione, G.A. (2001). Thinking styles, self-esteem, and socio-economic status. *Personality and Individual Differences*. 31(8), 1333-1346.

Zhang , L.F. (2001). Thinking styles and personality types revisited*. Personality and Individual Differences*. 31(6), 883-894.

Zhang , L.F. (2002). Measuring thinking styles in addition to measuring personality traits? *Personality and Individual Differences*. 33(3), 445-458.

Zhang, L.F. (2006a). Thinking styles and the big five personality traits revisited. *Personality and Individual Differences*. 40(6), 1177-1187.

Zhang, L.F. (2006b). Preferred teaching styles and modes of thinking among university students in mainland China. *Thinking Skills and Creativity.* 1(2), 95-107.

Zhang, L.F. (2009). Anxiety and Thinking styles. *Personality and Individual Differences.* 47(4), 347-351.

Zhang, L.F. and Higgins, P. (2008). The predictive power of socialization variables for thinking styles among adults in the workplace. *Learning and Individual Differences*18(1), 11-18.

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ASSESSING THE EFFECTIVENESS OF STUDENT REPRESENTATIVE COUNCILS IN OPEN AND DISTANCE LEARNING: A CASE FOR THE ZIMBABWE OPEN UNIVERSITY

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ABSTRACT

The present study aimed at establishing the effectiveness of the Student Representative Council in Open and Distance Learning institutions. A case study was undertaken at the Zimbabwe Open University, in the Mashonaland East region which the researchers selected to understand in depth regardless of number of there being 10 regions in the ZOU. In order to make an assessment of the effectiveness of the Student Representative Council at the Zimbabwe Open University, this current study sought to find out what services were being offered by the SRC, how beneficial these services were and how effective the SRC had been in addressing student concerns. The study also aimed at unearthing the challenges which the SRC faced in their quest to provide effective student services. The respondents were drawn from all the 436 active ZOU students from the four faculties in Mashonaland East region duly registered for the August-December 2010 semester. A sample of 100 students was drawn and consisted of 10 Student Representative Council members, and 90 ordinary students. The responses from the students were solicited through the use of a questionnaire, for the ordinary students, while the student representatives` views were extracted through the use interviews. Findings revealed that at most, the SRC was not being effective in rendering the services for which they were elected. No meetings had been held with students although only one had been held with the Regional Administration. Students` grievances were obtained through a suggestion box once, but unfortunately, these had not been deliberated upon. The most dominating challenge was lack of funds and this made the majority of the SRC`s objectives unattainable during the 2010 academic year.

For the effective functioning of the SRC, it is recommended that financial control of the students` monies should be devolved to regions in order to expedite disbursements to various service providers. For ease of coordination, office space should be availed to the SRC where the receive students` issues and sit for their meetings. There is also need for a vigorous campaign to have the students linked with their counterparts in universities inside and outside the country for exchange programmes.

Key Words: Open and Distance Learning, Distance Education, Student Representative Council, Student Unions

INTRODUCTION

The importance of student councils has increased over the past years (Kaba; 2000) and as they get involved in the decision making process of the universities and colleges, they get to appreciate the transparency with which activities are executed (Durman; 2009). Colleges and universities in Sub-Saharan African countries, Zimbabwe included, have fortunately, in the face of democracy, embraced the idea of student participation in the affairs of educational institutions. Since direct participation by large numbers of people in the running of the organizations is, in practice, impossible, it can only be replaced by some form of representative system whereby elected members represent the electorate and carry out the members` will (Robert Michels in

Haralambos and Holbron; 1995). Such democratization of organizations has, therefore, seen the proliferation of workers` organizations, student unions and other assortments of representatives towards the quest for harmonious institutional relations. The formation of student unions in institutions of learning has, therefore, had its foundations on these premises. Each and every school, college or university is, in some countries such as Zimbabwe, statutorily required to cause the formation of one such organization that represents the wishes, rights, beliefs and desires of the students thus being represented in the institution. It follows, therefore, that it is no longer the prerogative of the institutional administration alone to transmit its suggestions and seek enforced co-operation form the unsuspecting student. This inclusion of the student body in decision making has been hailed by many as a means that has helped to increase the legitimacy of the democratic processes in the eyes of the student (Calkins; 1974, Ryan; 1976). While the nobility in the creation of the student councils is at least in the name of democratization of learning institutions, their success in the provision of the much needed student services has been brought to question. It is behind this observation that this current study sought to assess the effectiveness of the Student Representative Council at the Zimbabwe Open University, an Open and Distance Learning institution.

BACKGROUND OF THE STUDY

The Zimbabwe Open University (ZOU) is an Open and Distance Learning (ODL) institution in Zimbabwe, established to cater for a substantial component of people who, by design or unintentionally, could not be accommodated in conventional universities, by offering them the opportunity to study in their homes and in their workplaces through distance education. The ZOU was established on 1st March 1999 through an Act of parliament (Chapter 25:20), with an initial enrolment of 624 students registered for the Bachelor of Education degree programme. By 2004 ZOU had become the largest university in the country and second largest in Southern Africa compared to University of South Africa (UNISA), with a student enrolment of approximately 13 000. However, the student population, in the year, 2010, dropped to approximately 10 000. During the time of this study, in 2010, ZOU had four faculties;

the faculty of Arts and Education,

- the faculty of Science and Technology
- the faculty of Commerce and Law and
- the faculty of Applied Social Sciences,

These faculties are offering more than 30 undergraduate degree programmes, over 3 diploma courses, over 5 masters` degree programmes and Doctor of Philosophy degrees in all the four faculties.

RESEARCH QUESTIONS

In order to make an assessment of the effectiveness of the Student Representative Council at the Zimbabwe Open University, this present research study sought to answer the following four questions:

1. What services are being offered by the SRC?
2. How beneficial have been the services offered to the student body by the SRC?
3. How effective has the SRC been in addressing student concerns?
4. What challenges have the SRC faced in their quest to provide effective student services?

REVIEW OF RELATED LITERATURE
CONCEPTUAL FRAMEWORK

The Student Representative Council: Definition, objectives and structure

A Student Representative Council (SRC), also known as student union or government, student senate, students' association or council, guild of students or government of student body is a student based civic organization designed to help promote school, college or university spirit and leadership among the student body. In higher

education, the student union is often accorded its own building on the campus, dedicated to social and organizational activities of the student body(Kaba; 2000, Wang and Salo; 2009).

Being student based, the student unions are run by students, independent of the university authorities although in most institutions the resources for the operationalisation of the union are institution funded. The purpose of this organization is to represent students both within the institution and externally, including on local and national issues. They are also responsible for providing a variety of services to students. Students can get involved in its management through numerous and varied committees, councils and general meetings.

In some countries, joining students unions is through what is known as "compulsory unionism". This is a practice whereby every student in any tertiary institution is compelled to join and to fund a student union as a prerequisite for admission to or graduation from a tertiary institution (Clarke; 2007). In contrast, some countries` institutions offer freedom to belong to any union whether a trade union, a religious group, a political or civic organization. Likewise, students in institutions of learning are accorded the opportunity to join any association if they so wish. In Zimbabwe, by compelling students to pay SRC fees is clear testimony that student unionism is compulsory, thus students have no right to refuse to belong to such unions or councils.

The structure of the Students Union at the Zimbabwe Open University

Zimbabwe Open University Act No 12/98 Chapter 25:20 envisages the establishment of an association of students to be known as the "Students Union", which is an association of all the students in the Zimbabwe Open University. Under the union is the Student Representative Council (SRC) which consists of two separate bodies: the Student Representative Assembly on one hand, and the Student Executive Council (SEC) on the other. The SEC is composed of 14 members elected by the students union. Office bearers in the SEC shall be the President, Secretary General, Treasurer and ten Regional committee members who shall be the chairpersons of the SRA in their respective regions. The SEC is responsible for administrative functions of the SRC and is directly accountable to the SRA and to the Students Union at general meetings. The SRA is responsible for regulating the activities of the SRC.

The Composition of the SRC at the ZOU

- The president
- Vice President
- The Secretary General
- The Treasurer
- Transport Secretary
- Social Welfare Secretary
- Academic and Legal affairs Secretary
- Sports and Entertainment Secretary
- External, Publicity and Information Secretary
- Properties Secretary

Aims and Objectives of the Student Union

The aims and objectives of the Student Union as stated in the Student Union Constitution (2002) are given as follows:

- to provide for the representation of the students in matters that affect their interests both as individuals and a body in the pursuit of academic excellence
- to promote intellectual, scientific, artistic, cultural, aesthetic, political , religious and economic activities arising among its members, and to promote their general welfare
- to provide, encourage and develop among its members the formation, organization and operation of clubs and societies for such purpose as are mentioned in clause 2.2 above

- to provide effective channel of communication between the student and the University authorities and the people of Zimbabwe in general
- to organize the students on the basis of love for peace, justice, democracy, progress, the elimination of racism, tribalism, regionalism, nepotism, neo-colonialism and imperialism
- to promote and maintain the co-operation of its members with other students at national and international levels

What is distance education?

Peters (1973) defines distance education as a method of imparting knowledge, skills and attitudes which is rationalized by the application of division of labour and organizational principles as well as by the extensive use of technical media, especially for the purpose of reproducing high quality teaching material which makes it possible to instruct great numbers of students at the same time wherever they live. It is an industrialized form of teaching and learning (Peters, 1973:206). The definition presented Moore (1973) states that distance teaching is the family of instructional methods in which the teaching behaviors are executed apart from the learning behaviors, including those that in a contiguous situation would be performed in the learner's presence, so that communication between the teacher and the learner must be facilitated by print, electronic, mechanical, or other devices.

Distance education is not a new phenomenon; it has been a mode of teaching and learning for at least the past one hundred years (Moore & Kearsley, 1996). The first distance learning was known as "correspondence education" and used printed course material delivered by post (Saba 1997). Garrison and Shale (1987) assert that distance education implies that the majority of educational communication between teacher and student occurs non contiguously and that distance education involves two-way communication between teacher and student for the purpose of facilitating and supporting the educational process and they further state that one very salient feature of distance education is its use of technology to mediate the necessary two-way communication. The term needs to be conceived as a sophisticated collection of methods for the provision of structured learning in situations, increasingly the norm, where students are unable primarily to attend fixed classes at a centralised venue and in the physical presence of lecturers (Saide, 2003).

Therefore, distance education is seen to be a planned teaching/learning experience in which teacher and students are separated by physical distance. In distance education courses and programs, student-teacher interaction may occur and course materials may be delivered in an asynchronous or synchronous mode over a wide spectrum of existing and evolving media.

THEORETICAL FRAMEWORK

Models of Student Representation

A number of models have given rise to the formation of student representation in various institutions of learning particularly in higher education. Among these are the Representative democracy Model, the Liberal model and the direct democracy model (Birch1993). Hereunder we discuss these models in detail.

The Representative Democracy Model

The model involves the selection of representatives by the students being or at least seeking to be represented. If the posts being vied for are filled in through democratic student elections, then the elected student representative body is called a democratic student body. The most common mechanisms for coming up with such student representation is to involve elections and the candidate with a majority or a plurality of the votes takes his/her place in the student council to represent the wishes and desires of the students who elect them into such position. However, while these student representatives are elected by the student body to act on their behalf and in their interest, they retain the freedom to exercise their own judgment as how best to do so (Dahl; 2000).

Liberal Model

The Liberal democracy model postulates that a representative democracy is one in which the ability of the elected student representatives to exercise decision-making power is subject to a constitution incepted by the students to guide the operations, a constitution which emphasizes the protection of students rights and freedoms and regulates the actions leaders against making unpopular decisions (Dahl; 2000).

Direct Representation Model

The direct model approach to student representation posits that in an organized institution, students participate in the decision-making of the organization personally, contrary to relying on intermediaries or representatives. The supporters of direct democracy argue that democracy is more than merely a procedural issue. The direct democracy model gives the voting student population the power to give binding orders to its elected representatives, such as recalling them before the expiry of their term in office.(Buccus;2010). Whatever model is followed three patterns of student representatives have emerged. These are one which allows for one students` association for all the faculties of the same university, another where each faculty has its own student representative and yet another with students` national union comprising unions of several universities and colleges (Madziyire et al; 2010).

The Representative Democracy Model apparently is of major use today in most institutions of higher learning in Zimbabwe and the Zimbabwe Open University has also adopted the model towards its thrust to democratize the institution through student participation and other means that are meant to achieve that endeavour. The Student Representative Council Constitution of the Zimbabwe Open University dated 20 March 2002 bears testimony towards this thrust. However, despite this desire for student democracy through the formation of the Student Representative Council, among other arrangements, the effectiveness of the SRC in an open and distance learning institution needs to be established through this current study.

PREVIOUS RESEARCH STUDIES

Research on the effectiveness of the Student Representative Councils in Open and Distance Learning institutions has not been bountiful as in other areas such as conventional universities, colleges and schools. However, important theories have been identified that have dwelt on the need to have student councils in all institutions of learning. The present study reviewed literature on the five motives for the formation of Student Representative Councils. Literature was also identified from previous researches that which centred on, mostly, conventional colleges, universities and high schools. Of interest to the present study, was literature on the following responsibilities and services rendered to the student body by the SRCs; representing the student body in issues affecting their learning in the institution, holding consultative and feedback meetings with the students, production of informative pamphlets for the benefit of all students and organizing campaigns of various forms, among others.

THE RATIONALE DEBATE FOR STUDENT PARTICIPATION

Debate has raged over the years on what reasons have been advanced for student participation in decision making processes in institutions of learning. Five schools of thought have emerged and proponents have advanced these categories of reasons on why students` participation in the decision making of the institution has been given the green light in most institutions of learning particularly those of higher education. These reasons have been advanced as the moral reason, the morale reason, decisional reason and educational reason (Schmerler, 1977). Ryan (1976) offers the fifth reason as the “credibility reason”.

According McGrath (1970), the most compelling reason for student participation in the affairs of the University rests in the generally accepted political proposition that in a free society all affected by a policy have the right

to be involved in the formulation of such a policy even at its inception. Otherwise the policy stands to be resisted. The morale argument in favour of student participation in university decision processes was provided by Johnson (1991) whose reason for the involvement lies on the premise that student input creates a sense of ownership and engagement between students and the institution. The decisional paradigm for student representation and involvement argue that students have special information and expertise not available to faculty and administrators and which would not be represented if students were not included in the deliberations. The students offers knowledge, perceptions and opinions that can only be held by someone who is the recipient , customer and purpose the educational process (Webber, 1974). The educational motive for student involvement posits that one of the main goals of educational institution is to educate the students for citizenship and democratic living. In order therefore, to inculcate the philosophy of democracy and citizenship in them, they must be afforded the opportunity to participate in civil and democratic dispensations in which they are directly involved in making decision which affect them most (Northington, 1972). Starkweather (1975) concurs when he argues that it seems reasonable that students would be better able to move from the role of students to the role of a citizen if they experienced optimum decision making while at college. The "credibility reason" paradigm postulates that student involvement in college governance allows for policy decisions to be viewed as more legitimate by the student body resulting in the institution avoiding looking paternalistic (Ryan, 1976). This eventually leads to improved quality of educational decisions and policies, diminished student dissent and unrest, giving legitimacy to colleges and creation of patriotic and better citizens.

RESPONSIBILITIES AND SERVICES OFFERED BY THE STUDENT REPRESANTATIVE COUNCILS

According to Wang and Salo (2009), council members are expected to design and participate in approved activities that serve to enhance the quality and image of both the physical and behaviour of the institution. Presented hereunder are some of the reviewed responsibilities and services offered by the SRCs to their electorate.

Representing the student body in issues affecting their learning in the institution

As originally proposed by John Dewey in Democracy and Education (1917), the purpose of representatives in democracy is to engage in meaningful dialogue between different groups of a given social set up. Student Representative Councils therefore, shall exist for the benefit of the students in order to help students share ideas, interests, and concerns with tutors, other members of different faculties, administrative staff and to help build harmonious relationships between students themselves. The Student Representative Council therefore, represents the student community to other students in other tertiary institutions and to the outside world. In the United States, Australia and Canada student councils are involved in curricular and extracurricular activities and student organizations promote public education and its values. In an article by Saba (2000), to secure students` perceptions of and feelings about their participation on these decision-making bodies, student representatives indicated that they helped to share decision-making responsibilities with the authorities in their institutions. However, while participation helped to foster a sense of equality and ownership among of stakeholders, student reps, were not given a corresponding opportunity to substantively affect policy and other changes in their schools (Saba;2000).

The concept of student participation usually conjures an image of elected student councils. However, a new generation of school reform experiments has brought to the fore a different kind of student leadership arrangement. The student council is no longer viewed as the primary mechanism for garnering student input; rather, the trend in student participation is now geared toward "more democratic decision-making modes" and "revised power alignments" (Schmerler, 1972). The idea is to "provide students direct access to administrative decision-making procedures" (Schmerler, 1977). Critics of traditional student councils have hailed this shift as a way to lessen the potential for co-option by administrators and faculty and as a means for increasing the legitimacy of the democratic process in the eyes of students (Calkins, 1974; Ryan, 1976).

Holding Consultative and feedback meetings with the students

The SRCs hold group meetings which should be held at regular intervals of time in order to discuss various aspects of functioning of the student council). Such meetings are to be attended by all stakeholders who include the student council, college or university counselors and faculty members. In order to facilitate consultation, the SRC raises student issues, engage in consultations and provide advice on educational and youth issues to the institutional authorities and appropriate government authorities and youth agencies (Vikas; 2009, Wang and Salo; 2009; Kaba;2000).

Communicating with the Student Constituents

As the representatives of the student body, the SRC has a responsibility to report information of various kinds to fellow students. They inform their constituents about the issues that were discussed or information items disseminated at meetings with the university authorities. It is vital that they gather information from their constituents about issues brought before meetings with authorities as well as about any issues that their constituents have. They also may wish to host one or two meetings per semester to update students on issues and to discuss any issues that need to be addressed. In order to stay in touch with what is going on in their institutions, they should meet with the college authorities at least once or twice a semester (Wang and Salo; 2009).

Participating in Committees

There are numerous opportunities to participate in committees within the college and the university level. Student bodies elect representatives to stand for them in University -wide committees. These representatives report back to students at organized meetings. Furthermore, Student Representative Councils have the opportunity to serve on Policy and Review Councils within the university (Wang and Salo; 2009). In Chicago, for example, in the United States student representatives elected by their peers share with authorities the responsibility for governing their institutions (Hess; 1996).

They are given the opportunity to take part in the approval of changes and the addition or deletion of the current university programs. The importance of taking part in such committees is therefore very important since avoiding such committee involvement will weaken the student`s voice in the operations and governance of the university. Research suggests that while participation fosters a sense of equality and ownership among student members, they are not given a corresponding opportunity to substantively affect policy and other changes (Kaba; 2000). The students therefore are not in possession of the same level of power like other power bases that are a source of legitimate authority to effect policy changes in the institution.

Provision of general student services

In Australian institutions, student unions are established for, among other reasons, provide eateries, small retail outlets (e.g., news agencies), student media (e.g., campus newspapers), advocacy, and support for a variety of social, arts, political, recreational, special interest and sporting clubs and societies (Clarke; 2007). In Sweden unions provide counseling services to members and publish their own magazines and newspapers. Larger Student Representative Councils often own and run their own facilities at the university such as shops, restaurants and night clubs. Most also operate specialized support services for female student are also catered through the provision of special services. Foreign or extra-territorial students also have special services offered to the through initiatives of the Student Representative Councils. These councils are ultimately for the benefit of the students. So all the activities conducted should be student pro. Involve the students as much as possible. Encourage suggestions and ideas by them (Vikas; 2009)

Fund raising

The Student Council may also help to raise funds for university-wide activities, including social events, community projects, and university reform (Bylaws of the Laurel Springs Student Council, 2010, Article I,

Section 2) Most students` unions take out membership fees to allow them to provide more services to the students they represent within the university.

