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Dear WJEIS Readers,

WJEIS appears on your screen now as Volume 2, Number 3. In this issue it publishes 26 articles. 52 authors from 14 different countries contributed this issue. These countries are Albania, Bulgaria, Egypt, India, Iran, Macedonia, Malaysia, Republic of South Africa, Serbia, Taiwan, Tunisia, Turkey, U.A.E. Kingdom of Saudi Arabia and Zimbabwe.

Colleagues that are in editorial board worked hard to determine the articles of this issue. There are also some articles that were presented in “3rd International Conference on New Trends in Education and Their Implications” that took place between 26-28 April 2012 with the contribution of 46 countries. Articles are evaluated by the referees that are either in editorial board or outside the board. According to the evaluations, some articles that were presented in “3rd International Conference on New Trends in Education and Their Implications” will also be published in our next issue.

Although WJEIS is a new journal, it has been welcomed with interest. A lot of journals from various universities are in the evaluation process. We would like to thank cordially our colleagues who work hard in editorial board to evaluate the articles, writers who contribute to our journal and all readers.

1st August, 2012

Best regards

Prof. Dr. Zeki Kaya
Prof. Dr. Uğur Demiray
TEACHER PROFESSIONAL IDENTITY, CREATIVITY AND COOPERATION:
RESULTS OF AN EMPIRICAL STUDY

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Abstract
The aim of this study was to examine the factor structure of the scale of professional identity of teachers (teachers in the sample N = 221) and the linkage scores on this scale with the dimensions of creativity and collaboration factors, extracted from seven-factors model quality indicators of teaching.

Author present results of empirical study of teacher professional identity structure using the Teacher Professional Identity Scale (Cheung, 2008) which consists of 18 items with good reliability (Cronbach alpha .83). Factor analysis was obtained four-factors interpretable structures. The factors were interpreted as: teaching practice, development and needs of students, schools and professions, personal development teachers. The most significative factor of the saturation was schools and professions, and at least a factor of teaching practice.

This factor structure was then correlated with two factors, the quality of teachers' work (creativity and cooperation), which are separated from the main scale assessment of the quality of teaching and on the basis of which was obtained seven-factors model (reflective thinking of teachers, continuous professional development (extrinsic and intrinsic motivation ), autonomy, responsibility, creativity and cooperative relations). The criteria for defining indicators of quality of teachers are determined based on the proposal closing 30th ATEE Conference (Amsterdam, 2005).

The results of canonical correlation analysis of the factors of professional identity and quality indicators of teachers' work (creativity and collaborative relationships) are presented.

The obtained correlations are usually significant factors of professional identity, teachers' creativity and collaboration. In crossstructure canonical correlation coefficients obtained are statistically significant correlations of creativity and collaboration with the factors: the school and the profession, teaching practice and student development. Multivariate analysis showed that teachers with higher academic qualifications, professional engagement later in the classroom and longer working lives are more important achievements of the factors of creativity and collaboration.

Key Words: Teacher professional identity, creativity, collaboration, correlation, quality of teaching.

INTRODUCTION

Formation of teachers' professional identity can be defined as "ongoing process of interaction personal and professional by practice; answer to the question of how to become and be a teacher" (Beijaard, 2004, p.131). Teacher education and training (there are differences between them), at the institutional level, affect the formation of professional identity of teachers. "The identity of the teacher - what are the beliefs of beginning
teachers about teaching, teaching and itself - is fundamentally important concept in the preparation of teachers to the profession, to make and explain decisions on the teaching. Teacher training should start researching the teacher’s self (self) "(Ibid. p.132). Verified empirically test the role of education and training in the formation of professional identity is very small.

Based on the report on the conducted research we can identify several essential elements (factors) of professional identity:

- professional identity is a dynamic entity,
- consists of more sub-identities,
- includes agency,
- includes personality and context.

If this analysis is accepted, it can be (adapted) applied to troubleshooting the formation of professional identity of future teachers. The formation of professional identity, in this case, is ongoing process of interpretation and reinterpretation of pedagogical theory and practice in education and training for the profession. Some authors (Kelchtemans, 2005) the dynamic nature of meaning and identity labeled as “self-understanding of teachers.” The concept is a response to the questions: Who am I as a teacher at the moment and what I want to become (as a teacher and a pro-expert)?

Obviously, there are many sources of epistemological precondition for the realization of the unfolding process of the formation of teachers’ professional identity: personality, family and significant individuals (significant others), experience of teaching and teaching practice, teaching atypical episodes, political context, tradition and culture, knowledge and understanding tacit knowledge (Surgue, 1997).

Professional identity involves more subidentities. They can come into conflict during the (academic) education and training, but also during the teaching and pedagogical practice (“practice shock”) (Volkmann & Anderson, 1998).

Teachers are active participants in their own professional development. Future teachers are expected to grow according to certain social expectations (the prescribed standards, basic competencies, etc.). Many researchers point out the context for the formation of professional identity (Goodson & Cole, 1994; Connely & Clandinin, 1999). The teacher does not adopt the standards and competencies, plain and simple. He was with them need to be "connected", and in person - rather than holistic and idiographic artificial. It is therefore reasonable to assume that teachers professional identity, mainly depends on the perception and understanding of the wider professional community.

Studies that have as their theme the formation of professional identity of teachers are relevant to the mentors in the training of future teachers in schools, and are aimed at better understanding and conceptualization of support and needs of future teachers (Volkmann & Anderson, 1998). Important factors of forming the professional identity of teachers are especially biographies and beliefs expressed in these biographies (Knowles, 1992, Surgue, 1997, Kalchtermans, 1994). From this perspective, Bullough (Bullough, 1997) writes that "... the identity of the teacher - what beginning teachers believe about teaching and learning as self-as-teacher - vital to the education and training of young teachers, it is the basis for the formation of meaning and decision-making (meaning making, decision making). Teacher education, therefore, must begin by examining ourselves as teachers, teachers' self-examination "(Ibid., r.21).

Professional identity is not a stable entity, it can not be interpreted as a fixed or unique content (Coldron & Smith, 1999). It is a complex and dynamic "equilibrium" in which the notion of self as a professional balanced with a variety of roles that teachers feel they should "play" (Volkman & Anderson, 1998). In this context, Coldron and Smith (Coldron & Smith, 1999) highlight the tension between "employment" (personal dimensions of teaching) and "structure" (social dimension for the givens). They write that "teach" is a matter of being teachers, as I see the teacher as well as do the other, it is a question of redefining identity that is socially legitimized.
Final remarks in the definition of teachers professional identity related to the fact that most of the provisions and overstate personal contextual underestimate the professional identity of teachers. Reynolds (Reynolds, 1996) points out that what surrounds a person, what others expect of her and what she allows to influence her, it determines the identity of teachers. She notes that the job of teachers' "landscape" that can be very demanding, but very restrictive. Cooper and Olson (Cooper & Olson, 1996) also point out that the identity of the "capacity of identity" may be limited. It limits the inadequacy of existing pedagogical knowledge (as a teacher available to this knowledge), norms and values that belong to this "area, the horizon".

The definition of professional identity, the concept of "self" is often combined with other, and it mainly appears as the essential link. "The consciousness of self" in such conceptualizations can not be separated from the personal, narrative life stories (interpretations, explanations, hermeneutics) and by the teacher, through the story, generates self-consciousness (Volkmann & Anderson, 1998). They (stories, anecdotes) are based on experience, and telling stories (written or verbal form) forms the personality itself. Antonek (Antonek et al., 1997) notes that reflection is a key theoretical component of the practice about yourself. In other words, it is impossible to discuss the "self" without reflection. This author believes that it is impossible to improve without the development of reflective abilities and skills. Where some authors write about reflecting, another debate about self-reflection. Through self-reflection teacher experience connects with their own knowledge and feelings, and is able to integrate what is socially relevant in the "image of himself" as a teacher (Korthagen, 2001; Nias, 1989).

Thinking about yourself can never be achieved (describe) without thinking about what surrounds a person (Taylor, 1989). With this in mind, Dillabough (Dillabough, 1999) writes of "self" that transcends the importance of social interaction and importance of any of the "professionalization". She criticizes the dominant view of professional identity in which the teacher is the only one that responds to the instrumental demands formulated by the makers of environment policies and called "experts". In this situation the teacher is only a transmitter, and where that case, no question of the teacher as a professional and his professional identities.

The process of formation of professional identity of teachers is a process that involves inclusion of a large number of sources of knowledge such as knowledge of the affects, teaching, relationships, communication, and knowledge specific to the area of science that deals with the teacher (Antonek, 1997). Implicit theories and experience of teachers, pupils should also have been part of the corps of sources. Sugrue (Sugrue, 1997) finds that this "theory" start the relationship of future teachers by profession, but they are framed and enclosed in a significant (1) family status of teachers, (2) acquaintances throughout the community, (3) the impression that a teacher of other price and respects, (4) atypical teaching episodes, (5) political and social contexts, pedagogical tradition and cultural archetypes, and (6) pedagogical intuition and situation-specific skills of which the most important tactical ability. These are the theory of "implied" and not fully articulated (tacit knowledge in discourse of Polonuij) and water forms of professional identity which differ from those forms of theory-based research. It is important for teachers to develop this kind of awareness, awareness of their own theories, those that stand in the grounds of their practical actions and beliefs (Bullough, 1997). Knowles (Knowles, 1992) mentions the experience of early childhood, the earliest perception of the role of teacher-teacher, previous experience of teachers and significative personality and experience is very important biographical categories of teachers in the formation of professional identity.

It is clear, and everyone knows that many human achievements depend on the ability to think creatively. It is therefore important to focus attention on the issue of creating a "space" for developing and maintaining the originality of thought and action. The school has a fundamental role in the development and expansion of creativity (or to prevent its collapse) as universal ideal.

The curriculum, the educational context, demand a creative approach to structuring, organization, implementation and verification of programs that affect teachers, principals, staff, students and parents – all together in an environment of creativity and creative action. The teacher’s role is multi-determined in this area.