Involvement in various national political social and non-academic activities

In some developed countries, for example French, student activism has resulted in the largest national student unions having a strong political identity and their actions are generally restricted to the defense of their vision of higher education rather than the particular interests of the student body of a single university. The strength of unions can be best measured by their effectiveness in national protests rather than by membership figures. In some instances, students' unions are highly politicized bodies, and often serve as a training ground for aspiring politicians. Campaigning and debate is often very vigorous, with the youthful enthusiasm of the various partisans. The Netherlands is also home to a unique case of student representation in which a local political party completely run by students gained seats during local town hall elections. In Greece, as in Portugal, Student Representative Councils organize and support numerous activities such as political debates, demonstrations, university occupations, public lectures, cultural and artistic events and conferences. In some instances, members work on student yearbooks being designed as an informational tool for the students. In some cases, such student media is often partisan, inexperienced, and under no financial pressure to slant coverage to please a broad readership, and a general lack of serious consequences for decision all encouraging political gamesmanship. Other unions, however, are less politicized. Students' Representative Councils generally have similar aims irrespective of the extent of politicization, and focus on providing facilities, support and services to students as well as political goals *(http://en.wikipedia.org/)*. In a case analysed detailing student participation in Australia, students are compelled to fund the student unions for the provision of service. However, these services are very often, dubious services which they may not need or do not want. They are compelled to fund a multitude of political groups, including many of an extremist nature. They are compelled to finance groups with policies and values which may be anathema to their religious or political views, or to their sense of decency.

Some SRCs organize and promote non-academic extracurricular activities such as sports and culture events, and get together parties and festivities. Organizing events of interest to the students and those that give an opportunity for students to showcase their talent is also an important role that should be played by the student councils (Vikas; 2009).

RESEARCH METHODOLOGY

The present study adopted the case study design which meant focusing on one phenomenon that is, the effectiveness of the SRC in ODL institutions at ZOU Mashonaland East region which the researchers selected to understand in depth regardless of number of there being 10 regions in the ZOU (McMillan and Schumacher; 1993). The case study was also used to gather directly from individual students for purposes of studying their perceptions of the effectiveness of the SRC. The case study assisted in studying a single entity of the ZOU (the SRC) and enabled the two researchers in the investigation, who are also stakeholders to the problem under study to be enmeshed in the study and obtain an in-depth insight into the activities of the Student Representative Council at the ZOU`s Mashonaland East Region.

POPULATION

The population for the study consisted of all the active 436 ZOU students from the four faculties in Mashonaland East region duly registered for the August-December 2010 semester with the university. These were made up of, on one hand, all the members of the Student Representative Council, and the ordinary students, on the other. The following table shows the population distribution by faculty.

Table 1: Distribution of the ordinary student population by faculty

FACULTY	MALE		FEMALE		TOTAL
	Number	%	Number	%	
Arts and Education	63	14.93	38	9.00	101
Commerce and Law	81	19.19	28	6.64	109
Applied Social Sciences	58	13.74	87	20.62	145
Science and Technology	33	7.82	34	8.05	67
TOTAL	235	55.69	187	44.31	422

Source: Mashonaland East Regional Administrator`s Student Enrolment records dated 31 August 2010.

The 14 members of the SRC were combined with the population of ordinary students to give a population of 436, which was the total student enrolment for the region during August-December 2010 academic semester.

The sample and sampling procedure

Out of the total population of 422 for ordinary students, a sample of 80 students was chosen through the stratified random technique. A list of all the students enrolled by faculty was obtained from the Regional Administrator`s office and from each faculty list, 20% of the subjects was obtained. This ensured proportional representation of all the 4 Mashonaland East regional faculties of the Zimbabwe Open University. From the SRC population of 14 students, 10(71%) were selected using the lottery method, which also made sure that all students had an equal opportunity of making it into the sample. Ninety (21%) students made up the sample out of 436(100%) students.

Data collection Instruments

The present study adopted a questionnaire as the instrument to facilitate the gathering of data from the ordinary students while the student representatives` views were extracted through the use interviews. The current research also adopted document analysis which was carried out in Student Representative Council archives in order to cross validate the data obtained through both interviews and questionnaires. Validity and reliability of the instruments were established and enhanced through a pilot test which was conducted with a sample of 10 students obtained through convenience sampling based on availability and vicinity to the Zimbabwe Open University Mashonaland East Regional Centre. A test-retest method of improving reliability of the instruments was carried on the aforementioned sample, and in both instances, yielding similar results.

Data Collection

The process of data collection was carried out over a duration of three months stretching from August to October 2010, during which period the researchers had the privilege to interact with the student body, analyze documents such as minutes of meetings and as well observe some of its activities meant to satisfy student member`s needs. After the samples had been drawn, a questionnaire with an introductory letter was mailed to all ordinary participating students. A total of 80 questionnaires were completed and subsequently returned giving a response rate of 100%. All of the 7 members making up the Student Representative Council sample were successfully interviewed.

Data Presentation and Analysis

Collected data were coded to facilitate easier interpretation and analysis. Data were grouped in themes and described using frequencies and percentages. The coding of collected data and presenting them in tables allowed the researcher to analyze the data in order to come up with meaningful conclusions from the data.

PRESENTATION AND DISCUSSION OF FINDINGS

The following discussion is based on the results which were obtained through data solicited through the use of questionnaires (for ordinary students) as well as interviews (for SRC members). All the 80 (100%) ordinary students returned the questionnaire and the 10(100%) selected members of the SRC were successfully interviewed.

The majority, 6(60%), of the SRC members exhibited knowledge of their responsibilities as student representatives. Among the 10 members, 4(40%) appeared not to be conversant with their responsibilities as student representatives. The majority, 8(80%), could recall all the 6 major objectives for the formation of the SRC although the remaining 2(20%) struggled to explain the reasons for the formation of the student body. One is, therefore, left wondering how the duties expected to be carried out by these representative were to be executed. Out of the 80(100%) ordinary students, the majority of 78(96%) indicated that they knew there was an SRC in the university but had not yet been assisted in any way by this council. Only 2(4%) remarked that they were only aware of the existence of the council through the compulsory payments of subscriptions to the SRC coffers.

Students paid their SRC subscriptions of USD$20 per semester which was meant to sustain SRC activities for a particular year. Whereas the majority 75(94%) of the ordinary students blamed the SRC for the misuse of their subscriptions, all the 10(100%) SRC members retorted that they did not handle the subscriptions and neither did they have control of such funds. However, concern was raised on the disbursement of the funds as the SRC was required to apply for the funds which were kept in the university account only to be released when applied for. All regional meetings operated at zero budgets and this implies SRC members had to finance their travel and subsistence despite travelling on SRC business. This is contrary to the funding systems prevailing in other countries particularly the developed world, for example in Denmark where student unions are funded by government and the university (http://www.en.wikipedia.org/wiki/ Students%27_union).

There was lack of coordination between the Regional and National SRCs hence activities in the different regions were obviously different and fragmented. There were no harmonized programmes of activities among the regional student bodies thus implying that there was no sharing of ideas as was the case with other colleges and universities. Some 3(30%) members of the SRC were ignorant of the existence of the National SRC, a body that should be harmonising regional activities and representing the students at national and international fora. The majority of the SRC members, 8(80%), did confirm that they had no contact with other student bodies form other universities and neither were they affiliates of the Zimbabwe National Students Union (ZINASU), a body made up of SRCs from all tertiary institutions across the country. This, therefore, shows a situation of isolation on the part of ZOU students, who are deprived of a platform on which to associate and share beliefs, concerns, successes and failures with students from other colleges and universities. This contrasts sharply with other SRCs which join national associations. In Canada, most student unions are affiliated to the Canadian Alliance of Student Associations. In Zimbabwe, most SRCs are affiliates of ZINASU. One therefore, wonders why the SRC at ZOU, Mashonaland East Region was ignorant of the existence of ZINASU.

A total of 4 meetings were supposed to be held per each academic year at the rate of 2 meetings per semester, for the SRC representatives. However, due to unavailability of funds, 3 of the scheduled meetings failed to take off, with only 1 materialising. No meeting by the current SRC had been held with the students. All the 80(100%) student respondents indicated that they had not had any meetings with their SRC, a situation that could have accorded them the opportunity to air their grievances that had accumulated over the years. There, therefore, appears to no communication between the student body and the SRC, hence communication as a service by the SRC was ineffective.

However, the majority, 7(70%) of the SRC members 7 (70%) indicated that due to the geographical dispersion of the students, the SRC was unable to arrange meetings with them, even when tutorials were in session. Most students do not attend the tutorials resulting in meetings penciled in for the encounter failing to take off.

There was clear evidence that there is lack of contact between the student representatives and the university administration. All the 10(100%) student reps indicated that they had held only one meeting with the administration and hence the performance of the SRC in representing the students concerns to the university authorities was clearly in doubt. However, according to 55(69%) students, the SRC had invited the students to provide them with lists of concerns through the suggestion box method, which they did. Unfortunately, no feedback was ever provided to the students.

There is also lack of continuity between current and previous SRCs. Since there was no handover-takeover with the previous SRC, the current representatives are unable to exercise their duties because they are not certain of where to start from given the fact that no files were availed to them. The previous SRC has cited 'no funding' as their reason for failing to pitch up at the Regional Office for handover-takeover.

The SRC, however, has plans for its organization. Activities earmarked for the 2011 academic year include the following:

- charity work in old people`s homes as well as orphanages and health centres
- marketing of the Zimbabwe Open University`s academic programmes
- sporting and entertainment activities for the current, former and future students
- fund raising activities for the SRC activities

All the 80(100%) respondents in the study indicated that they did not take part in the political affairs of the country as a student body. However, individuals were free to affiliate to any political party of their choice outside the auspices of the SRC as well as the university. This is unlike other universities and countries where student councils and unions have been actively involved in supporting, even through financing, political parties. Many such unions are highly politicized and have often served as training ground for aspiring politicians. However, the situation in conventional universities in Zimbabwe spells a different picture. A sizeable number of the modern day politicians in the country have found themselves ascending the ranks from student activism at the University of Zimbabwe. As explained by the majority of the respondents, political activities in the ODL situation were out of question for a number of reasons:

- the geographical fragmentation of the students(52%)
- more effort was devoted to learning since the majority of the students had lost out on studies which they should have concluded long back(39%)
- lack of interest in politics(78%)

The above findings therefore, show that political activities among the students ZOU are not among the functions of the SRC.

After establishing the services and responsibilities offered to the students by their SRC, the researchers sought to find out the challenges mitigating against the SRC`s effective discharge of duty. Prominent among the SRC responses, were the following:

- the geographical fragmentation of the students making it difficult to organize and worse still mobilize resources
- No funding (80%)
- no office from where to administer the affairs of the council (78%), hence poor coordination because there was no call-in centre for registering concerns, grievances or appreciations for services rendered

Unlike the situation prevailing at the ZOU, some local universities have office for their SRCs. Elsewhere, in developed countries, student unions own magnificent buildings, for example the Teviot Row House at the University of Edinburgh (http://en.wikipedia.org/wiki/Students%27_union).

CONCLUSIONS AND IMPLICATIONS FOR THE FUTURE

The results of the current research show a discouraging arrangement in which students learning through ODL appear to be weakly represented by their elected Student Representative Councils. Because of the SRC`s lack of capacity to control their own finances, programmes earmarked for inception are failing to take off thereby hindering attempts by the student body to address the concerns of their electorate effectively. The devolvement of fund control to the regions is thus encouraged.

As a result of lack of funding, there seems to be a gulf between the students and administration because their representatives are less effective than expected and in some cases, almost dysfunctional.

Despite the lack of funds, the SRC has not made any attempt to undertake any other activity that does not require any meaningful capital outlay. It was hoped that activities such as cleanup campaigns and visits to Old people`s homes for cleaning services could take off with minimum financial expenditure.

There should be meaningful engagement between the SRC and the university authorities on the issue of SRC subscriptions to establish the way forward and where possible devolve the financial management to the regional SRCs. The current breed of SRC members does not seem to have established themselves fully as the student representatives and as such time is running out as they approach the end of their tenure in office without having effectively justified their existence.

There is need to establish links with other universities and colleges and be affiliated to the national student bodies such as ZINASU to enable cultural exchanges and involvement in inter-university activities. It is also at such gatherings that the Zimbabwe Open University gets to be known, subsequently creating a large client base. Otherwise, the students currently are isolated from the rest of the other colleges and universities.
The SRC should play a major role in creating an environment that is conducive to student learning through holding regular meetings with the university administration during which, issues of concern to student problems are resolved.

There being lack of coordination, the SRC is encouraged to lobby for office space so that students have a meeting place and reporting centre that is clearly identifiable and conveniently located to the advantage of the students.

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REFERENCES

Birch, A.H. (1993). The Concepts and Theories of Modern Democracy. London: Routledge.

Clarke, D.(2007) Compulsory tertiary Student Union Membership http://www.parliament.nsw.gov.au/Prod/parlment/hansart.nsf/V3Key/LC20030916049 retrieved 21/12/2010

Dahl, R. A. (2000). *On Democracy.* Yale University Press.

http://en.wikipedia.org/wiki/Students%27_union

Huseyin, G. (2010). Participation of Student Councils in Decision making at Universities in Turkey, Retrieved from http://www.highbeam.com/doc1G1-228428443.html 23 November 2010.

Kaba, M. (2000) "They listen to me ... but they don't act on it": contradictory consciousness and student participation in decision-making." In High School Journal December 1, 2000.

McMillan, J.H. and Shummacher, S. (1993) Research In Education: A Conceptual Introduction, New York: Harper Collins College Publishers.

Orr, L. (2010). Bylaws of the Laurel Springs Student Council, Article I, Section 2 Article on direct democracy by Imraan Buccus". Themercury.co.za. http://www.themercury.co.za/index.php?fArticleId=3985561. Retrieved 2010-12-22.

Vikas, S. (2009) "How to Start a Student Council and Run it Effectively." Retrieved: 11 Nov. 2010 <http://eziniearticles.com/

Wang, J. & Salo, T. (2009). Council of Graduate Students (COGS) Representatives Guide http://www.cogs.umn.edu/pdfs/ProgramRepGuide.pdf. Retrieved 21/12/2010.

Zimbabwe Government, (1998). Zimbabwe Open University Act No 12/98 Chapter 25, Harare, Zimbabwe Government.

Zimbabwe Open University (2002). The Student Union Constitution. Harare: ZOU.

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FACTORS THAT AFFECT STUDENTS' PROGRESS AND THE COMPLETION RATE IN THE RESEARCH PROJECT: A CASE STUDY OF RESEARCH STUDENTS AND THEIR SUPERVISORS AT THE ZIMBABWE OPEN UNIVERSITY

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ABSTRACT

The question of why some distance education students in the Department of Education at the Zimbabwe Open University (ZOU) successfully complete their studies while others do not is becoming increasingly important as distance education moves from a marginal to an integral role in the provision of higher education. In order to unravel this issue and initiate some academic debate, the Department of Education at the ZOU mounted a national survey between June 2008 and July 2010 aimed at ascertaining the reasons for low completion rate among research students studying for the Bachelor of Education in Educational Management (B.Ed.-Educational Management). A survey of 100 research students was undertaken. Respondents were asked to identify and explain institutional and student- related factors that affected their progress and success in research projects. Major factors found to impact negatively on students' progress included financial problems, lack of books and journals, poor communication and poor supervision by some tutors. Personal and domestic factors found to impact negatively on students successfulness included the following: financial problems, distance between the student and the Regional Centre and lack of technology. The present study recommended that ZOU needs to decentralize its operations to district centres so as to reduce distance between students and supervisors. Project Supervisors need thorough training for them to effectively assist students to throughout the project. The Library should offer inter-net facilities, relevant and recent book and journals.

Key words: Open University, distance education, Zimbabwe

INTRODUCTION

Distance education institutions, the world over, are coming under increasing public and governmental scrutiny with respect to what they do, how well they do it, and at what cost. The extraordinary growth of distance education in Zimbabwe and particularly at the ZOU has generated a lot of interest in the issues of quality and effectiveness. One of the major challenges facing the Department of Education at the ZOU is the low completion rate amongst undergraduate research students. The question that motivated the present study is why only forty percent (40%) of B.Ed (Educational Management) students successfully complete their research projects while others sixty percent do not. This article discusses findings of a two-year investigation into factors that affect students' progress and completion rate in the research project. It is hoped findings of the present study will help to inform ODL policy and best practices in the supervision of students, research projects.

Background of the Study

The B.Ed (Educational Management) degree offered by the ZOU, is a four-year degree programme. To be admitted into the programme, the applicants are required to have;

- at least 5 Ordinary Level passes including English Language and Mathematics.
- a professional teachers certificate, diploma or degree approved by the university
- at least one year work experience in a public or private educational institution either as a teacher or administrator.

The BEd (Educational Management) programme is aimed at equipping practising educational administrators and teachers with administrative knowledge and skills in handling educational management, supervision, educational planning and policy issues. The degree is also useful to administrators, managers and leaders in other organizations outside the education system.

The Bachelor of Education Degree Structure

The B.Ed (Educational Management) Degree Programme consists of twenty-four courses including the research project. The degree programme is divided into four academic years of two semesters each (semester 1 to semester 8).

The Research Project

The research project is an important part of the B.Ed (Educational Management) Degree designed by the student in consultation with a tutor (supervisor) under the overall guidance of the Regional Programme Coordinator (co-supervisor. Basically, there are two types of research projects-structured and unstructured. For a structured project, Students are given topics to work on, what to look for and guidelines to follow. The Department of Education, at the ZOU, requires students to undertake unstructured projects. Unstructured research projects are self-directed and should be organized into five chapters involving a number of activities

Table 1: The Research Project Process

Chapter	Activities
1	specifying the research problem formulating the research topic or title presenting background of the study presenting statement of the problem formulating hypotheses or research questions discussing the significance of the study stating delimitations and limitations stating assumptions defining key terms outlining organization of the study
2	- reviewing literature
3	designing the research: creating, adopting or adapting a research design and data collection methods describing the population, sample and sampling techniques collecting data
4	analyzing and presenting data discussing research findings
5	summarizing major findings of the study drawing conclusions making recommendations compiling references compiling appendices

Students begin working on their research projects in the seventh semester. The student is expected to work with the supervisor throughout the research project and submit a typed project report of approximately 10 000 - 12 000 words to the Department of Education by the end of the eighth semester.

One of the dimensions of the project is its size approximately 10 000 words and the weight it carries in course assessment (8 credit points). A normal course carries a maximum of 4 credit points). Another important aspect is the amount of guidance and support students receive from the project supervisors. The research project is also a collaborative effort between the student and the supervisor. The question to ask is why only forty percent of the B.Ed (Educational Management) students each semester complete research projects. This low completion rate of research projects has a negative impact on the quality and effectiveness of the B.Ed (Educational Management) Degree.

Statement of the Problem

Unlike conventional classroom learning, it is recognized that in a distance learning system, a large number of students fail to complete their studies due to its inherent factors. Some reasons are obvious and common. Others may be unique and relevant only to a particular group of students or programme. In the implementation of a distance education programme, there are unique problems that stand against achieving programme goals. These problems may be student-related and/or institutional-related. The purpose of the present study was to identify and describe factors that negatively impact on B.Ed (Educational Management) students' progress and completion rate in the research project at the ZOU.

Research Questions

In order to address fully the main research problem, the study was guided by the following four sub-questions questions;

1. Who is a ZOU student? What are his or her characteristics?
2. What are the student-related factors that affect B. Ed (Educational Management) students' completion rate on the research projects?
3. What are the institution-related factors that negatively affect B. Ed (Educational Management) students' completion rate in the research projects?
4. How can the Department of Education at the ZOU improve the completion rate of B.Ed (Educational Management) research projects?