Studies show that teachers generally are not as successful in different fields related to the creativity.
These findings should serve as a starting point for the design of different educational programs for future teachers. Programs (development of creativity) should be designed in order to establish the appropriate skills, attitudes and cultivate mindfulness and tactfulness - kind of sensitivity for the importance of creativity in the daily work of teachers.

Creative teacher teaches and produces creative learners. Teachers who has a warm, open character increases the possibility for the emergence of creativity in students. Most of conceptualization of creativity can be classified in relation to four categories, the focal point of the research: personality, product, process and environment. The definition should be focused on the creative personality, including three aspects: cognitive characteristics; personal and emotional capacity.

The second category of definitions (product) emphasizes product characteristics of creativity. Product must be new, powerful from the standpoint of functionality, valuable and useful to society.

The third category focuses attention on the problem of the process, or how to get to the creative product. The creative process is determined by how original and unusual ideas, diversity combination or upgrading of new ideas to existing knowledge.

Finally, definitions are grouped in the fourth category emphasize the role of environment in promoting or hindering creative possibilities. In this context, creativity is the fundamental question "Where is the creativity?" Rather than "What is creativity?".

In consideration of creativity, some authors include issues of social, cultural and historical dimensions of creativity. "Spirit" and culture set the standard for creative product label. These standards can be "open" and direct individual potential, but they also can be inhibited. From this perspective, creativity can not be understood by isolating the individual and the context of his work, but only in the interaction of thought and socio-cultural context. This is the systematic, rather than individual phenomenon.

According to Amobile (Amobile, 1989) evaluation, competition, restriction of choice, conforms to the pressure, frequency error and routinized teaching and learning - are the factors hindering the appearance and development of creativity in school.

General school climate, and especially differences in socioeconomic status of students, significantly affect the achievement test of creative thinking in students. The social dynamics that prevail in the classroom composition and teacher-student interactions, are also a significant factor in developing the creative abilities of students.

Some researchers examined teachers' perceptions of creativity (the definition of creativity, factors affecting development and obstruction of creativity, methods for identifying creativity in the work, the teaching style and fostering creativity). Teachers mostly believe that creativity can be developed.

Like all professionals, teachers should develop during their careers, too. Learning from experience is critical to this process (Eraut, 1994). While most novices learn by observing and learning and practicing skills, experienced teachers learn in collaborative reflective discourse (with colleagues).

These findings are consistent with the "concept of teaching as a social practice" (D Eon et al., 2000). Widespread are adopted the view of reflectivity as a prerequisite for understanding the essence of teaching, reflecting on the different concepts and programs of professional development for teachers. Leads to a deeper understanding of the extent referred to as "implicit beliefs about the values that determine the functioning of teachers" (Eraut, 1994). Exchange of experiences and ideas with colleagues, are essential processes in developing the quality of reflection.
These cooperation allow participative reflection in which conditions are provided to enhance and improve teaching practice (exercise interpretation and conversation skills). Meijer (Meijer, 2005) offered a scheme for categorizing interactions (based on models designed Korthagen (onion model)) (Korthagen, 2001). Scheme consists of different types of interaction - asking questions, interpreting, summarizing, alternative “trade.” The author has found that these interactions models are important to recall and describe the classroom situation. Beginners have identified the essential aspects of the situation: clarifying, summarizing, concretizing, interpretation, guidance and providing information. All this is important for encouraging self-insight.

METHODOLOGY

The aim of this study was to examine the factor structure of the scale of professional identity of teachers in Republic of Serbia (teachers in the sample N = 221) and the linkage scores on this scale with the dimensions of creativity and collaboration factors, extracted from seven-factors model quality indicators of teaching.

METHOD

The aim of this study was to examine the factor structure of the scale of professional identity of teachers in Republic of Serbia (teachers in the sample N = 221) and the linkage scores on this scale with the dimensions of creativity and collaboration factors, extracted from seven-factors model quality indicators of teaching.

In the area of research that we present here, which is part of a larger study, the aim was to investigate the structure of the professional identity of teachers and to identify predictors connection between identity and some indicators of teacher quality of work. To achieve the aim, it is necessary to develop instruments to identify the latent structure of professional identity through factor analysis, such a structure and then brought in connection with the criteria for the quality of teachers.

The study of professional identity of teachers requires a complex approach and application of complex methodologies. A search of the literature on the study of professional identity, we found a very small number of papers on quantitative research and empirical verification of the identity of the structure of teachers, which could have pointed to possible directions that follow. Qualitative studies is significantly higher. We chose to use the research instruments used in four studies by reference (Cheung, 2008; Beijaard, 2004; Blake, 2002; Jackson, 1981). Our intention was to determine the factor structure of teacher professional identity, and that the factor determined by examining the statistical significance circuit connection with the factors of quality of teachers.

FINDINGS

Information about professional identity, we collected using four scales over which we have tried to determine the structure, function and basic characteristics of professional identity. The first scale was constructed by H.Y. Chang (Cheung, 2008) for empirical studies of teacher-practitioner identity. The initial set consisted of 41 items.

Data on the quality of teachers we collected scales with the quality of work, which was constructed for this work. It consists of six subscales that represent the quality criteria that are theoretically elaborated: reflection, professional development, autonomy, responsibility, creativity and cooperation among teachers. Reliability of the scale as a whole is relatively high (Cronbach alpha 0.67). Six sub-scales also meet the criteria of reliability. Teacher Professional Identity Scale (Cheung, 2008) is one of the few scales in the recent literature and research (psychometric) practices that are designed for the empirical study of professional identity of teachers. The study referred to the author (Measuring the professional identity of in-service teachers, 2008) the initial set consisted of 41 items. After establishing the psychometric characteristics of the final scale included 18 items that were possessed good psychometric properties (Cronbach alpha 0.83). In our study, the 18 items of the scale, through factor analysis (PCA with Varimax rotation) separate the five-factor interpretable structure which explained 70.57% variance. Selection of five factors was performed on the basis of the Kaiser-criterion and Scree Gutmanovog fence (eigenvalue greater than 1). Reliability of the scale as a whole is high (Cronbach alpha 0.87, higher than initial). Five subscales that represent factors also meet the criteria of reliability (Cronbach alpha ranging from 0.83 (first factor) to 0.63 (fifth factor)).

Factor analysis of the second order, using principal components analysis with promax rotation axis and the Kaiser-Guttman normalization, the scale of professional identity and quality of the extracted four factors explain 64.87% of the variance.
Table 1: Teachers Professional Identity and Teaching Quality Factors

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<tr>
<td>Personal development</td>
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<td>Teaching practice</td>
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<td>Cooperation</td>
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<td>Reflection</td>
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<td>Extrinsic development</td>
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<td>Autonomy</td>
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<tr>
<td>Responsibility</td>
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<td>Intrinsic development</td>
<td>.919</td>
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<tr>
<td>Role dedication</td>
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<tr>
<td>Role anticipation</td>
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<tr>
<td>Creativity</td>
<td>.931</td>
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</table>

Canonical correlation analysis obtained the following results:
The table showing the amount of isolated canonical correlations and their significance can be seen that there is a statistically significant correlation for all seven pairs of left and right set of variables (teachers' professional identity and quality of teachers). One might say that this is the main finding of the canonical correlation analysis.

Table 2: Canonical Correlations Analysis: Professional Identity and Quality Factors

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<td>2</td>
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<td>.974</td>
<td>5559</td>
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</table>

DISCUSSION

The presented empirical material has confirmed the general assumption from which we work: it is possible to identify interpretable factor structure of the professional identity of teachers and the quality of teachers, and a statistically significant and positive correlation of professional identity of teachers and the quality of teachers.

Factor analysis of professional identity was obtained seven-factors interpretable structure made up of factors: instructional practice, student development, school and profession, personal development, satisfaction with the profession, commitment to the role and the role of anticipation.

Factor analysis of the quality of teachers was obtained seven-factors interpretable structure made up of factors: reflection, development of extrinsic, intrinsic growth, autonomy, responsibility, creativity and cooperation of teachers.
Canonical correlation analysis obtained statistically significant coefficients of canonical correlation of professional identity and quality of teachers. We were found statistically significant correlations for all seven pairs of left and right set of variables (teachers’ professional identity and quality of teachers). One might say that this is the main finding of the canonical correlation analysis. We have confirmed our assumption that there is interdependence and positive correlation between professional identity and quality of teachers. It can be extracted significant correlation coefficients between two sets of variables: instructional practice and teacher accountability, student development and teacher accountability, commitment and roles of intrinsic motivation, anticipation, and the role of intrinsic motivation, cooperation and schools and other professions.

Obtained significant correlations are mainly factors of professional identity and creativity and cooperation of teachers. In cross-structure of canonical correlation coefficients obtained were statistically significant correlations with the factors of creativity and cooperation: schools and professions, teaching practice and student development. Multivariate analysis showed that teachers are autonomous academic years of service with shorter and longer waiting period for professional involvement in teaching. Teachers who were hired later are the autonomous in teaching. Previous experience helps it to gain a more assertive stance in independent work.

Self-assessment of autonomy increases with years of service, and is more pronounced in females. For teachers with higher education and a longer period of academic preparation, the situation is opposite. In these teachers’ creativity as it grows with age, more experienced teachers are creative.

Analysis of variance was obtained to statistically significant differences between level of education are factors only in instructional practice, student development, reflection, autonomy and creativity of teachers.

CONCLUSION

The presented empirical data confirmed the general assumption that we started in research: it is possible to identify interpretable factor structure of the professional identity of teachers and the quality of teachers, and a statistically significant and positive association of professional identity of teachers and the quality of teachers.

Factor analysis of professional identity was obtained as seven-factors interpretable structure made up of factors: teaching practice, student development, schools and professions, personal development, satisfaction with the profession, commitment to the role and the role of anticipation. Factor analysis of the teacher quality was obtained as seven-factors interpretable structure made up of factors: reflectivity, the development of extrinsic, intrinsic growth, autonomy, responsibility, creativity and collaboration of teachers.