Importance of the Study

Research projects undertaken for the B. Ed (Educational Management) Degree are widely regarded by both staff and students as an important component of the curriculum. A student who fails to submit a completed research project is failed or deferred. A study on factors that affect students' research work is, therefore, of theoretical and practical importance since it focuses on issues of educational quality and effectiveness. Thus, findings of the present study are of interest to distance educators and researchers in general and to project supervisors and their students in particular.

LITERATURE REVIEW

Openness and accessibility, the hallmarks of many distance teaching institutions, all too often seem to be associated with significantly lower rates of successful completion of courses and programs of study than campus-based institutions (Woodley and Parlett, 1983). In most conventional institutions students have access to their lecturers or tutors or to fellow students for help, advice or information. In a distance learning system, the student is more likely to experience isolation, even alienation from the institution. He or she may be geographically remote from the central or its local center, and either living at some distance from fellow students or unaware of their existence even if they do live nearby. Thus, students in distance- learning systems

face not only the problems of conventional students, but also those generated by the system itself (Robinson in Kaye and Rumble (Eds), 1981). In this review of literature we categorise these problems as students'- related and institution - related.

A number of studies have been undertaken on factors that affect the success and progress of research students in distance education. Robinson, in Kaye and Rumble (Eds), (1981) argues that all distance education students at some time experience problems in managing their own learning effectively, for example, in scheduling and using time efficiently, in expressing their thoughts in written work, and in developing adequate reading and comprehension skills to enable them to make use of what they read and to cope with the volume of the reading required. Most students seem to experience difficulty, at some point in their studies, in understanding particular concepts or texts. Bogdan, (1992) noted that right at the initial stage, quite often, students fail to define a research problem from either a conventional or technical meaning. This breeds frustration. Kratwohl (1985) identified lack of training and experience in research methods as an obstacle to students' progress in research. Taschian, (1997) indicated that students fail to prepare a clear and precise research proposal thereby failing to communicate, to the supervisor, exactly what information will be obtained and how it will be obtained. This leads the supervisor to demand that the student spends more time on the research proposal and clarify issues before proceeding to the next stage. In agreement with Taschian (1997), Nyawaranda, (2005) says some students fail to distinguish between writing a research proposal and a research report, thereby, wasting valuable time on developing the research proposal before they could undertake the intended study.

RESEARCH DESIGN

Researchers have come up with various research designs the major ones being the surveys, experiments, case studies, historical and correlation research designs. The present study adopted the survey research design. The survey design was preferred because it is the most appropriate design where perceptions of participants are sought (Punch, 2004). The survey design is one of the most effective ways of conducting research. It is effective in gathering information that describes the nature and extent of specified data, providing a systematic attempt to collect information, describe it and explain perceptions, beliefs, values, views and behaviour (Thomas and Nelson, 2001).

METHODS AND PROCEDURES

The population of the present study consisted of all B. Ed students in their final year, who had completed or not completed their research projects. Data was collected through the use of a questionnaire distributed to a purposive sample of 100 students. The study was qualitative in that it collected students' perceptions on factors that affected their progress and successfulness on the research project.

DISCUSSION OF FINDINGS

The first objective of the study was to identify student-related factors that negatively affected the progress of B. Ed (Educational Management) students towards the successful completion of the research project at the ZOU. We first identified key characteristics of the ZOU student. The question who is a ZOU student was unpacked according to a number of dimensions which are age, gender, educational background, marital status, number of children, geographical distance, income, access to information and communication and technology. We collected this information from the Registry Records and constructed a consolidated profile of a typical ZOU student.

Information about the age of B. Ed (Educational Management) students showed that the age range of the students is 35-60.The studied students were relatively old. In distance education, the age of the student is very important. Whilst, Coggins (1988) has argued that younger students are more likely a distance education

course, Holmberg(1899)argues that older, mature students are self-directed and are more likely to have the strong motivation that is necessary to succeed at a distance. However, older students usually experience personal problems as they try to balance their studies with work and family responsibilities. Therefore, it may be argued that their age other coupled with other factors could negatively affect their completion rate of the research project.

The marital status of the respondents showed that 90% were married, 6% were single and 4% were widowed. The number of own children per student was between 3-4 children. By implication, most B.Ed (Educational Management) students had some family responsibilities which could affect their research project work.

Sixty-four percent of the respondents were employed as educational administrators and 36% were classroom teachers. The major source of income for almost all respondents was the salary from their employment. Forty-four percent of the respondents indicated that their spouses were gainfully employed as teachers whilst (56%) said their spouses were either doing peasant farming in the rural areas or living with them at their workstations. In view of the economic meltdown that characterized Zimbabwe year 2005 to date, it may be common knowledge that ZOU students' salaries were inadequate for them to fend their families and finance their research projects.

The majority of students (86%) lived far away from the Regional center and had to travel an average distance of 100 kilometres to visit the Regional Centre or the project supervisor at his or her place. This student information enabled us to describe a typical B. Ed (Educational Management) student at the ZOU.(See Table 2 below).

Table 2:Profile of a ZOU B. Ed (Educational Management) Student

1.Age	35-60years
2.Gender	Male (60%) female (40%)
3.Educational level	Ordinary Level
4.Marrital status	Married
5.Average number of own children	3 children
6.Employment status	Employed
7.Income-salary	Less than USD2 400 p.a
8.Mean distance travelled to Regional Centre	100km

We then used these characteristics as the basis for studying student – related factors that negatively affected research students. The study identified ten common factors (See Table 3 below).

Table 3: Student-related factors affecting B. Ed (Educational Management) students' progress and successfulness on the research project in decreasing order of frequency

Factor	Students affected
1.College fees	83%
2.Typing and binding the research project	82%
3.Home and work pressure	80%
4.Distance travelled to see the supervisor	78%
5.Training and experience in research	78%
6.Demands of other courses	73%
7.Students health	22%
8.Marriage	17%

9.Children	13%
10.Friends	10%
11.Age of student	10%

Financial Problems

Knapper, (1988) argues that distance learners are more likely to have insecurities about learning more than traditional students. These insecurities are founded in personal - related issues such as financing of study. Although distance education is driven by the philosophy of affordability and cost effectiveness, findings of the present study show that 83% of the research students considered the cost of registering for the research project too inhibitive. The research project is a double major. A research student has to pay a total of United States (USD182.50) per semester for two semesters. And usually the research project is taken together with two other courses. The total cost per semester would then climb to USD 310.00. Besides their college fees, students have other financial commitments to meet (food, clothes, children's school fees and the cost of travelling to meet the supervisor).

Distance

Cropley and Kahl (1983) argue that the most unique feature of distance education, not surprisingly is distance. This has a myriad of implications for the distant learner. Among these implications are the isolation of the learner from resources, support, and peers; the lack of face-to-face interaction with tutors and delayed feedback. In the present study, 78% of the students saw the cost of travelling to see the research supervisor as a major factor that hindered their progress and successfulness on the project. One of the roles of the research supervisor at the ZOU is to maintain contact with the student through regular personal supervision meetings. On average, a student has to make about 10 visits to see the project supervisor. The frequency and nature of these sessions will vary depending on the nature of the research and the progress the student is making. A good number of students (58%) said they sometimes failed to visit their supervisors for advice because of high travelling costs.

Home and Work Demands

Distance learners operate in an environment meant primarily for other purposes such as the home, or the work place. Learners, therefore, often face household duties or have full time or part time jobs. In the present study 73% of the research students said their progress on the research project was negatively affected by their jobs. This was true since all B. Ed. (Educational Management) students were educational administrators (64%) and teachers (36%). Whilst male students (80%) said home demands did not affect their research work, female students (60%) said home duties as wives and mothers negatively affected their progress on the research project. Single, divorced or widowed women students did not mention their marital status as a negative factor in their research work. This is not surprising given that in rural Zimbabwe, tradition expects married women to perform almost 90% of the household duties (cooking, laundry and taking care of the children) even if they hold fulltime jobs elsewhere. Even if they have maids, it is still their responsibility to see to it that the maid performs these duties well. In this finding we agree with Cropley and Kahl (1986), who argue that often, the distance learner is in a setting meant primarily for other purposes such as the home, or the workplace and often face household duties or have full or part-time jobs. Hardy and Boaz (1997) found out that distance learning requires students to be more focused, better time managers and to be able to work independently. This means the successful distance student needs to have a number of characteristics such as tolerance for ambiguity, a need for autonomy and an ability to be flexible. (Thekeld & Brzoska, 1994).

Demands of other Courses

B.Ed (Educational Management) students are required to start working on their research project in the 7th semester and submit the completed project in the 8th semester. The research project is taken concurrently with two other courses. Data collected reveals that the progress of 73% research students was negatively affected

by the demands of other courses. The following factors were found not to negatively affect students progress in research work: student health (22%), children (13%), friends (10%) and age of the student (6%).

Institution - related Problems

The second objective of the present study was to identify and describe institutional factors that negatively affected research students studying for the B. Ed (Educational Management) degree. We first examined the role played by the research supervisor and the Department of Education in the supervision of students' research projects.

Responsibility of the Research Supervisor

Supervision of the research project is a relationship requiring mutual trust and respect between the supervisor and the student. The research supervisor's roles include the following;

- To give students guidance about the nature of the research and the standard expected, the planning of the research programme, relevant literature and sources, research methods and instrumental techniques and to direct students.
- To make the student aware of the relevant regulations and legal issues and any ethical issues that might rise in the course of research.
- To maintain contact through regular personal supervision and meetings in accordance with Departmental policy and in the light of any agreement reached with the student. The frequency and nature of these sessions will vary depending on the nature of the research and the progress the student is making. Both student and supervisor sign a form detailing student- supervisor contact meetings. The supervisor is responsible for maintaining a record of all supervision with the student
- To give detailed advice on the necessary completion dates of successive stages of research in order to ensure that a project report is submitted within the time allowed by the regulations.
- To request written work as appropriate and return such work with constructive feedback within an agreed period of time. During the writing-up of the research project, the supervisor is expected to keep in contact with the student and respond to reasonable requests for assistance. The supervisor also provides guidance on the writing and preparation of the research project. Ultimately, the student is responsible for his or her work and the supervisor's responsibility is to give guidance
- To ensure that the student is prepared for the oral examination and understands its role in the overall examination process.
- To advise the student subsequently of the implications of any recommendations from the examiners and to assist in the preparation of any re-submission.

Responsibility of the Department of Education

The responsibility of the Department of Education lies with the Regional Programme Coordinator. The Regional Programme Coordinator is a fulltime lecturer based in any one of the university's Regional Centres, who is responsible for managing and coordinating all academic activities of a particular programme. The roles of the Regional Programme Coordinator include the following;

- To approve research topics for research students.
- To ensure that the student has appropriate supervision throughout their time as a student of the university.
- To provide information and guidance on the Department, Faculty and University Regulations and codes of practice.
- To endeavour to ensure research students have access to sufficient library provision.
- To coordinate the pastoral care of research students and to ensure that they are informed of sources on independent advice should the student/supervisor relationship break down.
- To record the progress of research students and submit reports to the National Programme Leader as required.

- To maintain files which include written progress reports from the supervisors.
- To ensure that students' research projects are marked, moderated and marks submitted to the National Programme Leader (at the National Centre) in time.

A number of studies have examined institution – related factors that affect students' progress in research projects. According to Nunan and Calvert (1992), some supervisors lack relevant training and experience to supervise research students. Pearce (2005) found out that some supervisors are rigid and teach research the way they were taught thereby frustrating the student in the process. In a paper delivered at a workshop in Mashonaland Central, Nyawaranda (2005) highlighted some of the common criticisms usually leveled against research supervisors at the ZOU. Chief among them were that some supervisors lack relevant experience; lack relevant knowledge and skills required for the supervision of research projects; have little guidance and direction; hold few meetings with the research students.

Theorists (e.g., Coldeway, 1982, 1986; Calvert, 1986; and Garrison, 1987) stress the need for a comprehensive approach that takes into account all the experiences of distance learners as well as the unique aspects of the distance- learning environment. In order to ensure that research student have the adequate training and the necessary experiences in undertaking research, B. Ed (EAPPS) students are required to pass a prerequisite course EA3DC101, Introduction to Research Methods (see B. Ed(EAPPS) course structure, Table2) before they can embark on the research project. The Department of Education has also produced a Handbook on Guidelines to Educational Research for use by research students. Despite all these efforts and provisions and the actual supervision students receive, the progress of research students and their completion rate have remained unacceptably low. The question "why the Department of Education at the ZOU" continues to experience low completion rates amongst B. Ed (EAPPS) research students inspired the two researchers in this study to investigate into factors that retard B. Ed (EAPPS) students' progress and successfulness on the research project. The study also gave students the opportunity to describe their experiences and what they perceived as major factors affecting their progress and success on the research project.

INSTITUTION – RELATED FACTORS

Lack of Journals and Books

Findings of the present study show that 85% of B. Ed (EAPPS) research students considered lack of books and journals as some of the major factors affecting their progress and success. Research shows that successful research students tend to be comprehensive and up to date in reviewing the literature (Kangai and Mapolisa, 2008). However, Zimbabwe is a developing country and academic libraries are only found in the urban centers. This, therefore, means that distance students in the rural areas have to travel to their local center library to read. Students have also complained that ZOU library rules and regulations place some restrictions on access to reading materials. Materials that are heavily demanded, and there are so few of these, are placed on closed access and they are available for use within the library only. Books on short- term loan can be borrowed out for three days and books on long- term loan can be borrowed out for only seven days. The fine for not returning a book in time is US$20.00 per day delayed. These stringent library measures compounded by lack of relevant books and journals was seen by students as a serious hindrance to their progress and success on the research project.

Training and Experience in the Research Project

One of the critical factors affecting the progress and success of research students is the lack of training and experience in the research project. Most of the students would be undertaking research for the first time. In order to prepare students for the research project, all students are required to study and pass a pre-requisite course "Introduction to Research Methods" in their third year. This course is meant to equip students with the knowledge and skills required in the research project. The major focus of the course is to give students a conceptual and theoretical understanding of ten key stages of the research process; The present study sought

to unravel this problem and asked students to rate 10 key processes of the research project according to level of difficulty based on their experiences. The data we collected is presented in Table 4 below.

Table 4: Percentage of Students finding the project difficulty at each stage.

	Item	Easy		Difficulty	
		NO	%	NO	%
1	Selecting the research topic	11	22	39	78
2	Writing the background of the study	29	58	21	42
3	Reviewing Related	19	38	31	62
4	Describing the research design and methods	23	46	27	54
5	Preparing the research instruments	20	40	30	60
6	Collecting data	20	40	30	60
7	Analysing data	15	30	35	70
8	Presenting, discussing research findings	14	28	36	72
9	Writingconclusions and recommendations	36	72	14	28
10	Writing the references	38	76	12	24

Results in Table 4 indicate that research students experienced difficulty at all stages of the research project except writing the background of the study, writing conclusions and recommendations and compiling the references. The most difficult stages were selecting the research topic, analyzing data and presenting and discussing the research findings. According to Nyawaranda (2005), research students usually complain that their supervisors sometimes lack relevant experience; lack relevant knowledge and skills required for the supervision of research projects; give too little guidance and direction; and allow too few meetings with the students. Lack of clear guidelines for research argues Nyawaranda (2005) has been one of the major factors contributing to students' low completion rate. (Keegan, 1986) has also pointed out that lack of frequent contact with teachers, presents students with problems in undertaking research. According to Beaudoin (1990), lack of instantaneous communication in distance education causes the delivery system to be formal and rigid. Although face-to-face tutorials remain optional for distance learners, the research project shifts a considerable amount of responsibility to the student to make personal contacts with the project supervisor for guidance and advice. Beaudoin (1990) notes that distance learners are at varying degrees of readiness to undertake research at their own. Each research student thus needs some degree of personalization or individualization of instruction to suit his or her particular situation.

Typing and binding the research project was also considered by 82% of the students as a major factor that negatively affected their submission of the completed project as most students did not have their own computers and had to contract someone for the typing. Such students were stationed in rural areas where electricity facilities, computer and binding services are scarce. This could be expensive on the part of the students as they had to travel long distances to town centres where they could access such services.

The factors that were said to be impacting negatively on the progress and success of B.Ed (Educational Management) research students include both student- related and institutional related-factors. Major student related factors indicated were financial problems that included the cost of traveling to see the supervisor and the cost of typing and binding the research project. Major institutional- related factors that were said to adversely affect research students included lack of books and journals, lack of clear guidelines and in some cases lack of experience in research on the part of the supervisors. Poor communication between the institution and research students was also considered as a major factor that negatively affected the progress and success of research students.

Recommendations

In light of the above findings and conclusions, the researchers made the following recommendations:

- ZOU needs to decentralize its activities to district centres so as to cut down on traveling costs incurred by the students. Setting up district centres would be in line with the strategic mission of the institution to bring affordable university education to the learners wherever they are.
- There is need to review the Departmental policy on the typing of research projects particularly at undergraduate level. The Department of Education and Regional Centres may need to identify centres in the Regions and Districts where students may have their research projects typed and bound.
- Students should be trained in the use of computers so that they could type their own research projects.
- ZOU should ensure that supervisors and markers of research projects are well.
  trained and qualified in order to effectively and efficiently supervise and evaluate students' research projects.
- ZOU should endeavour to equip the National and Regional centre libraries with adequate and relevant books and journals for research. Internet facilities should also be made available in all ZOU libraries so that research students can access current knowledge and information.
- There is need for ZOU to improve communication with its research students through tutorial letters so as to keep them informed of Departmental expectations, important dates, and the progress the student is making in his / her research.
- Resources need to be collectively mobilised by the Corporate World, politicians, ZOU and the community at large with the intent to source or purchase computers for the ZOU Regional Centres where students can learn to type their research projects.
- In the wake of e-learning there is no harm in persuading and encouraging prospective ZOU students to purchase laptops or desktops as they enroll at the ZOU.
- ZOU Regional Programme Coordinators need to attach B.Ed (EAPPS) research students to part time tutors (supervisors) who reside in the same Districts with students. This might help in cutting down travel costs and communication challenges, thereby, increasing students' chances to successfully complete and submit quality research projects.

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REFERENCES

Beaudoin, M. (1990). The instructor's changing role in distance education. *The American Journal of Distance Education, 4* (2), 21-29.

Best, J. W. and Khan, J. V. (1993), *Research in Education*, New York, Longman.

Bogdan R. C. and Bilken S. K. (1992) Qualitative Research for Education. Boston Allyn and Bacon.

Calvert, J. (1986). Research in Canadian distance education. In I. Mugridge & D. Kaufman (Eds.), *Distance education in Canada* (pp. 94–110). London: Croom Helm.

Carr, R. and F. Ledwith. (1980). Helping disadvantaged students. *Teaching at a Distance* 18 (Winter), 77–85..

Coldeway, D. O. (1982). Learner characteristics and success. In I. Mugridge & D. Kaufman (Eds.), *Distance Education in Canada* (pp. 81–93). London: Croom Helm.

Galusha J M (1998), *Barriers to Learning in Education*, (ERIC Document reproduction Service No. 416377).

Garrison, D. R. (1987). Researching dropout in distance education. *Distance Education, 8*(1), 95–101.

Holmberg, B. (1986). *Growth and Structure of Distance Education*. London: Croon Helm.

Kangai,C.V.and Mapolisa,T.(2008).Citation Analysis of Research Projects Submitted by the Bachelor of Education(EAPPS)Students(2000-2004)to the Department of Education at the Zimbabwe Open University:Implications for Educators and Librarians.*African Symposium Journal.*Volume8,No.1,June 2008.

Keegan D (1986), *The Foundations of Distance Education.*London, Croom Helm.

Kennedy, D., & Powell, R. (1976, November). Student progress and withdrawal in the Open University. *Teaching at a Distance, 7*, 61–75.

Knapper, C (1998), Life long learning and distance education, *American Journal of Distance Education*, 2(1), 63-72.