Factor analysis of the second order, from the obtained factor structures of professional identity and factors of the teacher quality, extracted four latent factors, which we called: personal and professional situatedness, proactive professional development, selfactualisation and creativity. Creativity appears as a single factor, with the highest correlation coefficient and the highest value of extraction (usually the first factor obtained). We believe that future research should seek the nature of creativity as fundamental determinant of professional identity and quality of teachers.

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NON-FORMAL EDUCATION AS A CHALLENGE TO THE EDUCATION POLICY

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Abstract
Through this paper we will analyze the current situation of non-formal education in Republic of Macedonia and provides a comparative overview of the positive experiences of the Kingdom of Sweden, where informal education has a long tradition.

The performed research concluded that non-formal education contributes to the determination and identification of the needs of those skills or competencies that are important to empower young people to face the challenges of the new dynamic demands of the labor market.

It also concluded that classical formal education system is not sufficient and cannot meet the new trend of rapid socio-economic and technological change in modern society.

As a case study is analyzed cooperation between SEEU Tetovo and NGO “Triagolnik” Skopje, by applying the new methodology in the work of certificate programs, bachelor and master program

The most important segment of this analysis is the impact of this type of education in mitigating the problem of unemployment in the so-called countries in transition, which requires the change of existing education policy.

Key Words: Non-formal education, market labor, transition.

INTRODUCTION

Through this paper we will present the issues, developments and challenges in the field of non-formal education in Macedonia and compare it with the practices in the Kingdom of Sweden which is a state that has a long tradition in non-formal education.

We will describe that the poor economic development and the transition period in our country are the main reasons for the increased number of unemployed people. The survey will show that a high percentage of participants have similar viewpoints about the process of transition in our country. Also, the data (results) from the research realized with SEEU students regarding the social changes and political developments in the country and abroad will give us a hint in finding proper solutions.

We will present the role of our University and the role of NGOs in organizing programs, trainings and other workshops in this area. It is more than obvious that the NGO sector that deals with the community in general and the youth in particular is the major driving force of these actions and undertakings.
In conclusion, we will try to relate non-formal education with the employment opportunities. The most important segment of this paper is the impact of this type of education in mitigating the problem of unemployment in Macedonia, i.e. the impact of non-formal education in social policies and social welfare.

The endless transition
After the independence, the Republic of Macedonia did not mark any GDP growth which shows that the system that relies on the public ownership is not capable of giving positive economic results. Thus from the start of the transition process, Macedonia was challenged by the external political and economic pressures. Overall, the general political climate is a result of different factors that influence the socio-economic development, because it is a society in a prolonged transition which does not seem to end. \(^1\) The inefficient privatization and the economic reconstruction, the massive layovers, the serious worsening of the living standard, and the rapid expansion of poverty are some of the major reasons that keep Macedonia in a pretty bad status quo position without any hopes for sooner improvement of things and brighter future for the young generations.

Hope for the severe situation in Macedonia offers Stiglitz a Nobel laureate, who finds that the prolonged transition in modern societies can be overcome if the society is well governed in this time of globalization, as is the case with East Asian countries. \(^2\) In transition economies, there may be a significant mismatch between the types of skills that workers possess and the types of skills that the new economy demands. \(^3\)

The survey with students at SEE University shows the public opinion on the transition process in Macedonia. 80% of the participants in the survey share the opinion that the reason for such a long transition period is the lack of a good political will. In the next question, 96% of interviewed students think that the process of privatization has been abused during the transition period in Macedonia in the past 20 years. The students’ opinion in finding the way out of this difficult process relies in securing sustainable direct international investments for economic development. Thus, in the research published in “Students and global political and religious movements”, we can see their opinions about these issues.

Of course, in order to attract international investments you also need to have a qualified workforce. The official statistical data in 2011 say that 31.6% of the population capable for work in Republic of Macedonia is unemployed. In numbers, that is 295,427 unemployed people. This is one of the highest rates of unemployment in Europe.

Macedonia and Non-formal Education
Macedonia joined the modern trends of diversification of the educational offer through various types of non-formal education programs. The purpose of this paper is to analyze the role of non-formal education in Macedonia in terms of capacity building at the individual level but also at the level of society and its impact on the problem of unemployment in our society. In this sense it is very important to find a structured model of non-formal education, and see it as a supporter of the formal educational system i.e. as an added value, so that the educational system will be able to exercise its maximum impact on all segments of the society.

The Republic of Macedonia is not immune to the trend of diversification of non-formal education. It is evident that in our country the formal education system is unable to offer programs designed in accordance with the competencies and skills and knowledge that are of interest for the Macedonian citizens in order to fill in this vacuum.

\(^1\) „Studentet dhe levizjet globale”. Hasan Jashari, Jonuz Abdullahi, Zilitko Zhoglev. SEEU 2008, Tetove, p. 26
\(^2\) Joseph E. Stiglitz. “Uspjeh Globalizacije”. Zagreb 2009, p. 15
Public sector and non-formal education
According to the analysis of research data we can conclude that all the public, the NGO and the private sectors have an important role in many non-formal education programs and trainings. It is indisputable that the public sector institutions offer programs of formal education, but they do not correspond to the educational needs of citizens and the needs of the labor market.

The poor socio-economic situation of citizens in the country which has a tendency of deterioration as a result of the global financial crisis adversely affected demand in the labor market. Public sector institutions such as the Employment Agency of the Republic of Macedonia, the Agency for Civil Servants, the Secretariat for European Affairs, the Agency for Youth and Sports, have special significance for the promotion and implementation of programs in the field of non-formal education.

As a process which enables young people to gain the opportunity to develop their values, skills and competencies different from those obtained in the framework of formal education, non-formal education can contribute at large in soothing the unemployment problem. Skills such as group work, organizational and conflict management, intercultural awareness, leadership, planning, coordination, discipline and responsibility are the main areas of focus.

The private sector and non-formal education
The private sector is the most important driving force of the economy in a society. The comparative experiences show that the private sector is most interested in these training sessions, through which employees acquire more skills, knowledge and abilities to adapt to the needs of employers. But in the Republic of Macedonia, the motivation of employers for any type of education and training of their employees is low. In the country there are no incentives for education and training of employees, except for persons with disabilities. Employers consider the investment in education and training of their employees a waste of time and resources.

NGOs and non-formal education
There is no doubt that most of the non-formal education trainings are organized by NGOs working with the youth in the community. Civil society and especially NGOs are predominantly focused on programs of general education and cultural education of the youth.

One of our partners that offer non-formal education is the NGO “Triagolnik”, Skopje, Macedonia. We jointly did a research on “Non-formal education as an opportunity, mechanism and tool for decreasing the unemployment in the Republic of Macedonia”. In this research we concluded that non-formal education creates good employment opportunities and that the participants seek more by learning local languages other than their native language.

The biggest problem of these NGOs is the lack of recognition of these trainings in the country and insufficient information on these courses, lack of financial sustainability of these organizations, and an imbalance of these trainings throughout the whole territory of the Republic of Macedonia.

The experiences of the Swedish model of non-formal education – a good example for the Republic of Macedonia
We will dwell on this paper on the experiences of the implementation of non-formal education in Sweden as well as on the volume and the role of this kind of education and the support from the state in providing trainings and workshops in this field.

A fundamental point of the Swedish model is the complete governmental support for non-formal education. Fields with the greatest number of participants include: arts, sculpture, media, journalism, leadership, international trainings, drama, ecology, and religion, philosophy of life, sports, languages, creative writing, tourism, and cultural studies.
The flexibility and freedom of determination of programs in accordance with the participants’ needs are the most important characteristics of the learning process in the folk secondary schools. It is considered that these schools offer the possibility to learn flexibly based on the content of trainings and learning methods.\(^4\)

Through this model, Sweden is trying to make it up to those who were not able to acquire formal education. Special attention is paid to values of tolerance, equality and democracy through this model.

The foundation of this model of the non-formal education means a flexible and independent learning process, focused on the methodology of small groups and creative dialog. The participants are considered adults and responsible people who are able to think critically and are responsible for the learning process. It is also important to point out that during the 1995-1996 school year, a national evaluation of this kind of educational model as carried out. In accordance with this evaluation it was concluded that Swedish folk secondary schools meet the criteria for public financial support.

Sweden is known for its non-formal education approach and is considered as one of the leading countries which promote non-formal education. Non-formal education in Sweden is a developed concept which is happening parallel and in addition to the process of formal education through support programs by the state as well as by formal education institutions in the country.

**Folkbildning – for lifelong learning**

People want to learn and develop in many different contexts in all phases of life. Swedish folkbildning meets this need – and thereby contributes to societal development and growth. But folkbildning also has an intrinsic value because well-informed and active citizens constitute the core of democracy. Folkbildning is open to everyone in society. In folkbildning, everyone participates on equal terms, but based on different conditions. People seek knowledge and development through folkbildning for various reasons. All of these reasons are meaningful – regardless of whether it is a question of personal development, increasing the chances of finding a new job, or simply a desire to learn. In study associations and folk high schools, opportunities of lifelong learning are provided through a rich offering of courses and educational programs – everything from study circles where a small group meets a few times in their leisure time, up to multi-year, full-time courses of study at folk high schools.\(^5\)

**Comparative approach**

The Republic of Macedonia is far away from the approach of the encompassing implementation of non-formal education due to the insufficient support by the state as well as the ignorance of the importance of the skills that can be acquired in this kind of educational setting. The strategy for the youth in the Republic of Macedonia in terms of establishing civic program schools by NGOs is a good foundation, but its implementation in the first place depends on the support that these NGOs will receive from the public sector at a central and local level.

In attempt to provide answers to the main research question, the following survey was conducted by Center for Non-formal education- Triagolnik in January-April 2008, in which case 1128 respondents were surveyed in 8 statistical regions: Gostivar, Struga, Saraj, Kumanovo, Veles, Shtip, Strumica and Bitola.\(^6\) Our experience gained from this survey brought the following results:


\(^5\) http://www.folkbildning.se/Folkbildning/Oversattningar/English-translations/

\(^6\) Извештај. Центар за неформално образовање Триаголник. „Неформалното образование како можност-mekhanizam и средство за намаљување на невработеноста во РМ“. Јонуз Абдулаи, Јорде Јакимовски, Мемет Мемети. Скопје, Октомври 2008
In the employee population there is huge interest in participation in programs of informal education. Namely, 86% of the total number of the respondents is willing to participate in training programs of informal education which would acquire knowledge, skills, competencies and attitudes needed for greater competitiveness in global labor market.

Knowledge and skills acquired through this education would help to get a job?

- It would be very helpful
- It would not help
- It would help
- It would not help
- Don’t have answer

Fig. 2
It is interesting the fact that 55% of the total number of the respondents believe the training of informal education would help to open their own business for their own employment.

![Pie Chart: Do you expect quick employment if you acquire new skills and knowledge?](image)

**Fig.3**

The question whether if you expect employment if you acquire new skills and knowledge, we have obtained specific data so that the total number of the respondents 54% expect employment due time, 31% expect a quick employment and only 2% are skeptical about chances of employment.

According to the results obtained from the research we can highlight three issues that will give us concrete answers regarding the election of the best model for resolving the problems which the population in Macedonia is facing.  

From graph 1 we can clearly see the great interest of the unemployed to participate in various programs of informal education, these individuals through training will be equipped with new knowledge and skills which have been absent from formal education.  

Furthermore the majority of respondents are of the opinion that informal education will help them to find jobs and be more competitive in the labor market. This means that it will increase the interest of employers, particularly those of the private sector.

From what was said above we can conclude that the thesis of Anthony Giddens is confirmed, according to which, general education will help to reduce social inequalities and power, giving young people opportunities to secure their fair place in society.Life-long education is the need and mechanism for coping with challenges of globalization; therefore we conclude that informal education will alleviate unemployment as a cause of social problem in modern society.

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There have been many research in this field, it is worth to mention the research made by Cultural Youth Centre Bitola in 2009, sponsored by institutions for Sustainable Communities with the help of USAID funds. This document contains recommendation for improving the informal education in Macedonia; the project is called “Recognizing and affirmation of informal education in Macedonia”. From these researches it is vital to mention some of the recommendation which have a special importance for non-formal education, and facing the challenges and overcoming them in the future.

The recommendations of both NGOs mentioned above are as follows:
- To encourage the relationship between formal and informal education, proposes cooperation with career centers in educational institutions, primarily in universities which can spread information about opportunities in informal education.
- State institutions, especially those in the field of education even those who are in charge of the department of Labor and Social policy should pay more attention and readiness for greater support and recognition of the importance of informal education to alleviate the problem of unemployment in Macedonia.
- Reforming the system of formal education programs with programs that in their educational center have the student through the methodological approach that is based on an interactive model of teaching and courses that focus on applying theory to practice.

Based on this conclusion of these researches we can conclude that the need for their implementation in practice it is needed the inclusion of government and formal and informal institution of education and especially the role of NGOs.

In practice this was accomplished during the last 3 years between the NGO sector and high education, respectively SEEU and Triagolnik, realizing 1 year certificate programs “University course in Leadership and Community Youth work” in Tetovo and Prishtina within the framework of the Forum Syd-Sweden. Models that are implemented in this program non-formal education:
- Introduction to Community Youth Work and Personal Development
- The life stage of adolescence
- Working with Individuals
- Working with groups
- Working with conflict and difference
- Management in community youth work
- Introduction to research in CYW
- Leadership and Developmental Community Youth Work
- Practical application of training in actual environment
- Working with conflict and diversity

Besides the basic knowledge for youth work and non-formal education, within the frames of level 1, the students gain 30 ECTS through gaining knowledge from the following the above mention modules. At the moment in process of realization is the level 2 which also has 30 ECTS. The important fact is that these 60 ECTS are accepted in bachelor programs in SEEU Tetovo.

This practice of certificate University course in Leadership and Community youth work is realized through cooperation with Jonkoping University-Sweden and NGO Triagolnik-Skopje. The cooperation continued with our participation in program TEMPUS IV, respectively with the design of the bachelor program “Leadership and Community youth work in society”, in 2010 these program were accredited by the state board for

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8 Неформалното образование во Република Македонија, состојби и перспективи. Младински културен центар Битола. Ноември 2009, p. 71

accreditation, and in this academic year we are waiting the enrolment of the first generation, in which case they will gain double degree diploma.

The importance of informal education is growing, the need for new qualified, competent stuff are needed to deal with the challenges of modern society such as unemployment and other problems of youth.

The need to reform the educational system in particular changes in educational policy is needed, because it does not match the reality of the labor market and social changes in modern society. Dynamics of life, global crisis, increase of unemployment and other challenges faced by youth today in the so-called societies in transition, require adaptation of the educational system with the true European values.

Informal education is conditioned by the policymaking process, and therefore should be seen what are the advantages and effects of government policy in the public sector.

CONCLUSION AND RECOMMENDATIONS

Macedonia has the potential for good governance, but should invest in social capital through non-formal education. For overcoming the social crisis and dealing with modern challenges good governance is essential. Life-long education requires permanent investment in the implementation of non-formal education programs, as an opportunity for all citizens in civil society.

There is no conceptual framework and a strategy for non-formal education in R. of Macedonia. Non-formal education is situated in a very bad condition due to the lack of a complete legal framework, coordination and cooperation among social partners, as well as inappropriate transparency and accessibility of these kinds of programs.

One of the greatest promoters of non-formal education in Macedonia is the non-governmental sector assisted by foreign donations. There are youth NGOs which have the capacity, knowledge and experience to offer these kinds of programs. But the problem of coordination which causes duplication of the efforts in the NGO sector and unbalanced offers is more than evident. Another great problem of these NGOs is the accessibility of these programs to the general public. Most of the participants in the focus groups of the unemployed had no idea of the concept of non-formal education.

The motivation of employers to send their employees to non-formal education and trainings is very low. There are no stimulation measures for that purpose (financial benefits, tax releases, etc.) Most of the employers think that investment in education and training of their employees is a useless attempt and expense.

There is a perception that formal education contributes partially to the acquisition of those competences, skills and approaches that are necessary to remain competent and in line with the latest trends in the labor market.

The private sector employers have a need to hire people who not only have a formal education degree but also competences, skills and abilities in the field of non-formal education.

Individual skills acquired through trainings in non-formal education activities are not only related to the perspectives and opportunities for employment, but they also contribute to the development of human capacities and motivation for individual development which is necessary in a modern democratic society.

Non-formal education providers should ensure partnership not only with the decision-making structures, but also with authorities, educational institutions, the business sector and social partners, local organizations, research centers, etc.

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The system institutions, especially those in the field of education and labor and social policies should pay more attention and show readiness for greater support and recognition of the importance of non-formal education in order to reduce the unemployment rate in Macedonia.

The situation in the field of non-formal education in the Republic of Macedonia requires an urgent and suitable approach from the state through the establishment of cooperation between different governmental sectors, between the Government and other factors in the country, such as trade unions, economic chambers, employers, educational institutions, civic associations, etc.

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[http://www.folkbildning.se/Folkbildning/Oversattningar/English-translations/](http://www.folkbildning.se/Folkbildning/Oversattningar/English-translations/)


EFFECTS OF ADOLESCENTS’ POSITIVE, NEGATIVE THINKING DISPOSITION ON TEAM COLLABORATION DISPOSITION

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Abstract
In adolescence adolescents are facing a big transformation both in psychology and physiology, they need time to adapt during the course of transformation, and they are prone to generate negative thinking disposition if not well adapted, thereby affecting subsequent life. Based on the above critical reason, this study aims at describing and explaining effects of present situation and characteristics of adolescents’ positive, negative thinking disposition on team collaboration disposition. This study adopted questionnaire method to collect data from design group students of a senior vocational school in central region, and a total of 157 valid student questionnaires were collected; used SPSS 18.0 to conduct Pearson correlation analysis and multiple regression empirical analysis, and carried out estimation and verification for structural relationships between each group of variables. The study results show that: (1) adolescents’ positive thinking disposition and negative thinking disposition have a significant negative correlation, (2) adolescents’ positive thinking disposition and negative thinking disposition respectively has a significant relationship with team collaboration disposition; (3) positive, negative thinking disposition has a significant predictability for team collaboration disposition.

Key Words: Positive, negative thinking disposition; adolescent; team collaboration.

STUDY MOTIVATION AND PURPOSE

Because of fast pace and great pressure of present society, many problems such as emotion disorder can be easily derived. Staying in negative thinking for a long period can easily cause physical and psychological pressure and trigger physical and mental illness, may lead to produce inappropriate behavioral responses and even affect interpersonal, family and social relationships if not appropriate relieved. However, according to long-term studies of American scholars, children and adolescents may also be victims of depression (Feldman, Rubenstein and Rubin, 1988; Reynolds, 1985), and those suffered by depressive symptoms in childhood period
may even have higher percentage of depression than normal children after grown up (Reynolds, 1985). The study made by Peterson, Compas, Brooks, Stemmler and Grant (1993) also pointed out that 30~40% of adolescents experienced obvious depressive emotion, 5~6% of adolescents have severe depression symptom, and 2~3 % of adolescents meet diagnostic criteria for clinically depressive illness (Wu Chong-Shiu, 2006).

From the many studies mentioned above it can be known that exploring depressive situation of adolescents is already an urgent need. According to Cognitive Theory of Depression proposed by A. Beck in 1976, Beck believes that the generation of depression is a result of individual error cognitive schema, negative self-schema will be triggered when he/she faces negative event, and then further generate cognitive bias for that event. Such thinking of cognitive bias will lead to produce three elements of depressive cognition, i.e., hold a negative view for oneself, for world, and for future (Chiu Yi-Feng, 1996; Chen Sing-Zrong, 2001; Chen Chang-Lan, 2001; Yang Shun-Nan, 1996). In other words, most depression types are related to the negative thinking disposition of an individual (Ye Zeng-Shiu, 2004). Because in adolescence adolescents are facing a big transformation both in psychology and physiology, they need time to adapt during the course of transformation, and they are prone to generate negative thinking disposition if not well adapted, thereby affecting subsequent life. Therefore, this study would like to understand the present situation and characteristics of adolescents’ positive, negative thinking disposition, and this is the first purpose of this study.