Krathwohl D. R. (1985) *Social and Behavoural Science Research*. San Francisco, Jossey- Basssey.

Masenda, T. (2001*) An Invesigation into Problems Faced by Distance Education Students in the Management of Tutorials, Assignments and Examinations at the Zimbabwe Open University* (unpublished Research Project).

Nunan, T., and Calvert, J. (1992). *Quality and Standards in Distance Education.* Unpublished report to the National Distance Education Conference.

Nyawaranda V. A (2005) *Supervising Research Projects/ Dissertations*. A Paper delivered at the ZOU,Bindura:Mashonaland Central Regional Centre,12 November 2005.

Oppenheim, A. N. (1992). *Questionnaire Design, Interviewing and Attitude Measurement*. London, UK: Pinter Publishers.

Ostman, R. E. and G. A. Wagner. (1987). New Zealand management students' perceptions of communication technologies in correspondence education. *Distance Education* 8(l), 47–63.

Parlett, M. and Hamilton, D. (1977). Evaluation as illumination: a new approach to the study of innovatory programmes. In: Hamilton, D. et al. (Eds.). *Beyond the numbers game.* London: Macmillan.

Pearce L. (2005) *How to Examine a thesis*. New York, Society for Research into Higher Education and Open University Press.

Punch,K.F.(2004).*Introduction to Social Qualitative and QuantitativeApproaches.*London:Sage.

Rekkedal, T. (1983). Enhancing student progress in Norway. *Teaching at a Distance* 23 (Summer), 19–24.

Sung, N. (1986). *Perceptions of Program and Learning Environment as Determinants of Persistence and Post Study Attitudes in Adult Distance Learning*. Unpublished D.Ed. dissertation, Pennsylvania State University, P.A.

Taschian A. (1997), *Research Proposal Basics,* MKT 410- Spring 1997.

Thomas,J.R.and Nelson,J.K.(2001). *Research Methods in Physical Activity(4th Edition).*Albany:Human Kinetics.

Tuckman B. W. (1994) *Conducting Educational Research.* Orlando Florida, Harcot Place, College Publishers.

Woodley, A. and N. McIntosh. (1977). People who decide not to apply to the Open University. *Teaching at a Distance* 9 (July), 18–26.

Woodley, A and Parlett, M.(1983).*Book Teaching at a Distance :Issues in Distance Education*. Open University :UK.

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ANALYZING PRE-SERVICE ELEMENTARY TEACHERS' PEDAGOGICAL BELIEFS

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ABSTRACT

The major aim of the study was to reveal prospective elementary teachers' pedagogical beliefs. The following research questions were addressed in the study: "What are prospective elementary teachers' teaching beliefs?" and "Do their teaching beliefs differ based on their gender?. Data were gathered by using the adopted version of Teacher Beliefs Survey developed by Benjamin (2003). The instrument assessed traditional and constructivist view of teaching with a number of 18 items. It was distributed to 234 fourth-grade Prospective Elementary Classroom Teachers. The participants were categorized by using cluster analyze based on their pedagogical beliefs. The analysis results showed that majority of the participants hold constructivist teaching belief whereas remaining presented traditional and pragmatic views. Non parametric statistic test was conducted whether the participants' teaching beliefs differed based on gender. Chi square analysis showed significant difference between gender and teaching beliefs of the participants.

Keywords: pedagogical beliefs, cluster analysis, gender, pre-service teachers.

INTRODUCTION

Educational system is the most important organization for preparing the future generations. This system is evolving gradually to meet the needs of the era. Especially throughout the last two decades, reconstructed education systems focused on developing pupils' own understanding with an emphasis on learner centered teaching practices. Within this flow, in our country, both the education faculties and k-12 curriculums were redesigned to fulfill the desired outcomes for about a decade. The curriculum of education faculties are now focusing on the learner centered teaching strategies and practices. The Turkish National Education Curriculum introduced in 2004 stresses the learner centered strategies and activities. The teachers are urged to implement the curriculum in favor of students' personal developments with an emphasis on their involvements.

Although, this pedagogical practice shift is urged, it should be taken into consideration that the teachers' practices are related with their belief systems. Personal belief system is a messy construct as described by Pajares (1992). Belief is defined as "any simple proposition, conscious or unconscious, inferred from what a person says or does" by Rokeach (1968, p: 113). As belief itself has a wide definition, teachers' belief can be examined in different ways, self-awareness, attitude, or perspectives (Pajares, 1992). Teachers' belief on teaching and learning is another dimension that includes their views of pedagogical side of the teaching. As a construct, teaching belief contains many facets, and defining those dimensions is not easy. In the literature,

there are many studies focusing on the teaching and its components. Studies focusing on the characteristics of effective teachers also present the participants' educational beliefs.

Witcher and Onwuegbuzie (1999) focused on pre-service teachers' perceptions of the characteristics of effective teachers. The participants were asked to present and rank the characteristics of effective teachers. The statistics used for the analysis revealed the emphasis of the importance of student centeredness to describe characteristics of effective teachers by females. In addition, females presented the importance of the ethical issues and teaching methods whereas males advocated the importance of subject knowledge and classroom management.

Minor, Onwuegbuzie, Witcher and James (2002) studied pre-service teachers' perceptions of characteristics of effective teachers and their educational beliefs of pre-service teachers. The quantitative data analysis results showed that 28.4 % of participants presented traditional view of education and only 12.7% of participants were advocating progressive educational view. However, a majority of the participants, 59% presented eclectic view. A low percentage of participants revealed progressive view of education whereas from qualitative data analysis, the student centeredness description of effective teacher characteristics emerged. The result did not present any gender differences on the educational belief and different indicator for characteristics of effective teachers.

There are also studies that focused on pedagogical views of teachers. Parker and Brindley (2008) examined 21 graduate pre-service elementary teachers' initial teaching beliefs. The themes emerged from this qualitative study revealed that participants presented a progressive view of teaching by advocating active learners and student-centered learning.

In their study Hermans, Tondeur, van Braak, and Valcke (2008) examined the primary school teachers' pedagogical beliefs and some other characteristics. They use the teaching belief survey developed by Woolley, Benjamin, and Woolley (2004) with the dimensions of constructivist and traditional educational beliefs. The overall participants' scores on both scales presented that the primary teachers have a tendency towards constructivist educational beliefs. Also, participants' pedagogical views showed no significant differences based on the gender variable.

Sang, Valcke, van Braak, and Tondeur (2009) studied educational beliefs of primary teachers in Chinese educational settings. 'Teacher Educational Beliefs' scale (TEB) was administrated to 820 primary school teachers on their traditional and constructivist beliefs on teaching and learning. Result of the analysis presented that the participants scored higher on constructivist beliefs. ANOVA results showed no difference on constructivist belief based on gender. On the other hand, adoption of traditional view was high among males. Cluster analysis was conducted to present a general profile of the participants. Result depicted four groups. Although the constructivist scores presented higher mean scores, 29.5 % participants formed constructivist group whereas 31.7% participants were grouped under traditional profile. Remaining 29.5% formed mixed constructivist and traditional and 10.1% formed mixed low constructivist and traditional profile.

The researchers tried to answer following research question: "Are there any structures of teachers' pedagogical beliefs to develop taxonomy?" and "Are there any significant differences between genders based on teachers' pedagogical beliefs".

METHODOLOGY

In this research, it was aimed to present the pre-service elementary teachers' pedagogical beliefs. For this reason, to present the target populations views on the research topic, a survey research was selected as the

design of the study. During the 2008- 2009 school year, an adopted version of Teacher Beliefs Survey (Benjamin, 2003) was used to assess the senior pre-service elementary teachers' pedagogical views.

Sampling

The fourth grade pre-service teachers were selected as the sample of the study, since after their graduation they are to become in-service elementary teacher nominees. The survey was administrated in a course hour and all participants were asked to fill out whole statements in the instrument. A total number of 234 participants handed in the survey. Three out of 234 participants did not give gender information but remaining presented an equal distribution; there were 115 male and 116 female participants.

Instrumentation

The survey instrument was prepared to get information on some demographic characteristics and pedagogical beliefs of participants. In addition to these, data on another topic were gathered and its results were also presented. To assess pre-service elementary teachers' pedagogical beliefs, 19 items were selected from Teacher Beliefs Survey developed by Benjamin (2003) representing the constructivist and behaviorist educational beliefs. Eleven out of 19 items were defined as the constructivist items and remaining eight were defined as the behaviorist ones. The instrument was translated by two area experts both fluent in English and had masters degree in education.

The teaching belief survey was developed on five point-Likert type scale where 1: "strongly disagree" to 5: "strongly agree". The items were worded as positively and none of the item presents negative statement.

Analysis

Quantitative data from the study were analyzed by using parametric (descriptive and inferential statistics) and non parametric statistics (chi-square). In order to find whether the latent variables fall under the presented categories, explanatory factor analysis was conducted and for each factor, reliability analysis was run. K-Means Cluster analysis was also conducted to find out the general characteristics of participants. After determining the clusters, chi-square non parametric analysis was run to present the relation between participants' gender and pedagogical views. During the data analysis, SPSS 15 package statistics program was used.

RESULTS

An explanatory factor analysis (EFA) was conducted to identify the latent variables. The assumptions of EFA were checked (Tabachnick, & Fidell, 2001) and met. Principle axis factoring extraction method with oblimin rotation was used to form the item groups of teaching belief survey. The result of the factor analysis was fit to the two factor solutions with a loading range .2 to .7. Two items loaded below .3 were discarded from the analysis (Tabachnick, & Fidell). Eleven items were loaded to constructivist factor with minimum 29 and maximum 55 point (M= 47.50 ; SD= 5.23). Remaining six items loaded to behaviorist one with a minimum 6 and maximum 30 points (M= 14.56; SD= 4.81). Items 1, 2, 5, 7, 8, 12, 13, 14, 16, 18, and 19 were loaded to the first factor with a Cronbach alpha .77. The items of 6, 9, 10, 11, 15, and 17 were loaded to second factor with a Cronbach alpha .71.

Although the test was designed to assess the pedagogical views of teachers, there was no criterion set to label the participants as either constructivist or behaviorist. The cluster analysis technique was used to form meaningful subgroups that have similar characteristics on the chosen variable (Fraley & Raftery, 1998). For this study, K-means cluster analysis approach was selected and as the cases are grouped based on the distances, the scores were transformed to standardized scores in order to make the impact of variables equal (Garson, 2010).

The analysis was first run with 2, 3, and 4 cluster options. Although the instrument presented two different scores on teaching belief, a three-cluster solution presented better result. The ANOVA analysis presented that the formed groups are different from one another with a significant result.

Table 1 shows the result of cluster analysis. The first cluster showed constructivist oriented participants (70%) with high scores on constructivist items (*M*=49.12; *SD*= 3.54) and low scores on behaviorist part (*M*= 12.24; *SD*= 2.88). The second cluster presented a group of participants (15%) with behaviorist orientation where they present high scores on behaviorist items (*M*=38.54; *SD*=4.15) and low scores on constructivist part (*M*= 18.31; *SD*=3.32). The last cluster showed positive orientation on both pedagogical views with a number (15%), high scores on constructivist items (*M*= 48.94; *SD*= 3.61) and high scores on behaviorist items (*M*=22.01; *SD*= 3.47). Based on the group means, the first cluster was named as constructivist pre-service-teachers, the second cluster named as behaviorist pre-service-teachers. The last cluster presented positive views on both scale, based on this, the last cluster was named as pragmatic pre-service teachers.

Table 1 : Between-Groups Differences for Constructivist and Behaviorist Measures

	Group 1 (Constructivists) n=165		Group 2 (Behaviorists) n=35		Group 3 (Pragmatics) n=34		
Measures	M	SD	M	SD	M	SD	F(2,231)
Constructivist	49,12	3,54	38,54	4,15	48,94	3,61	124,259*
Behaviorist	12,24	2,88	18,31	3,32	22,01	3,47	177,283*

*p<.001

The Pearson Chi-square indicates that a significant relationship between gender and three clusters ($\chi^2(2)$ = 9.30, *p*=0.01, eta= 0.20). Based on this significant result, there were three possible 2x2 relationships. The first 2x2 relationship was between gender and whether teachers were constructivist or behaviorist. This chi-square test result showed a significant relationship between gender and being constructivist and behaviorist oriented participant ($\chi 2$ (1) = 9.29, *p* = 0.001, eta=0.22). Females were more likely to be constructivist oriented teachers than males. The second chi-square result revealed a significant relationship between gender and being behaviorist and pragmatic oriented participant (χ^2 (1) = 3.99, p = .048, eta=0.24). Females were significantly more likely to be pragmatic oriented than males. However, relationship between gender and being constructivist and pragmatic oriented showed no significance ($\chi^2(1)$ = 0.31, p = .58).

CONCLUSION

Research on the teachers' understanding of teaching, learning and attitudes towards related issues are stemmed from the belief that those views of teachers affect their classroom practices. Pajares (1992) mainly focused on the influence of personal belief systems on the teachers' perceptions and judgments where these mainly influence their classroom behaviors.

The focal point of this study was to determine the overall profile of senior pre-service elementary teachers. Their pedagogical views (constructivist and behaviorist) were revealed by a survey study. The result of the current study has parallel characteristics with previous ones. As presented such as Sang, Valcke, van Braak, and

Tondeur (2009), and Hermans, Tondeur, van Braak, and Valcke (2008), and Parker and Brindley (2008), the result of this study showed higher rating of constructivist items than the traditional one by participants. However, high rating of constructivist items do not present that the participants in the study hold constructivist orientation rather than traditional one. Clustering the participants who have similar characteristics is a way to draw a picture of pre service teachers' pedagogical views. By using the scores on both pedagogical views, three meaningful groups emerged. The majority of the participants get higher scores on constructivist items and low scores on traditional one. So, they formed the constructivist cluster. Those with high scores on traditional one and low scores on constructivist one formed the traditional cluster. The remaining scored high on both dimensions formed the pragmatic cluster.

Although the tendency of the participants' view in this study have similar characteristics with the previous studies, the result of this cluster analysis conflicts with the study of Sang, Valcke, van Braak, and Tondeur (2009). In their study they found that the proportion of traditionally oriented participants is similar with constructivist ones. This discrepancy may due to the cultural as well as the educational policy differences between two different countries, Turkey and China.

The clusters formed based on the pedagogical views were analyzed according to participants' gender. Females are more constructivistly oriented than males when we investigate the relationship between gender and their constructivist and behaviorist orientation. Also, females are more likely to be pragmatically oriented than behavioristicly oriented. However, no significant relationship was observed between gender and being pragmatically and constructivistly oriented. When considering the overall results, the prospective elementary teachers are more likely to be constructivistly oriented. This can be related to the emphasis on constructivist view of teaching and learning in teacher preparation institutions. Although all study members participated in the same teacher education program, gender difference was observed. Girls are dominant in teaching profession and this makes them open to new developments in teaching profession. This can be explained as girls are more open to trying new things than boys.

It is widely believed that, beliefs on teaching are developed throughout the personal observations and experiences that the students encountered during their time spent in schools (Pajares, 1992). Additionally, in this process, Richardson (1996) emphasize the effect of the way how knowledge and content presented by their teachers. As this is the grounded theme of the belief studies, pre-service teachers' pedagogical views gain an important attention. New national curriculum which was developed parallel with the needs of the current era, emphasis the students' own development with the guidance of the teacher that is called students centeredness, or from a wider perspective constructivist educational practice. As the implementer of the curriculum today, teachers have to be guides in the classroom. But, before this, their underlying belief of teaching and learning needs to be analyzed. The investigation of pre-service teachers' teaching beliefs can be used to shape the teacher preparation (Hart, 2004) programs. Moreover, ignoring the pre-service teachers' views of teaching can constrain their professional development and acquisition of new knowledge and strategies on teaching practice (Morton, Williams & Brindley, 2006). This study will contribute to make modifications on both pre-service and in-service teacher's professional developments. Their belief on teaching can be used to rearrange the undergraduate programs. The courses can be redesigned with constructivist approach and strategies. For introducing the new and different teaching strategies related with student-centered educational approach, seminars and in-service training program can be designed.

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REFERENCES

Benjamin, J. (2003). Revision and validation of the revised teacher beliefs survey. Paper presented at the Annual Meeting of the American educational research association (Chicago, IL, April 21-25, 2003)

Fraley, C. & Raftery, A.E. (1998). How many clusters? Which clustering methods? Answers via model-based cluster analysis. *Computer Journal, 41*, 578-588.

Garson, G. D. (2010). Cluster Analysis <http://faculty.chass.ncsu.edu/garson/PA765/cluster.htm> Accessed 02.03.2011.

Hart, L. C. (2004). Beliefs and perspectives of first-year, alternative preparation, elementary teachers in urban classrooms. *School Science & Mathematics, 104(2),* 79–88.

Hermans, R., Tondeur, J., van Braak, J., & Valcke, M. (2008). The impact of primary school teachers' educational beliefs on the classroom use of computers. *Computers & Education 51* 1499–1509.

Minor, L., C., Onwuegbuzie, A. J., Witcher, A. & James, T.,J. (2002). Preservice Teachers' Educational Beliefs and Their Perceptions of Characteristics of Effective Teachers. *The Journal of Educational Research. 96(2)* 116-127.

Morton, M. L., Williams, N. L., & Brindley, R. (2006). Colliding cultures: Career switchers transition to elementary school classrooms. *Action in Teacher Education, 28(10),* 40–50.

Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research, 62(3)*, 307–332.

Parker , A., & Brindley, R. (2008). Exploring Graduate Elementary Education Preservice Teachers' Initial Teaching Beliefs. *The Professional Educator. 32, (. 2).*

Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J. Sikula, T.T. Buttery,& E. Guyton (Eds.), Handbook of Research on Teacher Education (Second edition). (pp.102-119). New York: Macmillan.

Rokeach, M. (1968). Beliefs, attitudes, and values: A theory of organization and change. San Francisco, CA: Jossey-Bass.

Sang, G., Valcke, M., van Braak, J., & Tondeur, J. (2009).Investigating teachers' educational beliefs in Chinese primary schools: socioeconomic and geographical perspectives. *Asia-Pacific Journal of Teacher Education. 37(4)* 363–377.

Tabachnick, B. G., and Fidell, L. S. (2001). Using multivariate statistics. Needham Heights, MA: Allyn and Bacon.

Witcher, A. , Onwuegbuzie, A.,J. (1999). Characteristics of Effective Teachers: Perceptions of Preservice Teachers. Paper presented at the Annual Meeting of the Mid-South Educational Research Association (Point Clear, AL, November 17- 19, 1999).

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METACOGNITIVE AWARENESS OF PRE-SERVICE TEACHERS

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ABSTRACT

The purpose of the study is twofold: (1) to investigate the pre-service teachers' levels of "metacognitive awareness" and comparison of sub-awareness scores, and (2) to explore relationships among metacognitive awareness factors and other independent variables including gender, GPA, course grades, and graduated high school type. The data were collected during "Computer Applications in Education" course in Spring-2010. 49 students completed the "Metacognitive Awareness Inventory (MAI)" developed by Schraw and Dennison (1994). There are 52 items loaded into 2 factors which are 'knowledge of cognition' and 'regulation of cognition'. High reliability coefficients were found for these factors (form .91 to .97). Students' scores on MAI were calculated and used to find out relations with other descriptive factors. Results and interpretation of the statistical analyses reporting mutual interaction among these variables were presented.

Keywords: Metacognitive awareness, pre-service teachers, success factors.

INTRODUCTION

Increasing the efficiency in learning at any part of the life is almost always a consideration for educators. As lifelong learning becomes important in the information society, the target of such a consideration goes beyond professions. That is, learners become self-educators bringing the issue of metacognition on the table. It can be defined as cognitions of cognitions (Dunlosky & Metcalfe, 2009). Metacognition is classically divided into two major components that are "metacognitive knowledge" and "metacognitive regulation". The former can be simply explained by knowledge of cognition while the latter can be referred as the way for regulation of cognition (Schraw & Moshman, 1995).