Things don’t always turn out that way in life, whether individual self uses positive or negative thinking to deal with these people, things and objects, next will always inevitably have to take advantage of collaborative ability of professional group, only then team performance is able to be produced. These positive, negative thinking factors, including competitiveness and complementarity between academic peer in school, would seems likely affect interactive ways and implementing effectiveness of team collaboration. In addition, during the course of team collaboration and project promotion, emotional control ability of members is also an important factor affecting team performance (Birx, Lasala and Edd, 2011), therefore, this study intends to analyze the relationships between adolescents’ positive, negative thinking disposition and team collaboration disposition, and this is the second purpose of this study.

Previous studies had found that in fact the most major potential factor affecting a person’s behavior and result is the resulted interactive effect between the person’s thinking disposition and his/her surrounding environment, communities and interpersonal interaction (Bronfenbrenner, 1986). Levin and Stokes (1989) suggested that everyone has a kind of particular affection disposition, and the cognition and feelings generated through affection disposition would make everyone adopt a different attitude and approach to face things. According to previous viewpoint, it can be understood that an individual’s affection tendency would very likely affect the individual’s attitude and behavior on work or study (Luo You-Xuan, 2009). Especially when an individual joins a collaborative team, both positive emotions generated through optimism and negative emotion generated through conflict would affect team performance (Jordan, Field and Armenakis, 2002). In short, team members’ positive and negative thinking disposition affect the team’s collaboration disposition. Therefore, this study expects to explore the connection between both, and this is the third purpose of this study. In conclusion, our main study purposes are as follows:
1. Understanding present situation and characteristics of adolescents’ positive, negative thinking disposition.
2. Analyzing relationship between positive, negative thinking disposition and team collaboration disposition.
3. Exploring effects of team members’ positive, negative thinking disposition on the team’s collaboration disposition.

LITERATURE REVIEW
Whether in terms of general psychology or educational psychology, study for “self” has always been one of the important study topics since ancient times. However, the study for self is quite difficult. The reason is that self can not be measured from external observation, and can only rely on oneself experience (Chang Chung-Hsing, 1999). Therefore, this chapter will respectively explain the meanings of “definition and course of thinking”, “adolescents’ thinking disposition”, “positive, negative thinking disposition” and “collaboration disposition”, and use them to construct study framework.
Definition and course of thinking
What is thinking? “Thinking” is using our mind to feel, to study and uptake knowledge or understand knowledge. Thinking is also the course and activity of an individual in using intelligence, basing on current information and existing knowledge and experience, to engage in problem solving and new knowledge exploring (Rou Wei-Ern, 2009). Simply speaking, when an individual received any message, separate independent messages will be processed to bring out correlation and meaning among them, and in the course of processing messages, the individual is in a thinking state.

Thinking is the meticulous experience exploring engaged for reaching a specific objective, and the so-called objective include understanding, decision making, problem-solving, planning, judgment, action, etc. (de Bono, E., 1992). Whether thinking can effectively function depends on the amount of existing experiences and immediate information. The context of completely no or have information will make thinking difficult to produce; on the contrary, in order to compensate for the missing and omission of which, an individual often activates thinking due to lack of experience or incomplete information. Therefore, thinking is a deliberate effort to find a special link between our action and the consequence of our action, so that continuity exists between the both (Dewey, 1944:145).

Zeng YU-Chung (2004) argued that thinking course consists of perception, memory, understanding, reasoning, decision making, problem solving and creativity. So we know that the thinking course of an individual in the context is exactly a problem-solving course, therefore, school’s curriculum design and teacher’s teaching need to focus on arranging the contexts which would cause students’ thinking, and through the course of problem solving to reach the goals of individual’s meaning constructing and learning internalizing. So, thinking is not directionless and aimlessly, it is generated to cope with individual’s problem-solving need (Wu Mu-Kun, 2009).

In summary of various arguments, the researcher of this study attempted to make the following definition for thinking and thinking course: “the course of thinking is after an individual discovered a problem - a process of using existing knowledge and experience as a basis and applies assistance from understanding ability and existing information to integrate sub-thinking systems of viewpoints and knowledge which may mutually conflicting or contrasting to engage in root cause exploring and problem solving.”

Adolescents’ thinking disposition
Some experts divide adolescence into two transformation stages, namely early adolescence (10-18 years) and late adolescence (18-24 years). Papalia and Olds (1994) once pointed out that adolescence is the transitional development period between childhood and adulthood. With respect to this study, the description of disposition is a lasting and stable response way of an individual resulting from different stimuli in environment (Allpor, 1961). According to cognitive development theory proposed by Piaget (Piaget, 1896-1980), it is believed that adolescents have developed into formal operational period (11-16 years), the characteristics of their thinking disposition have been able to think in hypothesis-deduction approach and solve problem in reasoning method complying with formal logic, i.e., able to think and solve problem in accordance with scientific rules of hypothesis and verification (Piaget, 1970). It represents that the thinking ability of an individual adolescent has achieved in maturity, but at the same time the adolescent’s cognitive development accompanied by strong self-centereded phenomenon, easy to infer arbitrary. In addition, Piaget believes that adolescents have been gradually able to rationally judge social norms, assess right and wrong; and also can propose self-view based on rationality and selectively accept certain opinions.

Glasser (1985) pointed out, personal problem are originated from wrong perception and resulted from not able to distinguish the gap between feeling world and ideal world, therefore, the important key for changing their behaviors or solving affective distress can only be achieved through individual’s self-reflection and changes in feeling and concept. However, adolescents’ thinking disposition is often subject to misunderstanding of themselves or environment. But the result of relying on limited information and negative thinking is easy to - based on self-centereded viewpoint or dual illogical way - explain external phenomenon of personal, family or
school things, some even distort or exaggerate possibility of reality, thus resulting in troubles of many bad adaptation of behaviors or affections, but also can not be responsible for their judgments.

Summing up the above literature and study results, the researcher believes that thinking disposition is subject to personal intrinsic disposition, relevant experiences and external stimulus affairs and thus has different tendencies. Generally speaking, adolescents’ thinking disposition is more sensitive and makes them having positive thinking dispositions of curiosity, enthusiasm and vitality, and courage to ask question or propose dissatisfaction when facing various affairs, and critical attitude when facing challenges. But also because of self, coupled with insufficient experience in all aspects, their inner self-consciousness is often in a status of apparent contradiction and conflict. If adolescents can obtain proper guidance in intelligence, personality and emotion, they would be able to healthily grow toward adulthood. However, if they can not accept transformations brought by physiological changes in adolescence, plus self-identification failure and thinking level still remaining at egocentric stage, then they tend to produce negative thinking disposition such as easily anxiety, worry, or angry, arguing due to trivial matter, emotional instability, etc., when a slightly unhappy thing occurred.

Characteristics and effect of positive, negative thinking

(1) Characteristics and effect of positive thinking

Positive thinking refers to that an individual holds a positive, optimistic and aggressive belief for the interpretation of self and surrounding people and things. According to viewpoint of Seligman, Teasdale, Abramson and Garber, individuals’ interpretation patterns for things can be divided into three dimensions: permanence, pervasiveness, and personalization. Positive thinking is holding a “permanent”, “pervasive” and “internal” idea for the characteristics of positive events, and holding a “temporary”, “specific” and “external” idea for the characteristics of negative events. This allows individuals to transform irrational belief triggered by negative events to rational belief, adjust cognitive model and flexibly think solving method when encountered a setback, and is beneficial to adaptation of personal life (Huang, Xuan-Zhi, 2011). Positive thinking tendency is helpful to positive emotional feeling, allows a happier and healthier feeling in the face of all things, and easier to explain things with uncertainty from a positive viewpoint and a more optimistic thinking (Luo You-Xuan, 2009). In addition, they are also more enthusiastic, vital, active and alert, have more self-efficacy, and would become involved with more pleasant emotion while in the course of interpersonal interaction and goal achieving (Watson, Clark and Carey, 1988; Williams, Zainuba and Jackson, 2003).

(2) Characteristics and effect of negative thinking

Positive thinking refers to that an individual holds a negative, pessimistic and passive belief for the interpretation of self and surrounding people and things. Crandell and Chambless (1986) pointed out that negative thinking (including separation, low self-assessment, helplessness and hopelessness) is a bias of cognitive content, and can be used as an identifying factor for depressive and non-depressive populations. Norem and Chang (2002) expressed that negative thinking is pessimistic, and pessimism is a quality linking to more negative results; negative thinking people prefer to make unrealistically low expectation for the situation they face, and then reduce their activity through psychological play or reflection. Therefore, negative thinking is a process of responding activity, it is prone to generate negative thinking (Sugiura, 2002) and also easy to cause occurrence of depression (Dyson and Renk, 2006) if using negative coping strategy in the face of stress source.

Internal and external factors affecting thinking (positive and negative orientation)

As mentioned in previous section, positive, negative thinking refers to explaining belief for self and surrounding people and things of an individual, and can also be referred to as attitude. Many scholars believe that attitude is composed by three factors of cognition, affection and behavior. The so-called cognition factor refers to an individual’s knowledge, belief, values and imagery for situation and things, but is not involved with personal subjective feelings. While affection factor refers to emotional reaction to object of attitude, is personal emotional views on things, including emotion and feeling for specific object of attitude; and behavior factor refers to adopted action or behavior for object of attitude (Wang Bo-Ching, 1995; translated by Yu Bo-Chuang, Li Mao-Sing, 2003; Zeng Mong-Lan, 2002; Yang Chong-Fang, 1994; Zajonc, 1980; Zanna and Rempel, 1988). Therefore, this study attempts to divide internal and external factors affecting thinking into internal
physiological factor inherently born and external emotional qualities learned. In other words, the positive thinking disposition can be developed.

**Collaboration Disposition**

Research shows that collaboration is voluntary (Friend & Cook, 1992), interactive (Keys & Green, 2005), ongoing (Lawson, 2003), inclusive (Anfara, et al., 2008; Baker, et al., 2009), and requires commitment (Cahill and Mitra, 2008; Rubin, 2002) to a common goal (Friend & Cook). Friend and Cook assert collaboration is a means for solving problems and obtaining goals through a voluntary process whereby two or more stakeholders come together as equally valued participants to work on a mutual goal.

The purposes of collaborating are many and varied, but concerns about learning through collaboration have become increasingly prominent (Inkpen, 2000; Nooteboom, 2004). Assimakopoulos and Macdonald (2003), focusing on networks of innovation, examine informal, social learning processes but do not explicitly consider the attitudes that influence these processes. Much of the literature addresses attitudes to learning in either competitive (Ingram, 2002; Inkpen and Beamish, 1997) or collaborative (Inkpen and Tsang, 2005; Smith and Powell, 2004) frames.

Attitudes have so far been described as though they operate at a macro-level, throughout the life of a collaboration. Given the inherently dynamic nature of all aspects of collaboration (Ebers and Grandori, 1997; Huxham and Vangen, 2000; Koka and Prescott, 2002), attitudes may also change over time at the macro level, as, for example, individuals get to know each other, early successes lead to trust development, or changes of personnel undermine it. Attitude refers to the positive or negative feelings derived from knowledge sharing.

**STUDY METHOD AND IMPLEMENTATION COURSE**

This study adopted questionnaire method to collect data, the objects of study is design group students of a senior vocational school in Taiwan central region, it was expected to issue 168 student questionnaires, and survey time is from January 2012 to February 2012. The preparation of the study tool is based on and modified from Wu Ming-Chang and Wang Xiao-Tien (2011): ”Present Adolescent’s Idea and Life Experience Scale”; after adopted SPSS 17.0 to conduct statistical analysis and validation on survey data and ensured correctness of original data, used Pearson correlation analysis and multiple regression empirical analysis to carry out statistics for linear relationships between each group of variables in the model of this study, and to present structural relationships between positive, negative thinking disposition and team collaboration disposition. In the followings, this chapter will focus on explaining: study framework and hypotheses, study object and data collection, study tool and modification as well as data analysis method.

**Study framework and hypotheses**

Based on the abovementioned motivation and purpose, this study proposed the linear relationship model between three variables, namely “positive thinking disposition”, “negative thinking disposition” and “team collaboration disposition” (Figure 1).
For exploring the affecting relationships between “positive thinking disposition”, “negative thinking disposition” and “team collaboration disposition” of adolescent team members, this study set up the following hypotheses:

Hypothesis 1: Adolescents’ “positive thinking disposition” and “negative thinking disposition” is relevant.

Hypothesis 2: Adolescents’ “positive, negative thinking disposition” and “team collaboration disposition” is relevant.

Hypothesis 3: Adolescents’ “positive, negative thinking disposition” would directly affect “team collaboration disposition”.

**Study object and data collection**

This study adopted purposive sampling approach to conduct measuring work for design group students in a senior vocational school of Taiwan central region by class, collected 168 questionnaires from four classes (42 students per class) of second and third year design group students in the school, and removed invalid questionnaires with regular answers and too many missing questions, and a total of 157 valid questionnaires were collected, the validity rate is 93.5%, of which number of boy samples is 33 and number of girl samples is 124. The survey was conducted from January 2012 to February 2012.

<table>
<thead>
<tr>
<th>Background Variable</th>
<th>Category</th>
<th>Number of Samples</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>16</td>
<td>20</td>
<td>12.7</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>85</td>
<td>54.8</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>52</td>
<td>33.1</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>33</td>
<td>21.0</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>124</td>
<td>79.0</td>
</tr>
</tbody>
</table>

**Study tool and modification**

This study utilized questionnaire survey method, and since the purpose of this study is for describing and explaining present situation and characteristics of adolescents’ positive, negative thinking disposition, so adopted self-report inventory as main tool. The preparation of the study tool is based on and modified from Wu Ming-Chang and Wang Xiao-Tien (2011): “Present College Student’s Idea and Life Experience Scale”. All questions utilize Likert Scale as measuring scale, the subjects can tick a answer from “strongly disagree” to “strongly agree” for each question, and a score of 1-5 is give to each answer in sequence. The basic meaning and structure of this scale consists of three main dimensions, respectively is positive thinking, negative thinking, and exploring of effect on team collaboration disposition. The preparation of various dimension questionnaires had made reference to review and assessment of foreign and domestic relevant scales, and modified for this study.
(1) Positive thinking dimension adopted study scale of Ingram and Wisnicki (1988), a total of 22 questions; constructed four content dimensions, respectively are 7 questions for “positive expectation for future development”, 6 questions for “positive self-assessment”, 5 questions for “positive thinking for daily life”, and 4 questions for “comprehensive self-assessment”, mainly for exploring whether adolescents hold positive idea for these four content dimensions.

(2) Negative thinking dimension adopted study scale of Hollon and Kendall (1983), a total of 25 questions; constructed four content dimensions, respectively are 10 questions for “negative self-expectation”, 7 questions for “powerlessness of give-up, hopelessness”, 5 questions for “not adaptive to present situation and want to change”, and 3 questions for “low self-esteem”, mainly for exploring whether adolescents hold negative idea for these four content dimensions.

(3) Team collaboration disposition dimension adopted study scale of Jian Zhong Wang (2001), a total of 11 questions, to explore whether adolescents’ positive, negative thinking disposition will affect team collaboration disposition.

The reliability of this study questionnaire was assessed by using Cronbach’s α coefficient. The reliability of three scales of positive thinking, negative thinking, and team collaboration disposition are respectively 0.905, 0.968, and 0.937, all achieve good level, indicating that the measuring tool (questionnaire) of this study has trusted reliability level.

Data analysis method
After utilized SPSS 17.0 to carry out statistical analysis and validation on survey data and ensured correctness of original data, this study used descriptive statistical procedure to conduct frequency distribution analysis for basic information of study objects. This study then used Pearson correlation analysis and multiple regression empirical analysis to carry out statistics for linear relationships between each group of variables in the model of this study, and to present structural relationships between positive, negative thinking disposition and team collaboration disposition, and carried out statistical test for each hypothesis proposed in this study.

STUDY RESULTS

1. Results of correlation analysis
This study adopted Pearson correlation analysis to verify the relationships between dimensions, and used standardized coefficients to estimate correlation values (Table 2) between various dimensions, the final model paths are shown in Figure 2. The path analysis coefficients of the study model reveal: (1) positive thinking disposition and negative thinking disposition have a negative and significant relationship (γ = -.726, ** p < .01); verified that study hypothesis 1 is valid, showing that when an individual shows positive thinking disposition, will also show negative thinking disposition. (2) Positive thinking disposition and self-perceived team collaboration disposition have a positive and significant relationship (γ = .600, ** p < .01), while negative thinking disposition and team collaboration disposition have a negative and significant relationship (γ = -.432, ** p < .01); verified that study hypothesis 2 is valid.

Table 2: The correlation matrix of latent variables

<table>
<thead>
<tr>
<th>Positive thinking</th>
<th>Negative thinking</th>
<th>Collaboration Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive thinking</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Negative thinking</td>
<td>-.726**</td>
<td>1</td>
</tr>
<tr>
<td>Collaboration Disposition</td>
<td>.600**</td>
<td>-.432**</td>
</tr>
</tbody>
</table>
2. Empirical results of multiple regression analysis

This study adopted multiple regression analysis to verify effects of various content dimensions of positive, negative thinking disposition on team collaboration disposition, and used standardized coefficients to estimate effect values of various content dimensions, the final model paths are shown in Figure 3. The path analysis coefficients of study model reveal: (1) From Table 3, found that “various content dimensions of positive thinking disposition” have significant predictability for “team collaboration disposition”, and the overall explanatory power is 36.9% (R2 = .369), reached significance level (F = .000, p > 0.05). And from Table 4, further found that, three variables (“positive thinking for daily life”, “positive self-assessment” and “comprehensive self-assessment”) in four content dimensions have positive and significant direct effect on “team collaboration disposition”. Of which, the effect of “positive self-assessment” is biggest (Beta = .268). (2) From Table 5, found that “various content dimensions of negative thinking disposition” have significant predictability for “team collaboration disposition”, and the overall explanatory power is 25% (R2 = .250), reached significance level (F = .000, p > 0.05). And from Table 6, further found that, only the variable “not adaptive to present situation and want to change” in four content dimensions has negative and significant direct effect on “team collaboration disposition” (Beta = -.505). From the above two results, verified that study hypothesis 3 is valid.