Since success is closely related with metacognition (Schraw, 1998), shaping or improving metacognitive awareness of learners might be considered as one of the goals in education (Kuhn, 2000). In this way, learners can either build their own ways to understand their own cognitive processes or find ways and strategies to manage the obstacles about cognition. In a recent study conducted by Young and Fry (2008), the relations between metacognitive awareness components and specific factors of success were investigated. That research includes some contributions to the metacognition literature by confirming the importance of

metacognition in academic achievement. Among factors of success, especially both GPA and course grade were correlated with metacognitive awareness factors.

Appropriate use of metacognitive strategies is one of the keys to success. However, the relationship between awareness and the practice is not very simple as proposed by Cao and Nietfeld (2007). In their study, it was expected from students to adjust their strategies when faced with different levels of difficulties. However, the findings revealed the existence of a sophisticated relation between awareness and regulation because being metacognitively aware did not guarantee the strategy shift. Both studies were run in higher education context. Metacognition is expected to develop over years (Flavell, 1979). Cao and Nietfeld's (2007) study shows that components of metacognition might not always develop at a parallel fashion. That is why, supporting this process is important for educators. For example, metacognitive awareness training should be available for students. This might lead them to learn better (Wade & Reynolds, 1989).

In this study, the aim is to survey the levels of pre-service teachers' metacognitive awareness with the utilization of Schraw and Dennison's (1994) Metacognitive Awareness Inventory (MAI). The levels include two main (knowledge of cognition; regulation of cognition) and eight sub-scales (declarative, procedural, and conditional knowledge; planning, information management, monitoring, debugging, and evaluation). As a follow-up analysis, pre-service teachers' awareness types were compared. Another aim of the study is to explore the existent relations among metacognitive awareness measures, academic success (GPA and course grade), and demographic variables (gender and graduated high school type).

METHOD

49 First year undergraduate students participated in the study. All of them were from college of education. 46 students were enrolled in the department of elementary science education; 2 students were enrolled in the department of elementary mathematics education, and 1 student was enrolled in the department of early childhood education. 80 % (N=39) of participants were female and 20 % (N=10) of them were male. Most of them graduated from Anatolian high schools (N=20) providing English-based scientific curriculum. 10 students were graduates of general public high schools providing Turkish standard curriculum. Only 1 student graduated from a science high school and the rest reported other types of high schools. Cumulative GPAs of participants were ranging from .77 to 3.73 out of 4 (M=2.04, SD=.63). Course grades were between 10-100 out of 100 (M=82, SD=15.22).

Survey was distributed to participants during spring 2010 term. They attended CEIT 100 – a course offering the basic computer applications for teachers. During the semester, they completed weekly tasks and at the end of the semester, they were graded according to those assignments. The survey was administered at the end of the term. Voluntary participation was required.

Metacognitive Awareness Inventory was developed by Schraw and Dennison (1994). In the literature, validity and reliability of it were confirmed through certain studies (Schraw and Dennison, 1994; Young and Fry, 2008). There are 52 items loading 2 factors with 8 subscales. The 2 factors are parallel with the components of traditional metacognition theories: (1) Knowledge of Cognition; (2) Regulation of Cognition. In the first construct, there are three main knowledge types that are declarative, procedural, and conditional. Declarative knowledge refers to the awareness of the possessed learning abilities while procedural is the awareness of how to do's for learning. Conditional knowledge, on the other hand, deals with the when and why to do's. The second major construct comprised of strategies including planning, information management, monitoring, debugging, and evaluation. In the original inventory internal consistency was almost excellent [Cronbach's alpha values for factor 1 (□=.88); factor 2 (□=.88); entire inventory (□=.93)]. For this study, all items were applied and analyzed in consistence to Schraw and Dennison's (1994) article.

Gathered data were analyzed descriptively to understand the levels of metacognitive awareness of students. Then, it was explored whether there is a significant difference between pre-service teachers' two types of awareness which are knowledge of cognition and regulation of cognition. To do this, paired sample t-test was performed. In order to decide on the relationships, correlations were calculated. Before starting the analysis, data cleaning was performed. Since it was less than 2 %, missing values were ignored. All the analyses were considered at .05 alpha level.

RESULTS

SPSS 15.0 was used for analyses. The original instrument has high reliability values. Similarly, in this study, the instrument Cronbach alpha coefficients were found very high [□(factor 1)=.91; □(factor2)=.95; □(entire instrument)=.97]. To find out the answer of the first research question, descriptive statistics were explored. Table 1 summarizes the results for each subscale and the total metacognitive awareness scores. Knowledge of cognition scores ranged from 48 to 84 out of 85 (M=63.71, SD=10.03). Scores for regulation of cognition factor ranged from 88 to 169 out of 175 (M=125.86, SD=20.55). In total, metacognitive awareness scores were found between 137 and 253 out of 260 (M=189.57, SD=30.01). Frequencies indicated that 51 % of the first factor scores; 53 % of the second factor scores; and 57 % of the total scores are below the average. That is, more than half of the students have low scores in metacognitive awareness. Comparing the factors, pre-service teachers got slightly better scores in knowledge of cognition. In order to explore significance of better scores, a paired sample t-test was calculated. Before that, the mean scores were standardized because the amount of subscales and items were different for each factor. Knowledge of cognition consists of 17 items and the rest of the items belong to regulation of cognition factor. Such an imbalance results in different scores in maximum (factor 1: 85; factor 2: 175). That is why, to equate the maximum scores to be received, each score in the first factor was multiplied by the coefficient gained through division of maximum score of factor 2 by factor 1. In this way, the scores were equated to be compared. The paired t-test generated meaningful differences on the mean scores of knowledge of cognition and regulation of cognition factors ($t(48)=4.45$, $p<.001$). According to the results, knowledge of cognition scores of pre-service teachers is significantly higher than regulation of cognition scores.

Table 1: Levels of Metacognitive Awareness

		Min	Max	Mean	SD
Knowledge of Cognition	Declarative	21	40	30.25	4.91
	Procedural	10	20	14.47	2.92
	Conditional	13	25	19.00	3.32
	Total (Factor 1)	48	84	63.71	10.03
Regulation of Cognition	Planning	14	35	25.23	4.81
	Information Management	24	45	33.67	5.54
	Monitoring	15	35	25.53	4.90
	Debugging	12	25	19.59	3.60
	Evaluation	14	29	21.84	4.08
	Total (Factor 2)	88	169	125.86	20.55
Metacognitive Awareness		137	253	189.57	30.01

While examining the correlation coefficients, those above .30 were considered as a cutoff point (Tabachnick & Fidell, 2001). GPA and course grade variables were taken as academic success variables. GPA was found negatively correlated with gender (□=-.45) towards the opposite directions. In addition, GPA is positively

correlated with two of the regulation variables which are planning (r=.32) and monitoring (r=.31) whereas no significant correlations were found between GPA and knowledge of cognition variables. There is a significant correlation between course grade and the awareness evaluation (r=.39) that is another subscale under regulation of cognition construct. Among demographic variables, only graduated high school presented correlations with debugging skill (□=.35) belonging to regulation of cognition factor in the same direction. Although found correlations are not very strong, they are not too weak to ignore.

DISCUSSION AND CONCLUSION

Metacognitive awareness scores of pre-service teachers were not too low, but mean differences between knowledge of cognition and regulation of cognition factors were found significant. This finding can be associated with Cao and Nietfeld's (2007) study results. In their study, the participants did not shift strategy use as the task difficulties varied. Parallel to that, students in our study demonstrated higher awareness about their metacognitive structures with regards to knowledge. On the other hand, as the scores suggested, their regulation skills were relatively low. This might mean that the management of regulation skills is not easily adjusted no matter how high they are aware of what(declarative), how (procedural), and why (conditional) to learn.

Correlational analysis revealed certain relationships. According to these, it can be interpreted that males are tended to have lower GPA scores. Overall, academic success can be related with certain regulation skills. Results indicated that as the GPAs of pre-service teachers increase, their planning and monitoring awareness develop. Planning is a regulation skill occurring just before learning. It is a kind of preparation to decide on learning components such as goal setting. The improvement of this skill can lead to increase in the awareness of what should be done to improve academic performance. Monitoring occurs during a learning experience. It might be considered as a kind of self-evaluation or self-feedback about learning process. If the learner improves it, his/her awareness of the learning performance might become clearer after each trial. Then, academic success could be affected because of learners' awareness of what strategy work for what context or content. However, unlike the findings of Young and Fry (2008), awareness of knowledge of cognition is not a determinant factor on GPA scores in this study. Since students' regulation of cognition is relatively low, they could not perform necessary manipulations to increase their success in learning. That is why, no matter how high their knowledge of cognition, their GPAs are not determined by this factor.

Pre-service teachers' evaluation skills might be related to their high course grades because evaluation refers to an overall judgment to see the results of learning experience. As the analysis criteria develop after each experience, the strategies may be adjusted across cases. The learner can become aware of how to apply strategies for more effective and efficient learning outcomes including higher course grades. By this way, learner might use evaluation results of previous experiences in favor of upcoming learning situations in a cumulative and iterative manner.

Debugging can be thought as a self-correction skill. During a learning episode, the learner with high debugging awareness can generate certain strategies to deal with detected learning errors. The findings suggest that learners graduated from Anatolian high schools might be more tended to debug errors in learning performance. Students in these kinds of schools have to pass an elimination exam. Moreover, provided education in these schools seem more directed to improvement of critical thinking skills when compared to other types of schools. Because of these reasons, graduates are more successful to find their mistakes in learning. They are also considerably successful in university entrance exam. Although there is a relationship among school types and regulation of cognition, in Turkey, there is not a formally applied approach to improve metacognitive awareness. As Kuhn (2000) suggested, it should be an educational goal.

This study can be considered as a contribution for the confirmation of MAI (Schraw & Dennison, 1994), but the sample size was limited. Therefore, the results might not be generalized. On the other hand, the findings are valuable to shed light on for further studies about detailed analysis of the relations among subscales. Moreover, this study emphasizes the importance of metacognitive training. There seems to be an urgent need for improvement of metacognitive awareness even at higher education level.

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REFERENCES

Cao, L. & Nietfeld, J. L. (2007). College students' metacognitive awareness of difficulties in learning the class content does not automatically lead to adjustment of study strategies. Australian Journal of Educational & Developmental Psychology, 7, 31-46.

Dunlosky, J. & Metcalfe, J. (2009). Metacognition: A Textbook for Cognitive, Educational, Life Span, and Applied Psychology. Sage Publications.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. American Psychologist, 34(10), 906-911.

Kuhn, D., (2000). Metacognitive development. Current Directions in Psychological Science, 9(5), 178-181.

Schraw, G. (1998). Promoting general metacognitive awareness. Instructional Science, 26, 113-125.

Schraw, G. & Dennison, R. S. (1994). Assessing metacognitive awareness. Contemporary Educational Psychology, 19, 460-475.

Schraw, G. & Moshman, D. (1995). Metacognitive theories. Educational Psychology Review. 7(4), 351-371.

Tabachnick, B. G. & Fidell, L. S. (2001). Using multivariate statistics (4th Ed.). Needham Heights, MA: Allyn & Bacon.

Young, A. & Fry, J. D. (2008). Metacognitive awareness and academic achievement in college students. Journal of the Scholarship of Teaching and Learning, 8(2), 1-10.

Wade, S. E. & Reynolds, R. E. (1989). Developing metacognitive awareness. Journal of Reading. 33(1), 6-14.

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INVESTIGATING TURKISH EFL LEARNERS' BELIEFS ABOUT GERMAN, ITALIAN AND FRENCH AS A SECOND FOREIGN LANGUAGE (1)

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ABSTRACT

This paper reports on a study that investigated beliefs about second foreign language learning of Turkish EFL learners, compared their beliefs about learning German, Italian and French as a second foreign language and explored within-group variation in these learners' beliefs. The primary purpose of this study is to identify Turkish learners' beliefs about compulsory second foreign language courses in French, Italian and German at an English-medium university in Turkey. Another aim of the study is to identify the underlying reasons the students have for choosing and not choosing a particular second foreign language course among available options as well as to see whether beliefs varied according to the semester of the students. The results indicated that the participants had different beliefs about second foreign languages and that their beliefs are stable over time.

Keywords: learner beliefs, beliefs about language learning.

INTRODUCTION

Language teachers and researchers currently consider the role of the learner as an important part of the language learning process; learning styles, strategies, attitudes and motivations are some of the factors that learners have in shaping this process. One of the more recently investigated learner variables in the field is learner beliefs about language learning, which refer to opinions that learners hold about various aspects of language learning (Horwitz, 1987). As most language educators argue, these beliefs affect students' success in learning the target language and direct their learning strategies in that way. It has been noted that successful learners develop insightful beliefs about language learning processes, their own abilities and the use of effective learning strategies which have enhanced their performance in language learning. On the other hand, students can also have misconceptions, uninformed or negative beliefs about language learning, resulting in their reliance on less effective strategies and negative attitude towards learning and autonomy (Victori & Lockhart, 1995), classroom anxiety and poor performance. For instance, a student who believes that learning a second language primarily involves learning new vocabulary will predominantly focus on mastering new vocabulary, while adults who believe in the supremacy of younger learners probably begin language learning with some negative expectations of their own achievement (Bernat, 2004).

Beliefs are defined as psychologically held understandings, premises or propositions about the world that are held to be true (Richardson, 1996). Beliefs about language learning consist of "general assumptions that students hold about themselves as learners, about factors influencing language learning and about the nature of language teaching" (Victori & Lockhart, 1995:224). The first attempts to systematically investigate these beliefs started with Horwitz's pioneering studies (1985; 1987; 1988) and from then on, many studies have been conducted with different learners in local contexts such as Malaysian (Wong, 2010); Turkish (Altan, 2006;

Ariogul et al., 2009); Japanese (Sakui & Gaies, 1999); Vietnamese (Bernat, 2004); Lebanese (Diab, 2006) and many other native and non-native English contexts. These studies have noted that successful learners develop insightful beliefs about language learning processes, their own abilities and the use of effective learning strategies which have enhanced their performance in language learning. According to Horwitz (1987), learners' beliefs or notions about language learning can influence both their experiences and actions as language learners but Horwitz (1987) also asserts that studying learner beliefs about language learning is important not only because such beliefs may influence students' expectations for and commitment to their language learning, but also because such beliefs may be more susceptible to change than cognitive style variables or affective variables such as attitudes and motivation. Thus, knowledge of students' beliefs about language learning may provide language educators with a better understanding of their students' "expectation of, commitment to, success in and satisfaction with their language classes" (Horwitz, 1988, p.283). As a result of this teachers can make more informed choices about teaching (Bernat & Gvozdenko, 2005) and adopt "a more sensitive approach to the organization of learning opportunities" (Cotterall, 1999, p.494) in their lessons.

Although there are numerous studies in the field, the term *beliefs about language learning* were not clearly defined by researchers in the previous studies. In most studies, the term is used as a known construct without providing further explanation while some of the studies define the term *beliefs* by itself. According to Vibulphol (2004), even Horwitz, one of the pioneer researchers of the studies on beliefs about language learning, did not give an operational definition of beliefs about language learning in her articles (Horwitz, 1985, 1987, 1988). She only refers to beliefs using the terms like *preconceptions* (1985), *preconceived ideas* (1987) and *preconceived notions* (1988) without giving specific descriptions about the construct. She used the statement "opinion" to refer to beliefs to introduce the Beliefs about Language Learning Inventory, namely BALLI, which has been used widely for researchers studying beliefs about language learning.

Horwitz (1985) and Wenden (1986) were the first ones to study beliefs about language learning. In more than 25 years, the scope of research on learner's beliefs has grown and several studies have been conducted. Most of these studies were based on the *normative approach*. Halliday (1994) used the term *normative* to refer to studies on culture that sees students' culture as explanation for their behaviors in class. The normative approach includes studies that have used Likert-scale questionnaires to investigate beliefs about language learning. The most widely used questionnaire is the Beliefs about Language Learning Inventory (BALLI) developed by Horwitz (1985).

In the field of student beliefs about language learning, most studies in the literature investigate student beliefs about English or other languages either as a second or foreign language. One of many studies in the literature dealing with the issue is of Bernat's (2004) study who investigated learner beliefs about language learning. In the study, there were 20 adult Vietnamese ESL learners who were given the BALLI. Their responses to the questionnaire are analyzed in order to identify learner beliefs about second language learning for the purpose of informing syllabus design and teacher practice as well as to discover if links existed between students' motivation for language learning and their beliefs. 12 of the participants were males and 8 were females aged between 24 and 59. The data was analyzed using the frequency of each item and the results indicated that no links were established between motivation and beliefs about language learning in this study.

Altan (2006) investigated the beliefs about language learning with a total of 248 foreign language-major university students at five universities. BALLI was given to students of English, German, French, Arabic and Japanese who were all going to be the teachers of the language they were learning. The study is a replication of the study Horwitz (1988) conducted with American students. The results of the questionnaire were evaluated again under the five language areas of the BALLI and indicated that students hold a wide range of beliefs with varying degrees of validity.

Another study by Ariogul et al. (2009) addresses the differences and similarities among English, German and French language groups' beliefs about language learning using a questionnaire. There were a total number of 343 participants; 143 students of English, 138 students of German and 62 students of French. All the participants were freshmen students enrolled in the intensive language school of a university in Turkey with a minimum workload of twenty hours of week of foreign language training. Their degree programs ranged from nursing to German language teaching. In their research, they used the BALLI, as well as a demographic questionnaire to answer the research question: *Do English, German and French language learners in Turkey differ in their beliefs about foreign language learning?* Descriptive statistics, including mean, standard deviation and frequency, were calculated. One-way analysis of variance (ANOVA) statistical analysis was used to understand the differences between the three language groups' scores on BALLI. The results revealed that there have been significant differences in beliefs among the language groups in four categories; *foreign language aptitude, the nature of language learning, learning and communication strategies* and *motivation and expectations*.

The primary purpose of this study, therefore, is to identify Turkish learners' beliefs about compulsory second foreign language courses in French, Italian and German at an English-medium university in Turkey. Identification of these beliefs and the reflection on their potential impact on language learning and teaching in general might inform teachers about their future syllabus design in the course as well as making teachers teaching a compulsory second language course gain insight about learners' thoughts.

In spite of the growing number of studies investigating beliefs about language learning of different groups of EFL/ESL learners from various cultural backgrounds since Horwitz's pioneering study in 1985, not much importance has been given to the investigation of students' beliefs about a *second* foreign language. This study is significant in the sense that it investigates the beliefs about learning a second foreign language. In the light of the aims discussed above, the following questions will be answered for the study to reach its aims.

1. What are METU FLE (2) students' beliefs about learning a second foreign language?
a. What reasons do METU FLE students have for choosing their second foreign language among the alternatives?
b. What reasons do METU FLE students have for not choosing the other second foreign languages available at the department?
c. Is there a difference between the students' beliefs about German, French and Italian as their second foreign language?
d. Do students' beliefs about a second foreign language change as they make progress in learning the language?

METHOD

Participants

For the sample of the study, all students in all the sections of the entire second foreign language courses (FLE 177 and FLE 277) at the department of Foreign Language Education, METU in Ankara, Turkey were selected. 133 students participated in the study. Among these 133 students, 64 of them were learners of German; 42 of them were learners of Italian and 27 of them were learners of French. There were 32 males and 101 females.

Data Collection and Analysis

As part of the quantitative survey research methodology, a questionnaire was developed and administered in order to obtain the relevant data for the study. In order to analyze the survey results, both quantitative and qualitative processes were used. The data concerning the participants' demographic information and beliefs about second foreign language learning were coded and entered into the PASW 18 statistical analysis program. Descriptive statistics, that is, frequency of items, mean scores and standard deviation scores were calculated to

answer the research questions. In order to analyze the association between the beliefs of the participants about German, French and Italian and to find out if these beliefs change as they make progress in learning the language, one-way analysis of variance (ANOVA) was calculated. Qualitative data obtained through the five open-ended questions in the questionnaire were analyzed by means of content analysis. The answers of the students were grouped into different themes related to the research questions and reported.

FINDINGS AND DISCUSSION

In this part of the paper, the findings of the statistical analyses of the data collected from the questionnaire will be reported. The results are presented according to the order of the research questions.

Participants' Beliefs about SFL in General

The first research question, *what are METU FLE students' beliefs about learning a second foreign language,* was answered by item frequencies, that is, according to the frequency of the answers the students gave to the related items in the questionnaire. The items 4, 6, 9, 14 and 18 were composed of statements related to the learners' beliefs about SFL. The items referred to both the nature of language learning in general and to the local situation of the learners.

More than half of the participants (91 out of 132; %68.4) agreed that the instructor teaches the language well. However, 26 participants (%19.5) stated that they were not sure whether the language they are trying to learn is taught well by the instructor. Item 6, stating that, *it is important to learn a SFL from a native speaker of the language*, received agreement from the participants. 107 of the participants (%80.5) marked either agree or strongly agree to the item which show that they believe a SFL is learned better from a native speaker.

Another general belief the participants had about SFL was the statement that *it is easier for someone who already knows a foreign language to learn a SFL*. Out of 133 participants, 113 (%84.9) marked either agree or strongly agree. Since the participants have English as a foreign language (or other languages), they believe that English has an important role in their learning German, Italian or French as a second foreign language.

General beliefs about learning a SFL in the local situation, which is related to the SFL courses they are taking at the department, were also investigated by two items, 14 and 18. The participants mostly disagreed to the statements *if I had a chance, I would change the language I am studying now* and *I would drop the course if I had the chance.* Item 14 received disagreement from 85 participants (%63.9) and Item 18 received disagreement from 104 participants (%78.2). This shows that the students are generally satisfied with their current choice of SFL. On the other hand, according to the results of the questionnaire, 26 participants (%29.5) were not satisfied with their current SFL and 22 participants (%16.5) were not sure.

Participants' Reasons for Choosing and Not Choosing Their Current SFL

Items 3, 5, 7, 8, 11, 15, 16, 17, 19, 20, 22, 23, 24 aimed to answer the research question (1a); *What reasons do METU FLE students have for choosing their second foreign language among the alternatives* and (1b) *What reasons do METU FLE students have for not choosing their second foreign language among the alternatives* again from both a general and local perspective. The reasons for choosing and not choosing the SFL were themed under four categories; 1) difficulty of the language, 2) general attitudes towards learning a SFL, 3) its being compulsory in the department and 4) the influence of the instructor teaching the course. Almost all of the participants, 131 of them (%98.5), stated that it is important to learn a SFL (Item 7) and 109 of the participants (%82) stated that they will have many opportunities to use the language if they speak very well (Item 19). It might be inferred that these are some of the reasons why the students chose their current SFL. This argument is verified by their answers to Items 3, 11 and 23. Most of the participants (97 of 133; %72.9) disagreed with the belief that their choice of the SFL depended on the course's being a part of the curriculum

(Item 3). Similarly, more than half of them (77 out of 133; %57.9) marked either disagree or strongly disagree with the idea that they chose the SFL since it was compulsory in the department (Item 11). A similar statement in the questionnaire (Item 23) received disagreement from 105 of the participants (%78.9) which stated that their choice of the SFL depended on the fact that they had no other choice.

Regarding the difficulty of the SFL and their choice of the SFL, the three items (1, 12 and 15), the three of which stated that the language they were learning was either easier or more difficult, were analyzed. The results revealed that there is not a clear cut variance among the five statements. It might be inferred from these findings that difficulty of the SFL did not play a major role in the participants' choice of the SFL.

Difference between the Participants' Beliefs about German, French and Italian

In order to answer the research question (1c) *is there a difference between the students' beliefs about German, French and Italian as their second language,* one-way analysis of variance (ANOVA) was calculated. Significance levels were set at $P < 0.05$.

Items 1, 4, 12, 14, 15, 22 and 23 were found to be statistically significant between groups with different *p* values. According to the ANOVA results, there is a statistically significant difference among the beliefs of German, Italian and French learners about the difficulty of second foreign languages (Item 1, p=0.000). The results of the Post-Hoc Scheffe show that this difference is directed from German to Italian and French which might mean that participants had a tendency to state that German was easier than Italian and French. Item 4, which stated that *the language I am trying to learn is not taught well by the instructor,* was also statistically significant between the groups (Item 4, p=0.000). Item 15, I have chosen this SFL because it is easier than others, was found to be statistically significant between the groups (Item 15, p=0.000). It verifies the fact that German learners agreed with the fact that German is easier than other SFLs than learners of Italian and French. The results also showed that German learners thought they chose the language they are currently learning because of the instructor when compared to learners of French and Italian (Item 22, p=0.003).

Difference between the Current Semesters of the Participants

In order to answer the research question (1d), *Do students' beliefs about a second foreign language change as they make progress in learning the language,* one-way analysis of variance (ANOVA) was calculated. Significance levels were set at $p < 0.05$.

The results reveal that there is no change in the belief of the participants as they make progress in learning the language. There is no statistically significant difference in any of the 24 items in terms of their semesters. A surprising result is that the students do not think that they have progress in learning the SFL so far (Item 10, p=0.459). They also believe that they have not learned the SFL (Item 21, p=0.420).

Responses to Open-Ended Questions in the Questionnaire

Qualitative data collected through the open ended questions in the questionnaire were analyzed according to their content and the themes; reasons for choosing/not choosing the language, satisfaction with the language and opportunity of chance have been determined. In the following sections, a general perspective of the participants related to these themes will be discussed. Below is the table of descriptive for the number of participants for each second foreign language.

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Table 1. Descriptive Statistics for German, Italian and French Learners

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	German	64	48,1	48,1	48,1
	Italian	42	31,6	31,6	79,7
	French	27	20,3	20,3	100,0
	Total	133	100,0	100,0	

German

In the study, there were a total number of 64 learners of German. Almost all of the students were satisfied with choosing German as a second foreign language One of the most frequently cited reason for choosing German is because most of the participants had previous knowledge of the language either from high school or their relatives in Germany and many of the participants chose German because they said they liked the language in general. Some of the participants stated that it was easier than other SFL offered in the department while others stated that they chose the language because their friends chose it as well. Popularity of German language and possible advantages it might bring over the other languages is another reason for German to be chosen. Also, a few participants stated that their advisors suggested that they took German as a SFL

When asked if they would change the language if they were given an opportunity, almost all replied in a negative way. They stated that German is widely spoken and when they learn the language, they will have many opportunities to use it. There was a consensus among the participants that they would not like to start learning a new language from the beginning and that is why they chose German as a SFL in order to improve their current knowledge.

Italian

Qualitative data from 42 learners of Italian were collected and one of the biggest reasons for choosing Italian as a SFL among other alternatives was the similarity of Italian to Spanish. Since Spanish is not among those SFL courses offered in the department, the students believed that learning Italian will help them learn Spanish better later on which is why they chose Italian. Another factor affecting their choice of the language was the interest to and attraction of the language. Some students stated that they chose Italian because they had previous knowledge of German and French and wanted to learn a new language.

When asked if they were satisfied with the language and whether they would change the language is they were given an opportunity, half of them said they were not satisfied and would change it with Spanish if Spanish was offered in the department. They stated that they would not change it with either German or French. Those who were satisfied with the language saying that they would not change it were as much as those who think in the opposite way.

French

27 learners of French participated in the study and qualitative data from these participants were analyzed according to the content related to the research questions. There are a number of different views of French as a SFL among the participants. Since the number of the participants in the study is not very high, generalizations cannot be made; however, most cited reasons for choosing the language include; influence of their friends, previous knowledge of the language from high school, the interest in the French language and culture in general (sound and pronunciation) and not being interested in the other languages offered in the department. Most of the students were not satisfied with choosing the language since they stated that it was a difficult language.

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CONCLUSION AND RECOMMENDATIONS

This study aimed at uncovering the beliefs EFL learners have about a second foreign language at a university in Turkey. The primary purpose of this study was to investigate participants' beliefs about three second foreign languages (German, Italian and French) in general and to explore the reasons why they chose one over the others. Although these languages are compulsory in the curriculum of English Language Teaching, the participants' major area, different reasons that influence choosing one language were identified thus, this study investigated the learners' beliefs about a second foreign language.

In the literature, there are many studies conducted by various researchers in various contexts (Altan, 2006; Ariogul et al., 2009; Bernat, 2004; Diab, 2006; Peacock, 2001 and Wong, 2010). This study differed from the others in two ways; firstly, BALLI is not used as a data collection tool. In most of the studies in the literature, BALLI was utilized to assess learners' beliefs about language learning. Secondly, this study is different from other since it focused on *second* foreign languages. Due to the fact that BALLI items were not written specifically for second foreign language learning, a questionnaire was developed by the researcher and by the help of some scholars in the field.

The first research question of this study was a general one, *what are METU FLE students' beliefs about learning a second foreign language*, and the answer to the question was tried to be found by evaluating the responses the students gave to the items in the questionnaire. Items 4, 6, 9, 14 and 18 were analyzed and the results showed that the students had positive beliefs about learning a second foreign language in general agreeing that it is important for someone who already speaks a foreign language to learn a SFL. Participants' knowledge of English as a foreign language seemed to help them learn a second foreign language better. Since METU is an English-medium university and the department they are studying at is English Language Teaching department, most of them are advanced learners of English who study courses like the English language, English literature, methodology, educational sciences and linguistics in order to learn how to teach English to, primarily, students in the primary and secondary levels in Turkey. Also, almost all of the participants believe that it is important to know a second foreign language. They believe that learning a SFL will enable them to have many opportunities later on after they graduate.

The second and third research questions were *what reasons they had for choosing and not choosing the second foreign languages offered in the department (German, Italian and French).* Results from the quantitative data showed that difficulty of language learning, general attitude towards the language and interest in the language, influence of the friends and necessity of knowing a SFL were among the reasons that directed the students to choose the language.

Another research question of the study, *difference between the students' beliefs about German, French and Italian as their second foreign languages*, was answered with one-way analysis of variance (ANOVA) to see if there was any difference between the groups. The results showed that German was considered to be easier than Italian and French. This might be inferred from the fact that the frequency of those who agreed with the statement "the language I am learning is easier than others in the department" was higher in the German group. This might also stem from the fact that learners of German as a SFL comprised almost half of the whole population (%48.1).

When the difference was analyzed according to the semester of the students, interestingly, there was no statistically significant difference in any of the items among the three groups. It can be inferred that the belief of the learners do not change as they make progress in learning the language. This was a surprising finding for

the researcher since beliefs were expected to vary with the students who were in the first semester and those who were in their third semester. Wong (2010) investigated Malaysian pre-service teachers' beliefs about learning English and the stability of these beliefs over time. The results revealed that with the exception of slight change to two items on language learning difficulty and six items on nature of language learning, most of their beliefs were stable over time. Since Wong's study was different in that the same questionnaire was administered to the same students 14 months after the first administration, it might reveal that beliefs are stable and not easily change over time with progress in learning the language.

The primary aim of this study was to investigate learners' beliefs about learning a second foreign language. Although the collected data provided some insights about various aspects of these beliefs, due to lack of time, only 133 participants were involved in this study. A further research might be conducted that investigates these beliefs from a wider perspective, with more participants and different contexts. Since the primary aim of this study was to look at the issue from a local setting, data was collected from only one university. The results presented here cannot be generalized and in order to have a general perspective of Turkish learners' beliefs about language learning, a comprehensive longitudinal study should be conducted.

Also, the effect of gender has been ignored in this study since it was not the primary goal and due to the fact that there were not equal number of males and females in the study. According to Tercanlioglu (2004), gender is still a key variable that may directly influence or even determine attitudes, motivation and behaviors. Therefore it is reasonable to suppose that they might have different beliefs about what learning is and how it occurs. A further study might include gender as a variable.

To conclude, exploring the beliefs of learners can lead to more effective language learning behaviors. If teachers are not aware of the beliefs of the learners, their efforts in applying some teaching methods to get maximum benefit might be in vain. Therefore, knowledge of learner beliefs will be important in increasing teachers' understanding of how the students approach the language and a result, will help the teachers to apply more effective strategies during the teaching of second foreign languages.

Notes

(1) This study is a revised version of a previous study called *Turkish EFL Learners' Beliefs about Learning Second Foreign Languages* by the same author.
(2) Middle East Technical University, Department of Foreign Language Education

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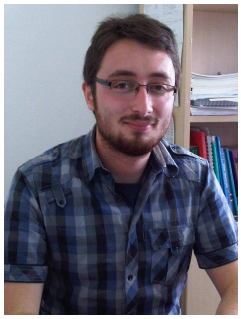

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REFERENCES

Altan, M. Z. (2006). Beliefs about language learning of foreign language-major university students. *Australian Journal of Teacher Education, 31(2),* 45-52.

Ariogul, et al. (2009). Foreign language learners' beliefs about language learning: A study on Turkish university students. *Procedia Social and Behavioral Sciences, 1,* 1500-1506.

Bernat, E. & Gvozdenko, M. (2005). Beliefs about language learning: Current knowledge , pedagogical implications and new research directions. *TESLJ-EJ, 9(1).*

Bernat, E. (2004). Investigating Vietnamese ESL learners' beliefs about language learning. *English Australia Journal, 21(2),* 40-55.

Cormack, D. F. (1991) The research process in nursing. (2nd. Ed.) Blackwell Scientific Publications. Victoria: Australia.

Cotterall, S. (1999). Key variables in language learning: What do learners believe about them? *System, 27,* 493-513.

Diab, R. L. (2006). University students' beliefs about learning English and French in Lebanon. *System, 34,* 80-96.

Dörnyei, Z. (2003). Questionnaires in second language research: construction, administration and processing. New Jersey: Lawrence Erlbaum Associates.

Halliday, A. (1994). Appropriate methodology and social context. Cambridge: CUP.

Horwitz, E. K. (1985). Using student beliefs about language learning and teaching in the foreign language methods course. *Foreign Language Annals. 18*, 333-340.

Horwitz, E. K. (1987). Surveying student beliefs about language learning. In A. Wenden & R. Rubin (Eds.), *Learner strategies in language learning*. (pp. 119-129). London: Prentice Hall International.

Horwitz, E. K. (1988). The beliefs about language learning of beginning university foreign language students. *The Modern Language Journal. 72 (3),* 283-294.

Peacock, M. (2001). Pre-service ESL teachers' beliefs about second language learning: a longitudinal study. *System, 29,* 177-195.

Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J. Sikula, T. J. Buttery & E. Guyton (Eds.), *Handbook of research on teacher education*. New York: Macmillan.

Sakui, K. & Gaies, S. J. (1999). Investigating Japanese learners' beliefs about language learning. *System. 27,* 473-492.

Stevick, E. W. (1980). *Teaching languages: A way and ways.* Rowley, MA: Newbury .

Tercanlioglu, L. (2004). Pre-service EFL teachers' beliefs about foreign language learning and how they relate to gender. *Electronic Journal of Research in Educational Psychology, 5, 3(1),* 145-162.

Vibulphol, J. (2004). Beliefs about language learning and teaching approaches of pre-service EFL teachers in Thailand. Unpublished Doctorate Dissertation. Oklahama University.

Victori, M. & Lockhart, W. (1995). Enhancing metacognition in self-directed language learning. *System, 23(2)*, 223-34.

Wenden, A. L. 1986. Helping language learners think about learning. ELT Journal 40/1: 3-12.

Wong, M. S. (2010). Beliefs about language learning: A study of Malaysian pre-service teachers. *RELC Journal, 41(2),* 123-136.

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THE POTENTIAL BENEFITS AND CHALLENGES OF INTERNSHIP PROGRAMMES IN AN ODL INSTITUTION: A CASE FOR THE ZIMBABWE OPEN UNIVERSITY

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ABSTRACT

Several studies done elsewhere have indicated and concluded that a gap really exists between the quality of graduates produced and what the market demands (Mpairwe, 2010). For this and other reasons, training institutions and employers have accepted the need to seek mitigatory steps to bridge the gap. Among other steps, institutions of learning have introduced internship programmes also referred to as field attachment in some of their degree and non-degree programmes. There has also been the realisation that imparting the relevant practical skills is a partnership between the training institution and the prospective employers through student internships. However, despite these positive intentions, interns on field attachment have faced serious challenges among which are insufficient time and lack of funding for the programmes. It is behind this background that the present study sought to establish the benefits and challenges faced by student interns at the Zimbabwe Open University. The study focussed on two of the university`s faculties: the Faculty of Science and technology and that of Applied Social Sciences. Most of the students on internship were from these faculties. Being quantitative in nature, the study employed the use of the questionnaire to solicit data from the 50 respondents chosen through convenience sampling. Results showed that the majority of the students preferred the attachment programme because it exposed them to the real expectations of the world of work. However, a number of challenges militated against the effectiveness of the programmes. Challenges include some fulltime employees being reluctant to disclose important information to students. A number of supervisors are too busy to provide effective supervision. Current duration of attachment is not sufficient for all the disciplines. Moreover, some employees regard interns as a threat to their position and in some cases some supervisors possess inferior qualifications than the student interns.

Key words: Challenges, Internship programmes, Open and Distance learning.

INTRODUCTION

In order to accord the ODL student the opportunity to attain hands on experience, the Zimbabwe Open University introduced internship programmes in a number of both undergraduate and post graduate studies. This has been done to provide students with a smooth transition from the academic world to the working environment.

According to Tackett *et al* (2001), internships have taken on an increasingly important role in education over the past decade since they present students with many advantages, ranging from gaining experience and obtaining career-related direction to networking with other students from various institutions as they at the organisation providing the internship (Lubbers, 2008). The learning or parent institutions offering internship programmes have also benefitted through increased cooperation and rapport with the industry (English and Koeppen, 1993). Employers have not been left out of the benefits as internships can provide them with inexpensive help, new ideas and potential future employees (Rothman, 2007; Cannon and Arnold, 1998)

though at times complaints have been raised employers for treating the interns as cheap labour. The benefits have, therefore, accrued to the tripartite stakeholders: the students, parent institutions and employers (Cook *et al.,* 2004; Lam and Ching, 2007).

However, the mode of delivery in Open and Distance Learning institutions places the prospective student intern in a difficult position as he/she has to balance between the requirements of his/her full time employment and the new role as an intern. It is behind this background that the present study seeks to unearth the benefits and challenges of internships in an ODL setting. The study also seeks to find strategies that can be adopted to alleviate the challenges arising for the unique characteristics of the ODL learner.

BACKGROUND OF THE STUDY

The Zimbabwe Open University (ZOU) is an Open and Distance Learning (ODL) institution in Zimbabwe, established to cater for a substantial component of people who, by design or unintentionally, could not be accommodated in conventional universities, by offering them the opportunity to study in their homes and in their workplaces through distance education. The ZOU was established on 1st March 1999 through an Act of parliament (Chapter 25:20), ZOU currently has four faculties which are the faculty of Arts and Education, the faculty of Science and Technology, the faculty of Commerce and Law and the faculty of Applied Social Sciences. These faculties are offer undergraduate diploma and degree programmes and Masters and Doctor of Philosophy degrees in all the four faculties. The internship programmes are currently offered in all but one in the Applied Social Sciences, internships are offered in the Bachelor of Science degree in Counselling and the Master of Science in Counselling. The Faculty of Arts and Education, through the Department of Education, offers internships in a different form that is, teaching practice. The programmes offering teaching practice are the Diploma in Education (both primary and secondary) and Bachelor of Education (secondary). Internships were also introduced in the Faculty of Science and Technology in Physical Education and Sport. This initiative to introduce the internships was upon realisation that they were of utmost importance to the different degree and diploma programmes in which they were introduced. However, despite the positive intentions of their introduction, there have been pockets of challenges interfering in the smooth completion of the internships. This study therefore sought to unearth the benefits accruing to the student, the institution and the employer. The study also intends to explore the challenges encountered by the three parties and provide recommendations for the smooth administration of internships. The three areas to be explored by the currents study are answered by responses obtained from the following research questions.