Table 3: Summary of overall multiple regression analysis model of “various content dimensions of positive thinking disposition” vs. “collaboration disposition”

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R2</th>
<th>Adjusted R2</th>
<th>Standard error of the estimate</th>
<th>R2 change</th>
<th>F change</th>
<th>df1</th>
<th>df2</th>
<th>Significant F change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.608</td>
<td>.369</td>
<td>.353</td>
<td>5.520</td>
<td>.369</td>
<td>22.265</td>
<td>4</td>
<td>152</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 4: Overall multiple regression analysis coefficients of “various content dimensions of positive thinking disposition” vs. “collaboration disposition”

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>Collinearity statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B estimate value</td>
<td>Standard error</td>
<td>Beta distribution</td>
</tr>
<tr>
<td>1 (Coefficient)</td>
<td>8.607</td>
<td>3.487</td>
<td>.2468</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.337</td>
</tr>
<tr>
<td>Positive thinking for daily life</td>
<td>.373</td>
<td>.146</td>
<td>.268</td>
</tr>
<tr>
<td>Positive self-assessment</td>
<td>.573</td>
<td>.188</td>
<td>.211</td>
</tr>
<tr>
<td>Comprehensive self-assessment</td>
<td>.563</td>
<td>.265</td>
<td>.046</td>
</tr>
<tr>
<td>Positive expectation for future development</td>
<td>.124</td>
<td>.218</td>
<td>.046</td>
</tr>
</tbody>
</table>

a. Dependent variable: Team collaboration disposition

Table 5: Summary of overall multiple regression analysis model of “various content dimensions of negative thinking disposition” vs. “collaboration disposition”

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R2</th>
<th>Adjusted R2</th>
<th>Standard error of the estimate</th>
<th>Change statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.500</td>
<td>.250</td>
<td>.363</td>
<td>6.021</td>
<td>R2 change</td>
</tr>
<tr>
<td>1</td>
<td>.230</td>
<td>.250</td>
<td>.260</td>
<td>6.021</td>
<td>.250</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Negative self-expectation, Powerlessness of give-up, hopelessness, Not adaptive to present situation and want to change, Low self-esteem

Table 6: Overall multiple regression analysis coefficients of “various content dimensions of negative thinking disposition” vs. “collaboration disposition”

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>Collinearity statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B estimate value</td>
<td>Standard error</td>
<td>Beta distribution</td>
</tr>
<tr>
<td>1 (Coefficient)</td>
<td>50.003</td>
<td>1.918</td>
<td>26.072</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.006</td>
</tr>
<tr>
<td>Negative self-expectation</td>
<td>.117</td>
<td>.130</td>
<td>.103</td>
</tr>
<tr>
<td>Powerlessness of give-up, hopelessness</td>
<td>-.876</td>
<td>.239</td>
<td>-.505</td>
</tr>
<tr>
<td>Not adaptive to present situation and want to change</td>
<td>-.249</td>
<td>.333</td>
<td>-.089</td>
</tr>
<tr>
<td>Low self-esteem</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent variable: Team collaboration disposition
DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS
This study examined affecting factors of adolescents’ positive, negative thinking disposition on team collaboration disposition, and used the results to analyze the effectiveness and structure model of the affecting factors. The analysis results in this study lead to some interesting issues for discussion:

DISCUSSIONS

(1) Coexistence of positive thinking disposition and negative thinking disposition
The results of this study are consistent with the views of past scholars, that is, positive, negative affection disposition are independent personality dispositions, and a person may have both high positive affection disposition and negative affection disposition at the same time, or have both low positive, negative affection disposition at same time (George, 2007). This reveals that when an individual shows positive thinking disposition, he/she may also show negative thinking disposition at the same time. In particular, this is not only true for ordinary people, even for twice-exceptional students, i.e., persons having both gifted and physically/mentally handicapped characteristics may have both positive and negative dispositions at same time (Wu Yi-Hui, has Zeng Ru-Ying, 2009). Therefore, this study suggests that adolescent individuals should actively understand and accept the fact of having both positive and negative thinking dispositions, and then try to play more positive thinking pattern to replace negative thinking pattern.
(2) Correlation of positive thinking disposition and negative thinking disposition vs. team collaboration disposition

According to the study results, it can be seen that adolescents’ positive thinking disposition and self-perceived team collaboration disposition have significant positive relationship. While negative thinking disposition and team collaboration disposition have significant negative relationship. In other words, the more the adolescent’s positive thinking disposition, the more the adolescent’s team collaboration disposition; the more the adolescent’s negative thinking disposition, the less the adolescent’s team collaboration disposition. Further regression analysis found that although positive thinking disposition and negative thinking disposition together have significant predictability for “team collaboration disposition” and have overall explanatory power of 36%, but only positive thinking disposition reached significant predictability level. As mentioned above in this study, because positive thinking individuals mostly hold a positive, optimistic and aggressive belief for the interpretation of self and surrounding people, things and objects, and thus also would be involved with more pleasant emotion while in the course of interpersonal interaction and goal achieving. Therefore, compared to negative thinking individuals holding negative, pessimistic, passive beliefs, their team collaboration disposition can be better predicted.

(3) Effects of content dimensions of positive thinking disposition and negative thinking disposition on team collaboration disposition

This study aims at exploring affecting factors of team collaboration disposition, the study results reveal that three variables (“positive thinking for daily life”, “positive self-assessment” and “comprehensive self-assessment”) in various content dimensions have positive and significant direct effect on “team collaboration disposition”. It is noteworthy that only the variable “not adaptive to present situation and want to change” in four content dimensions has negative and significant direct effect on “team collaboration disposition”. This finding seems to indicate that:

i. “Positive thinking”, in fact, is to conceive method for solving problem, properly perform emotional management while in demonstrating mobility, and open mind to accept results after put efforts. However, “positive thinking” is not a personality trait born by nature for everyone, rather relies on exercising to learning of “positive thinking for daily life”. “Positive thinking” train people through exchange of knowledge and experience to make people have a broader pattern of thinking. A person with “positive thinking” always thinks in the direction of problem-solving, is committed to solve problems for him-/herself and help others, understand his/her and the other party’s needs, provide his/her own knowledge and experience and invite the other party to jointly conceive method for solving problem, these approaches form team collaboration and thus achieve a win-win outcome, naturally will have a significant effect on “team collaboration disposition”.

ii. In the content dimensions of “negative thinking disposition”, only the variable “not adaptive to present situation and want to change” has negative and significant direct effect on “team collaboration disposition”. This finding is in line with the conclusion of Zing Zhou (2007), reveals that a negative attitude in the workplace may be an effective catalyst for improvement and progress. Which even points out: “the dissatisfaction for maintaining status quo and present situation of things would encourage people to develop ideas and find solutions.” That is, performance of negative thinkers may be better than positive thinkers, because they would expect problems and avoid mistakes in order to more likely make plan to do things right and do a good job rather than proceeds with relying on feel good about themselves. Although the negative, pessimistic, passive beliefs held by negative thinking individuals often lead to established impression of poor “team collaboration disposition”, but if can remain vigilant rather than strengthen it in thinking when negative feeling appears and converted to a positive thinking pattern, in fact, can also create good performance for their own life and career! In the biographies of many professionals, often found that they always hold some negative thinking disposition in their successful journey, this approach helps them to prevent from accidental raid and make them well-prepared for situations that may hinder progress. So, successful persons look forward and pay attention to problems and obstacles they might encounter. And the result is that they will not collide with too many unexpected or unplanned roadblocks. Therefore, in fact, educators can think again when considering “negative thinking” as annoying characteristics required to eradicate from the team, because negative thinker should have more efficient problem-solving pattern according to the thinking disposition of “not adaptive to present situation and want to change” found in this study.
CONCLUSIONS

Through exploring adolescents’ positive, negative thinking disposition, this study examined eight factors affecting team collaboration disposition, including “positive thinking for daily life”, “positive self-assessment”, “comprehensive self-assessment” and “positive expectation for future development” in positive thinking, as well as “negative self-expectation”, “powerlessness of give-up, hopelessness”, “not adaptive to present situation and want to change” and “low self-esteem” in negative thinking. With regard to the affecting effectiveness of these content dimensions, this study finally obtained the following three conclusions:

(1) Adolescents’ positive thinking disposition and negative thinking disposition have a negative and significant relationship, reveals that when an individual shows positive thinking disposition, he/she may also show negative thinking disposition at the same time;

(2) There exist significant relationships among positive thinking disposition, team collaboration disposition and negative thinking disposition, reveal that the more the adolescent’s positive thinking disposition, the more the adolescent’s team collaboration disposition; the more the adolescent’s negative thinking disposition, the less the adolescent’s team collaboration disposition.

(3) Negative thinking disposition has no significant predictability for team collaboration disposition, and only the “not adaptive to present situation and want to change” in its four content dimensions reaches negative and significant direct effect on “team collaboration disposition”. This symbolizes that negative thinking disposition may be an effective catalyst for improvement and progress, it would make an individual take into account the community honor and group performance and thus improve team collaboration disposition.

RECOMMENDATIONS

The main purpose of this study expects to understand whether positive, negative thinking disposition would affect adolescents’ performance of team involvement attitude. Since in the past most studies regarding thinking tend to explore single dimension thinking disposition, however, positive, negative thinking disposition are independent personality dispositions, so the help for present teaching situation is actually quite limited if explores students’ team involvement attitude only from a single dimension of thinking disposition, therefore this study adopted two thinking dispositions, not only can compensate for the deficiencies of the past studies in this field, but also try to increase the accumulation of adolescent thinking behavior theory. Based on the conclusions of this study, thereby proposed the following recommendations:

(1) In psychology, the most common method used by researchers of self concept is usually self-report inventory. The content includes a number of questions describing characters, and a subject is only required to answer those questions suitable to personal circumstances when used. In the future, more variables of cooperative behavior aspects can be increased for exploring, and qualitative study methods such as interview can be added to provide more information in order to achieve a deeper understanding.

(2) For a theoretical study targeting on positive, negative thinking disposition and team collaboration disposition, in the course of this study there are certain limitations and expectations for future study; for the convenience of sampling and issuance of questionnaires, the samples of this study are only limited to design group students of a senior vocational school in central region, so there may be environmental and cultural characteristics and limitations, in order to get more diversified understanding and discovery on this study topic, future study subjects should be able to expand to northern or southern schools and adolescent groups of different learning backgrounds.

(3) In addition, number of possible variables affecting team collaboration disposition are many, this study only explored effects of positive, negative thinking disposition on adolescents’ team collaboration disposition from individual perspective, therefore, it is recommended that follow-up studies may include different contextual variables, and even can add school teacher’s perspective and adopt field case observation method to explore more deeply.