STATEMENT OF THE PROBLEM

Internships have been hailed for integrating classroom education with practical experience in enabling graduates to develop their professional knowledge and professional skills (Beard, 1998). However, unlike in the conventional system and owing to a diversity of factors in an ODL setting, the concept has encountered challenges. The current study therefore, aims at assessing student interns` perceptions of internship programmes at the Zimbabwe Open University. The study seeks to identify the direct benefits accruing to the interns, areas in which they faced challenges as well as actions to remedy the situation for future improvement. The study also focuses on impediments affecting the smooth flow of the internship process as well as the field process.

RESEARCH QUESTIONS

In an attempt to provide answers to the main research question, the following sub problems stood as research questions:

1. What are institutional benefits of internships in Open and Distance Learning?
2. How do students benefit for the internship programmes in an Open and Distance Learning institution?

3. What benefits accrue to employers of Open and Distance Learning employing ODL interns?
4. What challenges are faced by three parties in the process instituting internship programmes for Open and Distance Learning interns?
5. How can the challenges faced by student interns be overcome in order to make the attachment programme more effective?

Literature Review

This section of the paper reviews literature on internships and presents some models of internships that have been adopted by various institutions.

Internships

Most definitions on the concept Internships have been in agreement making it easy to explain the term. According to Furco (1996) internships are defined as programmes engaging students in service activities primarily for the purpose of providing them with hands-on experience that enhances their learning or understanding of issues relevant to a particular area of study. On the other hand, McMahon and Quinn (1995) note that internships are supervised work experiences whereby students leave their institutions and get engaged in work related programmes, during which period they are closely supervised by experienced job incumbents.

Internships are therefore any carefully monitored piece of work or service experience in which an individual has intentional learning goals and reflects actively on what she or he is learning throughout the experience or duration of attachment.

Theoretical framework

From a variety of research available, internship programmes, have tended to benefit the student, the student`s institution and the employer. However, for the student, it is the learning that is of utmost benefit. The individual can apply knowledge learned in the classroom to the workplace. The individual gains knowledge of the qualifications and duties of a position and can explore their interest in a field. The individual gains an understanding of the skills and knowledge required in the workplace. Personal development - The individual gains decision making skills, critical thinking skills, increased confidence and self-esteem.

Theory is abounding as to what forms internships take. Internships vary in duration; they can last from a month (or less) to two years (or more) and may be part-time or full-time. Internships can take place in any work or service setting and be paid or unpaid. They may be part of an educational programme and carefully monitored and evaluated for academic credit, as is the case with internships at the Zimbabwe Open University. Or, they can be part of a learning plan that the intern develops for personal benefits. It is for these reasons that a number of models of internships have been brought to being.

Types of Internship Programmes

According to the Employers' Internship Toolkit (2005), internships are commonly used term in experiential education. Internships takes take place during different times of the year: summer, winter or spring. These may be part-time or full time internships over different durations. Typical internships are entry-level, educational jobs that can be paid or unpaid and usually give you college credit for your work (but not always). Usually, these internships last for one semester, although sometimes you can find internships that last for two semesters. Figure1 below shows the general types of internship programmes.

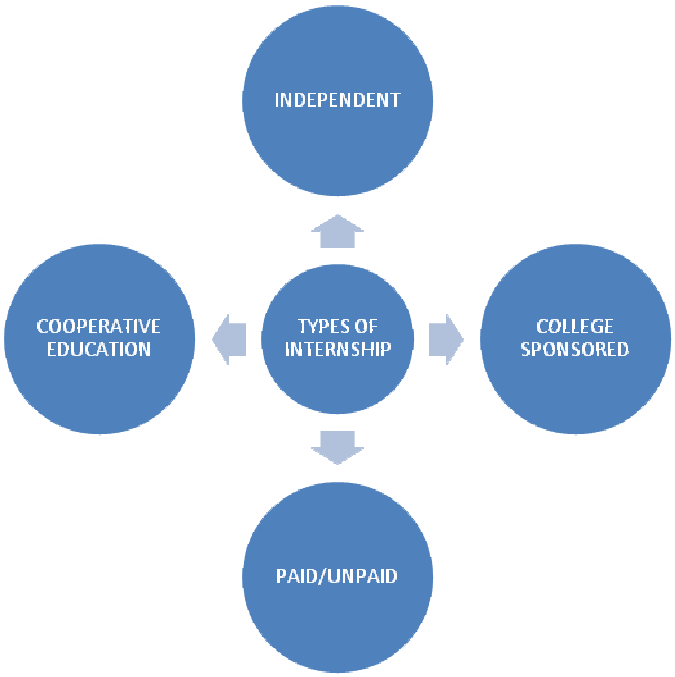

Figure 1.1: Types of internship programmes
Hereunder, the different types of internships are discussed.

Cooperative Internships

Some colleges and universities use the term Cooperative Education for a certain type of workplace position that is experiential, that is, experience-based education. In this way co-ops are fundamentally similar to internships; students learn while applying knowledge and skills from the academic setting to a work setting. Connotations of these two terms (internships and co-ops) are often unique to the persons or organizations using them. What an organization may call 'internship' may be referred to by a college or university as a 'co-op'. The different uses of these terms sometimes cause confusion between the university, the employer and the student. Generally speaking, co-ops or cooperative education programmes involve paid positions. These c**ooperative education experiences** are internship programmes that are usually required and are available only to students in certain majors. Usually, they are full-time, and you're much more likely to be offered a full-time job. If your college requires an internship, they usually have a cooperative education programme. These positions are easier to get then typical internships and externships. They sometimes entail two six-month assignments, with an academic semester or year in between rotations, but they are not always structured on this timetable. Co-op programmes are often, though not always, run at engineering schools.

Paid and Unpaid Internships

Internships are sometimes paid and sometimes unpaid. Ultimately, this is a decision of the employer. Some schools may have a policy on paying interns from their institution, but most will facilitate both types of internships for employers. The “market” will typically drive the issue of paid and unpaid interns. For example, in the fields of accounting and engineering where students provide very tangible benefits to employers and competition for interns is keen, most internships positions are paid. On the other hand, internships in human services and advertising are most often unpaid. The same goes for interns who are attached to government departments.

However, when students are under unpaid internships, the following factors need to hold true for a legitimate internship where a company is not paying the student:

- The work of the intern is an integral part of the student's course of study.
- The student will receive credit for the work, or the work is a requirement of graduation.
- The student must prepare a report of his/her experience and submit it to a faculty supervisor.
- The employer receives a letter or some other form of documentation from the school indicating that it approves of the internship and it's educationally relevant.
- Learning objectives are clearly defined.

Independent and College Sponsored Internships

It is possible for students to engage in internships experiences either through the school, college or university that they attend or independent of them. Schools can have both loose and close relationships with various employers. Most will advertise internship opportunities to students. How closely they monitor internship programmes, varies. Most colleges and universities will allow students to earn academic credits for participating in internships. It is also entirely possible for students and employers to arrange internships independent of schools. This approach is better suited for situations where internships are paid and learning objectives are secondary to performing a job.

Previous research studies

An attempt is made in this section of the paper to present previous findings on the benefits and challenges of internships so that comparisons can be made with the same programmes instituted at the Zimbabwe Open University.

Benefits of internships to students

Furco (1996) defines Internship have been viewed by different researchers as offering a diversity of benefits to the student intern. They engage the intern in service activities primarily for the purpose of providing them with hands-on experience that enhances their learning or understanding of issues relevant to a particular area of study. They assist the internee to bridge the gap between the academic learning process and the practical reality (Furco, 1996; Lam and Ching, 2007). McMahon and Quinn (1995) note that internship is supervised work experiences where students are closely supervised. Research highlighting the importance of relevant practical experience for students has been carried out (Mounce *et al*, 2004) but the effects of these internships on the success of the intern to transfer the field practice into the actual workplace engagement needs follow up (Beard and Morton, 1999). The importance of internships have also been established in recruiting decisions by employers (Pasewark *et al*, 2001) and research studies in accounting internships have shown improved subsequent academic performance (English and Koeppen, 1993).

The internship programme contributes significantly and positively towards enhancing the knowledge base and motivational level of students (Beard, 1998).

The best outside classroom learning activities are through an internship attachment (Burnett, 2003). Several studies have reported the benefits of internship programmes in conventional colleges and universities on the rationale in offering attachments as part of the academic programme, to the conventional student who at most is graduating out of high school he/she benefits through gaining experience and exposure. Further benefits include improvements in career-related direction, gaining practical experience (Lubbers, 2001), improved marketability of graduates (Swift and Kent, 1999; Hymon-Parker, 1998), interpersonal skills (Beard and Morton, 1999) and understanding of the theories of classroom learning (Cook *et al.,* 2004; Hymon-Parker, 1998). However, unlike the conventional student intern, the ODL intern is at times already an experienced employee and has already made up his/her mind on a career choice. To further cement this view, http://polisci.osu.edu/ugrads/internship.pdf and Scott (1992) state that internship is the best way for students to explore the suitability of a particular job. It follows therefore that the benefits accruing to conventional students may not apply to the ODL student.

In a study by Nevett (1985), students argued that attachments bridged the gap between the theory of the classroom and the world of practice. Internship programmes are perceived as a valuable way to acquire broad competencies where the practical knowledge obtained supports and complements the theoretical studies learned in the classrooms (Mihail, 2006). According to Knechel and Snowball (1987), internship attachments were found to enhance students' performance in their courses. But with some of the internship programmes coming at the end of the final semester (for example in the Master of Science degree in counselling at the ZOU), internships of such nature would not contribute much to their academic attainment.

However, other interesting benefits general to both conventional and ODL interns are provided by various researchers. The internships have been seen to be beneficial in socialising the student through training and teamwork assignments at the workplace (Lubbers, 2008). Mihail (2006) noted that interns have successfully developed their personal skills, particularly relating to information technology, time management, communication skills, teamwork, specialist knowledge and ability to prioritize tasks. According to Cannon and Arnold (1998), internship may pave the way for permanent employment upon graduation as well as providing an in-depth understanding of actual business practice. Students hope to receive monetary rewards and be treated as regular employees (http://polisci.osu.edu/ugrads/internship.pdf, Hall *et al.,* 1995). Knechel and Snowball (1987) found that the internship has successfully enhanced the interns' understanding of content in their areas of study.

Challenges faced in internships

Most students in previous studies felt confused on who should arrange the internships (Gault *et al.*, 2000). Asked who should be responsible for arranging their internship placement, the majority of interns feel faculty should work for their placement (Tackett *et al*., 2001; Maskooki *et al.,* 1998).

Previous research studies also show that internship periods were too shot and the majority of interns think that the most appropriate internship period should be six months (Oliver, 2010; Mihail, 2006). Mihail (2006) also found in his study that most of the interns preferred to have internship periods ranging from six to nine months instead of three months. This indicated that interns are willing to have a longer internship period and believe that they can learn more within a six month period. Oliver (2010) remarks that the short amount of time an internship lasts really never lets the student become a fully functional employee because there is not so much to take in for them.

According to some, internships bring about discord among workers in a variety of ways. Perlin (2011) says this is sometimes so since internships displace paid workers and allow companies to dodge liabilities through the non payment of intern labour. Interns accept the post at no price to survive the duration of the internship. According to Rothman (2007) and Cannon and Arnold (1998) at times complaints have been raised against employers for treating the interns as cheap labour.

Supervision of interns has been cited as being problematic. Qualified staff to supervise the interns has been in short supply (Tackett et al., 2001; Gault et al., 2000). Universities should be responsible to ensure that internships are offering meaningful learning experiences for their students. According to Tackett *et al.* (2001), students feel that there should be careful examination of feedback from employers and interns followed by the modification of the internship programme accordingly.

METHODOLOGY

The present study adopted the mixed methods approach. Both quantitative and qualitative paradigms were employed in the process of data gathering and analysis. Questionnaires and interviews were used to collect data from the respondents.

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POPULATION AND SAMPLE

The population for the present study consisted of a total of 150 students who been identified to have just gone through the internship programme during the January to June 2011 semester, 75 were made it into the sample. These were sampled through the stratified random sampling technique in order to accord each of the faculties proportional representation. The respondents were drawn from the Zimbabwe Open University`s four faculties of Arts and education, Applied Social Sciences, Science and Technology and Commerce and Law. After placing the students into strata, according to faculties, respondents were drawn through simple random sampling. Owing to the manageable student numbers, the lottery method was adopted to pick upon the respondents.

PRESENTATION AND DISCUSSION OF RESULTS

A total of identified 150 Zimbabwe Open University students who were involved in internships during the January to June 2011 semester only 75 were part of the sample. These were drawn form the faculty of Arts and Education, Faculty of Applied Social Sciences and the Faulty of Science and Technology. From the total sample, all the 75 questionnaires were returned owing to the follow ups to retrieve all the instruments distributed to the respondents. Departments that took part in the present study were the Education (Diploma in Education-Primary and Bachelor of Education-Secondary), Health Science, Physical Education, Counselling and Psychology.

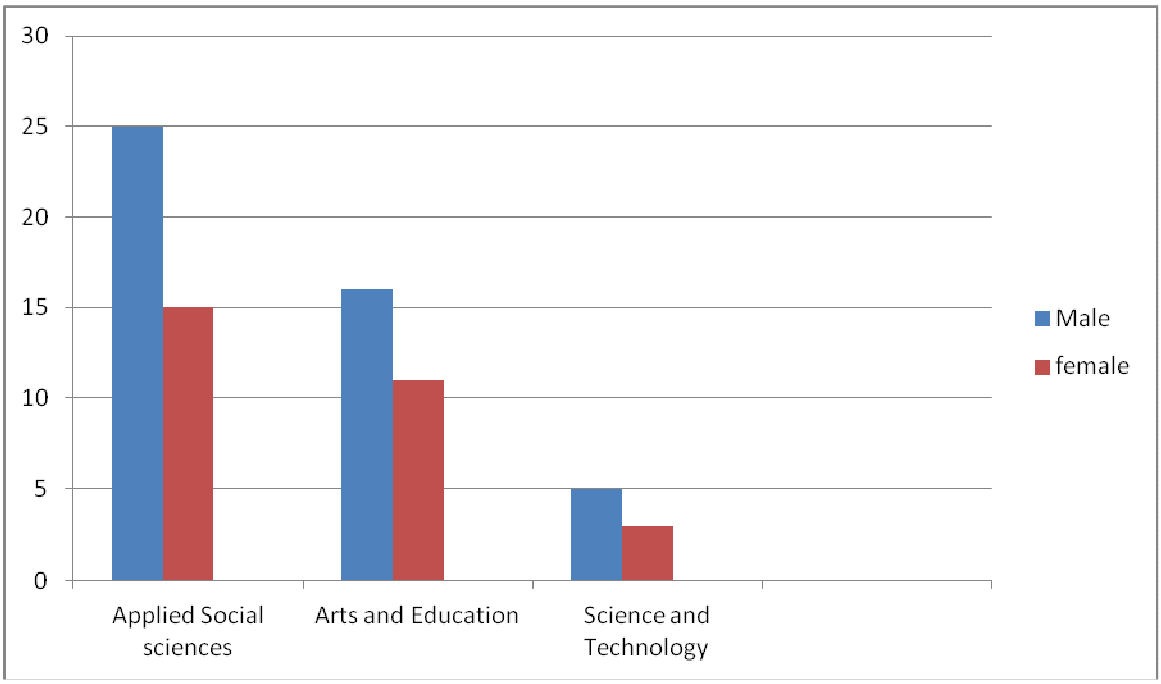

Fig 1: Distribution of interns by faculty by sex

Results from Fig 1 show that the majority of the interns were male who accounted for 49(61%) of the population. Only 29(39%) of the interns were female with the majority of the women interns coming from the Faculty of Applied Social Sciences. The majority of the interns was from the Faculty of Applied Social Sciences and did their internships in health centres and organisations dealing with humanitarian aid and HIV/AIDS mitigation.

Table 1: Respondents` views on the benefits of the internship by faculty by sex

Benefits accruing to the students from undertaking internships	FACULTY					
	Applied Social Sciences		Arts and Education		Science and Technology	
	No	%	No	%	No	%
1. Internships provide interns with hands-on practical experience and exposure.	25	33	27	36	5	7
2. They assist the intern to bridge the gap between the academic learning process and the practical reality	20	27	27	36	7	9
3. Internships contribute significantly and positively towards enhancing the knowledge base	28	37	27	36	4	5
4. Interns benefit through career-related direction	10	13	25	33	3	4
5. They boost motivational levels of students	21	28	23	31	3	4
6. Internships help to improve the marketability of graduates	11	15	3	4	1	1
7. Internships help the understanding of the theories learnt in classroom settings	25	33	27	36	7	9
8. Internships enhance student`s learning and understanding of issues relevant to a particular area of study	29	39	25	33	8	11
9. The internee gains interpersonal skills in the real work situation	18	24	24	32	3	4
10. Internships are of no benefit at all to an ODL student	8	11	0	0	0	0

Responses from across faculties are in general agreement that internships provide interns with hands-on practical experience and exposure. The majority, 57(76%) felt the internships were of benefit through the experience and exposure gained by the students. This finding is in agreement with those by Gault *et al.* (2000), Mounce *et al* (2004) and Beard and Morton (1999) where interns responded that they experienced greater exposure to a variety of experiences on the job.

Another majority of 54(72%) also felt that internships assisted the interns to bridge the gap between the academic learning process and the practical reality. These findings concur with those by Nevett (1985) in which students argued that attachments bridged the gap between the theory of the classroom and the world of practice. Furco (1996) and Lam and Ching (2007) concur with these findings when they remark that internships assist the internee to bridge the gap between the academic learning process and the practical reality Such exposure would likely make the students require little or no induction upon taking up full time jobs.

All the students from the Faculty of Arts and Education subscribed to this perception. Interns remarked in interviews that they were likely to benefit from the internship programme if thorough arrangements were being made by the university and the various departments. When it came to the view that internships contribute significantly and positively towards enhancing the knowledge base, 59(78%) agreed to the assertion and most of these respondents were from the Faculty of Applied Social Sciences and Arts and Education. This finding replicates those by English and Koeppen (1993) and Knechel and Snowball (1987), which suggest that an internship programme is able to improve the academic performance of interns. The student teachers learn

while on the job for a long time and most likely they are exposed to vast tracts of knowledge by the experienced teachers they work and interact with on a daily basis.

Of the 75(100%) respondents, 38(50%) felt that interns benefited through career-related direction. Of these, 25(33%) were from the Arts and Education faculty, who by virtue of the nature of their diploma programme, have to stay on teaching practice for the duration of the course, that is, three years. They thus benefitted from their lengthy stay on teaching practice through interaction with the qualified and experienced teachers who assisted them on mapping their career aspirations. This benefit was also established in studies by Beard and Morton (1999) and Gault *et al.* (2000). However, Cook *et al.* (2004) and Lam and Ching (2007) found that interns do not perceive the internship experience as an important element regarding career choice for students. This is probably due to the fact that most would have already made their career choice decisions and internships would the first step into the chosen career.

That internships boost motivational levels of interns was a perception subscribed to by another majority of 47(63%) of the student interns. The Faculty of Arts and Education had the majority of 23(31%) while only 3(4%) came from the Faculty of Science and Technology.

On the efficacy of internships to help improve the marketability of graduates, only 15(20%) agreed to this. Only 3(4%) respondents from the Arts and Education faculty agreed. This is in contrast with the findings elsewhere (Swift and Kent, 1999; Hymon-Parker, 1998) and according to Cannon and Arnold (1998), internship may pave the way for permanent employment upon graduation as well as providing an in-depth understanding of actual business practice. The result is not surprising given the fact that in Zimbabwe, the student teachers are already guaranteed a teaching vacancy with the Ministry of Education, Arts, Sport and Culture soon after graduation. Besides, most of the students at the Zimbabwe Open University are already in employment and their furthering of qualifications is due to their desire to position themselves comfortably at their place of work.

According to 59(78%) respondents, internships helped them to understand theories learnt in classroom settings while 62(83%) indicated that internships enhanced their learning and understanding of issues relevant to their particular areas of study. Mihail (2006) and Knechel and Snowball (1987) concur.

Since internships are programmes meant to marry theory and practice, it is the period during which the interns actually put into practice whatever will have been exposed to them in classroom. They explore and experiment on the learnt material.

The majority of the interns were of the opinion that they gained interpersonal skills in the real work situation. This is probably so in situations whereby they interact and communicate on issues that may need group approaches (Lubbers, 2008; Mihail (2006). Bearing in mind that conflicts are always in existence in organisations, the interns are therefore exposed to situations which assist them to develop the interpersonal skills for use in their present and future organisations.

A minority of 8(11%) of the respondents remarked that internships were of no benefit at all to an ODL student. All these were from the Faculty of Applied Social Sciences. They probably had problems with whole process of the internship programmes. This finding is similar with the finding in Lam and Ching's (2007) study, which indicated that student's expectations before and after the internship were unmet. Students do not benefit from the internship attachment in obtaining the relevant knowledge and practical experience to assist them to better adapt to their future working environment. This might indicate that students are not being treated as regular employees and, thus, are not being given appropriate or specific tasks to expose them to a proper job setting and experience. As highlighted by Lam and Ching, the majority may be attached to small firms which may not expose them to the more meaningful job experiences.

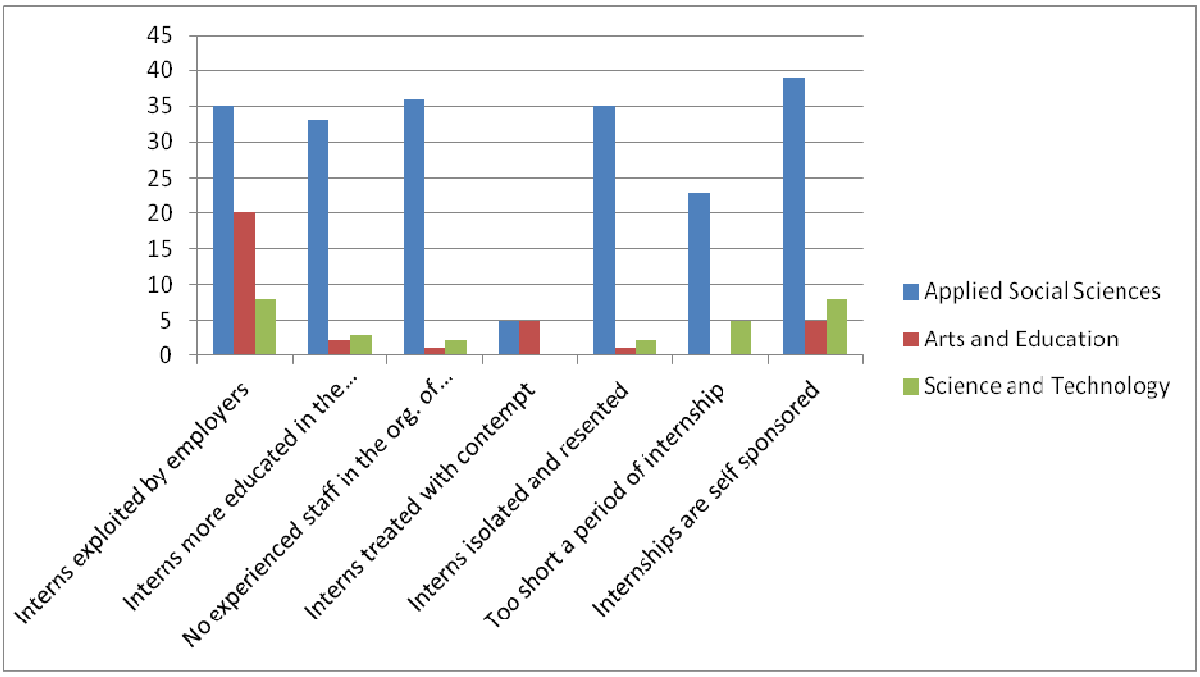

Fig 2: Respondents` views on the challenges faced with the internship programme by faculty by sex.

A number of challenges hampering the smooth flow of internships at the Zimbabwe Open University were indentified by the interns. An overwhelming majority of 63(85%) interns indicated that they were treated like full time staff. Instead of learning they were providing cheap labour in the organisations they were attached to. Another overwhelming majority felt interns were the most educated persons in the organisation of attachment. The majority of institutions used for the attachment lack qualified mentors. This therefore means there was little or no learning for them as they were more knowledgeable that the regular employees they were to learn from. No wonder one student remarked that there was poor performance in internships in the Bachelor of Science in Physical Education and Sport. However, this is an area needing further investigation. The response from the Applied Social Science Masters` degree in Counselling could be justified in the sense that most organisations do not have among their staff holders of such a higher degree. Under such circumstances, therefore, students were the most educated as they undertook the internship in their final semester.

A majority of 36(48%) respondents from the Applied Social Sciences acknowledged that there were no experienced staff in most organisations where they were attached (Tackett et al., 2001; Gault et al., 2000). A minority from across faculties, that is 5(7%) from social sciences and the same number from Arts and Education remarked that interns were at times treated with contempt by organisational staff.

Thirty-five (47%) of the respondents indicated that interns were at times resented and isolated by full time staff because of being perceived as being more knowledgeable. Only 1(1%) and 2(3%) from Arts and education and Science and technology respectively agreed to the view. However, findings elsewhere by Rothman (2007) and Cannon and Arnold (1998) show that interns were welcome as these were wanted as cheap labour by some unscrupulous employers.

On the view that the internship duration was too shot a period of time for effective internship, some 23(31%) from the Applied Social Sciences agreed while respondents from Arts and Education, who are on teaching practice for the duration of their programme felt the period was adequate. Findings by Oliver (2010) and Mihail (2006), show that interns complained about short periods of internships. Only 5(7%) from Science and Technology felt the duration was short. Oliver (2010) remarks that the short amount of time an internship lasts really never lets the student become a fully functional employee because there is not so much to take in for them.

Due to the fact that internships are self-sponsored 39(57%) of the students felt this was to the disadvantage of the student intern while a minority from the two other faculties felt the same. Students hope to receive monetary rewards and be treated as regular employees (http://polisci.osu.edu/ugrads/internship.pdf, Hall *et al.,* 1995).

Interviews also brought to surface the problem of getting places for teaching practice for students from the Faculty of Arts and Education. Twenty-seven (36%) encountered problems in getting temporary teaching posts. One student indicated that he had spent most the semester looking for a teaching post to enable him to do his teaching practice.

General remarks also came through from students doing their Bachelor of Science degree in Physical education and Sport. Te majority indicated in interviews that job changes seriously affected their internship programmes. At initial enrolment as a student, one was employed as a temporary teacher and after the expiration of his contract which was not renewed; he joined a farm as a general hand. Going back to the teaching field for internship became a problem. On one hand the current employer would not release the employees for more than a week and on the other, the schools could not accommodate the prospective internee.

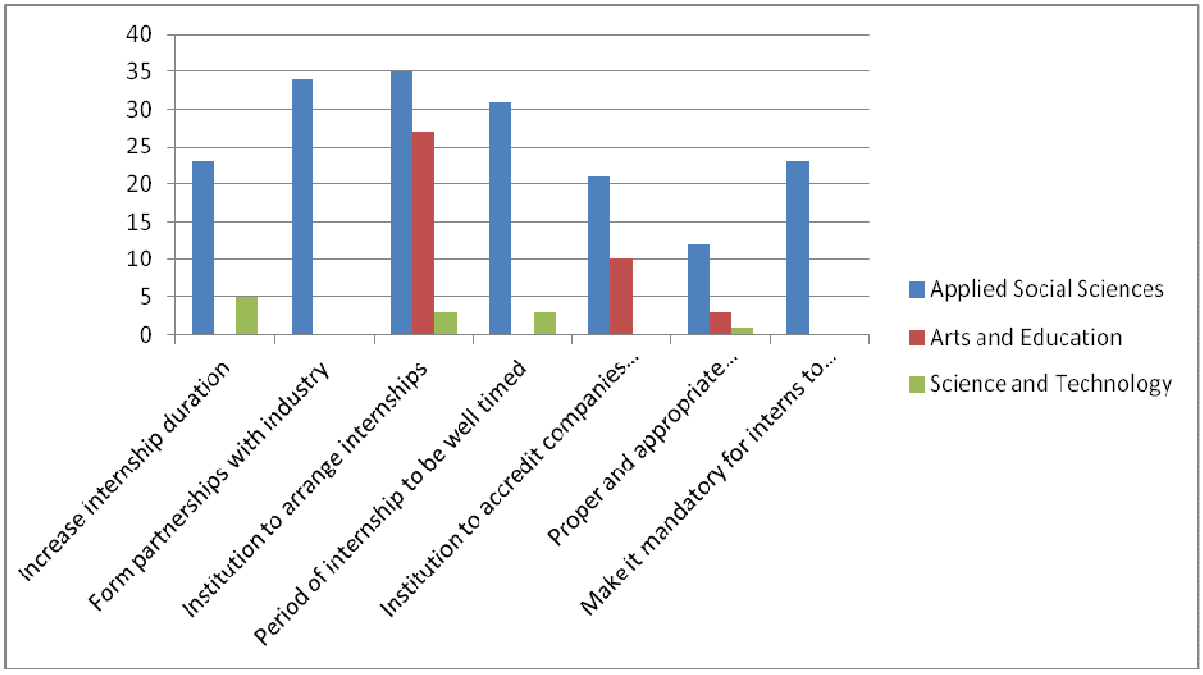

Fig 3: Interns` views on the remedies to the challenges by faculty by sex

The interns were asked to provide remedies on the best way to improve the internship programme at the Zimbabwe Open University. Some 23(31%) from Applied Social Sciences suggested increasing the duration of internship. Mihail (2006) also found in his study that most of the interns preferred to have internship periods ranging from six to nine months instead of three months. However, only 5(7%) from Science and Technology agreed while all respondents from Arts and Education thought it was not an issue at all.

Thirty-four (45%) from the Applied Social Sciences suggested that there be the formation of partnerships between the university and industry to have interns paid during internship. This could have been a result of the interns feeling that they were being exploited for nothing in return.

Because the interns felt that getting places for their attachment, 35 (47%) from Applied Social Sciences and 27 (36%) from Arts and Education advocated for the institution to arrange internships with organisations rather than the individual intern to go it alone.

Thirty-one (41%) respondents from the Faculty of Applied Social Sciences remarked that periods of internships should be well timed. The same sentiments were also shared by a minority of 3(4%) from the Faculty of Science and Technology.

Internships should be well monitored by both employers and the institution according to 33(44%) of the respondents from the Applied Social sciences while only 5(75) from the Arts and Education thought the same. However, the students on teaching practice from the education department are supervised at least once per semester. This could appear to be inadequate to some of the students. The monitoring of student interns was not a problem in the Faculty of Science and Technology.

In order to gain maximum benefit from internships, 21(28%) respondents from Applied Social Sciences suggested that the institution should accredit and recommend suitable companies for internships. Ten (13%) from Arts and Education concurred, with none from Science and Technology agreeing to the suggestion.

According to 12(16%) respondents from the Faculty of Applied Sciences, proper and appropriate documentation should be prepared to check on whole internship process. Only 3(4%0 from the Arts and Education thought likewise. Interview results show that those from the Applied Social Sciences felt documentation submitted to the department upon completion of the internship programme were prone to being tempered with by the students. One interview stated that in order to make the documentation more authentic there was need for follow up by Programme Coordinators through calling the interns` supervisor of further verification. A sizeable number of interviews from across faculties also lamented lack of supervision from the parent institution.

Twenty-three interns all from the Applied Social Sciences advocated for the government intervention to ensure that some piece of legislation was put in place to make it mandatory for interns to be paid. Those from the Education department found no problem on the issue of paying interns because once recruited for temporary teaching, the students were assured of getting a monthly salary, something not being done to interns from other faculties.

Interne were asked in interviews the processing of the internship programme. A majority of 46 (60%) felt the university was leaving the burden to the students to look for their own organisations for internships. Asked who should be responsible for arranging their internship placement, the majority of interns feel faculty should work for their placement (Tackett *et al*, 2001; Maskooki *et al.,* 1998).

CONCLUSIONS

Drawing from the above findings it is, therefore, concluded that:

1. Responses from across faculties are in general agreement that internships are beneficial in as far as they provide interns with hands-on practical experience and exposure.
2. The internship programme was beneficial in that it helped boost motivational levels of interns and internships helped them to understand theories learnt in classroom and enhanced their learning and understanding of issues relevant to their particular areas of study.
3. Due to the fact that in some organisations, interns were the most qualified personnel, they were treated like full time staff and instead of learning they were providing cheap labour in the organisations they were attached to.
4. Students generally resent internships due to the fact that internships are self-sponsored and they feel this is a disadvantage to them.
5. Students on internship find problems in getting organisations where they can undertake their internship and this has been exacerbated by the fact that internships at ZOU are arranged by the individual student.
6. Interns felt that the duration of the internship programme was short. Only a semester was set aside for the internship during which student interns also had some coursework on other courses on offer.
7. Not many organisations are endowed with qualified staff that can effectively and efficiently contribute to meaningful and successful student internship and that ZOU staff did not make site visits to the places of internship, for some programmes especially in the Social Sciences, supervision could not be said to be effective.
8. Interns are at the mercy of unscrupulous employers who regard them as staff to be assigned full responsibilities and duties normally prescribed to full time job incumbents.

RECOMMENDATIONS

A number of recommendations can be drawn from the findings of the study. It is recommended that:

1. The university should be actively involved in assisting students in getting organisations where they can enroll for their internship.
2. The internship duration should be increases.
3. Credible organisations should be approached by the university to offer places for the interns and there should an audit of these organisations to establish the levels of personnel qualifications.
4. Organisations accepting the interns should offer to pay the interns a small token and funds permit these should be paid for the duration of their stay.
5. Legislation should be enacted to protect interns against exploitation by unscrupulous employers.
6. Supervision of interns should improve with more visits to the sites of internship and those programmes where Programmes Coordinators do not visit interns should re-visit their regulations and make site visits to their interns.

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REFERENCES

Beard, D.F., (1998). The status of internship / cooperative education experiences in accounting education. Journal of Accounting Education, 16, 507-516.

Beard, F. and Morton, L. (1999). Effects of internship predictors on successful field experience. Journalism & Mass Communication Educator, 53, 42-53.

Bernstein, J. (1976). Urban field education: An opportunity structure for enhancing students' personal and social efficacy. Human Relations, 29, 677-85.

Britton, B.K. and Tesser, A. (1982). Effects of prior knowledge on use of cognitive capacity in three complex cognitive tasks. Journal of Verbal Learning and Verbal Behaviour , 421-436.

Brooks, L., Cornelius, A., Greenfield, E. and Joseph, R. (1995). The relation of career related work or internship experiences to the career development of college seniors. Journal of Vocational Behaviour , 46, 332-349.

Burnett, S. (2003). The future of accounting education: A regional perspective. Journal of Education for Business , 78, p. 129

Callanan, G. and Benzing, C (2004). Assessing the role of internship in career-oriented employment of graduating college students. Education + Training , 46, 82-89.

Cannon, J.A., and Arnold, M.J. (1998). Student expectations of collegiate internship programs in business: A 10-year update. Journal of Education for Business, 73, 202-205.

Rusnah Muhamad., Yazkhiruni Yahya Faculty of Business and Accounting, Suhaily Shahimi November, (2009) 49 Undergraduate Internship Attachment in Accounting: The Interns Perspective International Education Studies

Cook, S. J., Stephen R. Parker and Charles E. Pettijohn (2004). The perceptions of interns: A longitudinal case study. Journal of Education for Business, 79, 179-185.

English, D.M. & Koeppen, D.R. (1993). The relationship of accounting internship and subsequent academic performance. Issues in Accounting Education , Fall, 292-299.

Eyler, J. T. (1992). Comparing the impact of two internship experiences on student learning. Journal of Cooperative Education , 29, 41-52.

Furco, A. (1996). Service Learning and School-to-Work. Journal of Cooperative Education , 1, 7-14. International Education Studies November, 2009 53

Gault, J., Redington, J., & Schlager, T. (2000). Undergraduate business internships and career success: Are they related? Journal of Marketing Education, 22, 45-53.

Hall, M., Stiles, G., Kuzma, J. & Elliot, K. (1995). A comparison of student and employer expectation with regards to business internship. Marketing Education Review , 5, 3.

Hite, R., & Bellizzi, J. (1986). Student expectations regarding collegiate internship programs in marketing. Journal of Marketing Education, 8, 41-49.

Hursch, B. and Borzak, L. (1979). Toward cognitive development through field studies. Journal of Higher Education , 50, 63-77.

Hymon-Parker, S. (1998). Benefits and limitations of internships as viewed by educators and retailers/commentary. Journal of Family and Consumer Sciences, 90, 76-81.

Knechel, W.R., & Snowball, D. (1987). Accounting internship and subsequent academic performance: An empirical study. The Accounting Review , October, 799-807.

Knouse, S.N., Tanner, J.T., & Harris, E.W. (1999). The relation of college internship, college performance, and subsequent job opportunity. Journal of Employment Counseling , 36, 35-43.

Lam, T., Ching, L. (2006). An exploratory study of an internship program: The case of Hong Kong students. Hospitality Management, 26, 336-351.

Lambert, S. "Make learning real" http://www.becpdx.org/
Maskooki, K., Rama, D.V., & Raghunanandan, K. (1998). Internships in undergraduate finance programs. Financial Practice & Education, 20, 94-102.

McMahon, U., & Quinn, U. (1995). Maximizing the hospitality management student work placement experience: A case study. Education and Training , 37, 13-17.

Mihail, D.M., (2006). Internship at Greek Universities: An exploratory study. Journal of Workplace Learning , 18, 28-41.

Mounce, P. H, Mauldin, D.S., & Braun, R. L. (2004). The importance of relevant practical experience among accounting faculty: An empirical analysis of student' perceptions. Issues in Accounting Education , 4.

Nevett, T. (1985). Work experience: The essential ingredient in British programs. Journal of Marketing Education, 7, 13-18.

Pasewark,W.R., Strawser, J. & Wilkerson, J. Jr. (1989). An empirical examination of the effects of previous internship on interviewing success. Journal of Accounting Education, Spring, 25-40.

Ricks, F. A., Ney, T., Branton, G. R., Cut, J., Loken, M., &Van Gyn, G.H. (1989). A critique of cooperative education literature. Review of Educational Research .

Rothman, M. (2007). Lessons learned: Advice to employers from interns. Journal of Education for Business, 82,140-144.

Scott, M.E. (1992). Internships add value to college recruitments. Personnel Journal, 71, 59-62.

Swift, C.O., & Russell, K. (1999). Business school internships: Legal concerns. Journal of Education for Business, 75, 23-26.

Tackett, J., Wolf, F., & Law, D. (2001). Accounting interns and their employers: Conflicting perceptions. Ohio CPA Journal, 60, 54-56.

Taylor, M.S. (1998). Effects of college internship in individual participants. Journal of Applied Psychology , 73, 393-492.