(4) This study has confirmed that positive, negative thinking disposition of team members serve as antecedents in team collaboration; like other workplaces, in order to develop positive thinking and transform negative thinking, schools should be committed to create a positive atmosphere. If school curriculum design can
cultivate positive emotions and create a positive thinking environment to help adolescents in establishing positive emotional intelligence, mutual trust among members would be enhanced and team collaboration could be recognized (Bishop and Scott, 2000), thereby members would be willing to provide better decision-making and more creative solutions to achieve good collaboration performance.

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UTILIZATION OF EXTENSION- EDUCATION METHODS FOR FARMERS: A COMPARATIVE STUDY IRAN AND INDIA

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Abstract
Over a period of time the agriculture extension education systems in India and Iran through their policies and strategies have influenced the stakeholders accordingly. These situations need to be studied on comparative basis. The population for the study consisted of farmers in Iran. A Complex Random sampling was employed to select samples, in Iran (n=248) and India (n=317). Major findings: There was no significant difference on Individual Methods in Iran and India. There was no significant difference on Group Methods in Iran and India. There was a significant difference at the .01 level on Mass Media Methods in Iran and India. There was no significant difference on Printing Methods in Iran and India. There was no significant difference on Audio Visual Methods in Iran and India. There was no significant difference on Total Methods in Iran and India.

Key Words: Individual Methods, Group Methods, Mass Media Methods, Printing Methods, Audio Visual Methods.

INTRODUCTION

One of the most important barriers in agricultural development in Iran is the lack of an effective human resource development structure in the agricultural sector to sector to support the farmers. An essential part of this support structure, is the formal agricultural extension service. The National Extension Service was initiated in 1953 in India and also in Iran. In India the Green Revolution happened from 1967 to 1978 and it was very successful (substantial increase in the production of food grains, mainly wheat and rice). While, in Iran there was The White Revolution from 1964 to 1969. Iran was self-sufficient in food production earlier, but gradually began to import food subsequent to the implementation of the White Revolution. It can be said that, the White Revolution in Iran was not so successful as it was in India. Therefore, it becomes pertinent to study on a comparative basis the factors and situations prevailing in India and Iran (Heidari, 2000; Emadi, 2003).

Agriculture sector forms the backbone of the Indian economy. India is an agricultural country, endowed with abundant natural resources. So, prosperity of the nation is largely dependent on agriculture in the national economy is of vital importance. Between 1950-51 to 1960-61, the share of agriculture to GDP was alone 50%. This share of agriculture sharply decline and reached a level of 26.1 per cent during 1999-2000. In 1991 around 68 per cent people were engaged in agriculture. In the year 1996, in absolute terms agriculture provided employment to 279 million people. Importance of Indian agriculture also arises from the role it play in Indian trade. Agricultural products such as Tea, Sugar, Oilseeds, Tobacco, constitute the main items of exports. The proportion of agricultural goods exported is about 50 per cent of Indian exports and, manufacturing of agricultural content contribute to about 20 per cent. Thus, it becomes 70 percent of total export (Talathi et al 2008).
The philosophy of agricultural informal instruction is preparing a fruitful context for qualified farming and helping the farmers to be more efficient and successful in their activities. Since farming is a complex and multidimensional job, the farmers need different kinds of knowledge and skills, which are utilized directly or indirectly in their career (Van den Ban, 1988).

Several studies conducted over the past few decades have highlighted the need for an emphasis on utilization of extension-education methods for farmers. According to findings, Extension organization and policy makers should try to build and improve group-based approaches in Extension delivery. And participation of farmers in Extension programs is main thing for increasing Agricultural production. And also possession of land is a key determinate for participation of farmers in Extension services programs, and according to studies, Extension worker visit only large farmers and do not go to small farmers. Extension agents, Experts and other farmers can be as an information sources for farmers. Public Extension officers utilized a wider range of ICT than the private agent counterparts, and utilization of broad cast/audio visual and print technology was significant difference between two groups of Extension officers. Personal contacts, progressive farmers, agro service center were regularly consulted by the respondents (Okorley et al., 2008; Jan et al., 2008; Hedjazi and Veisi., 2007; Akpabio., 2002; Hedjazi et al 2006; Morrow et al 2004). And in another studies, Telephone was as an effective and efficient medium for communicating agro-technology among farmers. New communication technologies, such as cell phone, internet access and world wide web is inspiring Extension administrators in developing countries who are looking for cost-effective ways of disseminating information to the masses of small farmers is clouded with many challenges, such as the need for rural electricity, provision computer hard ware and soft ware content and training of extension agents (Timbadia et al., 2007; Mayfield et al., 2006; Frempong et al 2006) . Oommen (2001), studied ‘use of extension teaching methods by the horticultural development officers for dissemination of information to farmers in Punjab’ It was found that individual contact method i.e. farm and home visit was the most extensively used extension teaching methods and the farm clinic was the least used the individual contact methods. Method demonstration followed by group meetings were the most extensively used extension teaching methods and the least used group contact methods was panel discussion. It was further found that the pamphlet was the most extensively used mass contact methods followed by farm magazine and the T.V. talk was the least used mass contact method by the HDOS. Warmund and Schrock (1999) found that a majority of participants felt it would be easier to learn material in a face-to-face setting, while one-third of the distance education participants felt that using interactive television would make learning easier.

Sing (1998) in his investigation ‘utilization of agricultural information sources by the farmers of Punjab’ found: Majority of the respondents used the literature, T.V. and radio as sources of information for receiving agriculture and animal husbandry information. Sing (1997), in his research “Training needs of farmers regarding cotton-wheat rotation in Bathida district of Punjab” found: The age and size of the operational land holding of the farmers were non-significantly correlated with their training needs. Mass media exposure and extension contact were negatively and significantly correlated with the training needs of the farmers. Singh Bains (1980), in his research entitle “An Analytical study on some aspects of the farmers training and education under the high yielding varieties program in the Punjab State” found: The respondents pointed out lack of follow-up and incentives, time constraint, irregular schedule of meetings etc. as short comings. They suggested the provision of community T.V. sets and farm equipment to discussion groups, more use audio-visual aids, more emphasis in training on subject like farm management, plant protection, weedicides, dairy, poultry, bee-keeping etc. and increasing the follow-up training.

Singh saini (1979), in his research entitled “ Potentials of Distance- teaching a study of the correspondence courses for small and marginal farmers of Punjab State “ found: The distance – teaching was efficient in the fulfillment of information needs of the respondents in respect of agricultural technology. Hussein et al. (1994) found impact of the Training and Visit (T & V) extension system in the irrigated Punjab of Pakistan. Sharecho (2009), found, field visits in India and joint visits or meetings with the farmers was the most popular methods in Ethiopia.
The overall purpose of this study was to study Utilization of Extension- Education Methods for farmers in Iran and India.

Specific objectives of the study were to:
1. Study of Extension- Education Methods being used in Iran and India with regard to Agriculture Extension Services.
2. Study the differences in the Extension- Education Methods being used in Iran and India with regard to Agriculture Extension Services.

MATERIALS AND METHODS

Research Design and Selection of Sample
A descriptive research, casual-comparative educational research Design was employed in the study. Statistical Samples (n = 565) for the study consisted of the farmers in Iran (n1 = 248) and India (n2 = 317), during 2008 – 2009. A Complex Random sampling technique was utilized (in the first step it was used Multi-stage sampling and the second step it was used simple random sampling).

Instrumentation
The research instrument was developed using modified version instruments from previous studies (Farhadian, 1997; Chizari, et al., 1999; Oommon, 2001). The survey instrument was divided to six parts. Part one (9 items) was designed to determine Individual Approaches (individual farm visits, group farm visits, individual home visits, group home visits, personal letters, office calls, telephone calls, informal meeting, farm clinic). Part two (10 items) was designed to determine group approaches (result demonstration, method demonstration, educational tours, panel discussion, group discussion, lectures, agricultural exhibitions, seminar for farmers, workshop for farmers). Part three (5 items) was designed to determine mass media approaches (television talks, radio talks, campaigns, mass meeting, national exhibition). Part four (9 items) was designed to determine printing approaches (news papers, circular letters, farm literatures, leaflets, pamphlets, bulletins, folder, farm magazine, books). Part five (14 items) was designed to determine Audio-Visual approaches (films, slides, flash cards, charts & diagrams, T.V, computer, video set, blackboards & whiteboards, models & exhibits, recorded talks, overhead projector, opaque projector, pictures & images and posters). The 47 statements were assessed on a three- point, Likert-type scale, that ranged from; 1= “Never” 2 = “Sometimes” and 3 = “Always”. Farmers recorded their demographic data in the sixth part.

Validity and Reliability
The instrument was assessed for content and face validity by a panel of experts consisting of faculty members at Delhi university Department of Education. The instrument was pilot tested using farmers (N=30) in Sari Township in Iran, the farmers who were not part of the main study. Minor changes were made to improve the clarity and reliability of the instrument. Cronbach’s alpha, and internal consistency measured, was employed to estimate the reliability. The reliability for 47 item instrument was found to be acceptable (Alpha for 47 items=0.78).

Data Collection and Analysis
Data was collected via interviewing the farmers in Agriculture extension center area. One Extension center in forestry area, two Extension centers in plain area and two Extension centers in coastal area were chosen in Iran. Three KVKs (Agricultural extension center) in forestry area, five KVKs in plain area and four KVKs in coastal area were chosen in India; at least 248 farmers in Iran and 317 farmers in India were interviewed. Data were analyzed using frequencies, percentages, means, and standard division. T-test was employed to determine differences if any among farmers' viewpoints toward utility of Extension-Education methods in their areas.

RESULTS

Demographic Profile of Farmers
Largest number of the farmers in both the countries belonged to the middle age group of 36-55 years; 94.8 % Iranian farmers were male of which 87% were below graduation level and that consisted of 18.1 % illiterate,
79% had nuclear family, 45.6% were in farming and Horticulture system and 38.3% were in the farming system; 87.5% of respondents used seasonal labor on their farms, and majority (50.8%) of their occupations were farming alone, 56.9% were medium and large farmers and only 2.4% were landless farmers in Iran (Table 1).

In India, large number of the farmers belonged to middle age group 36-55 years. 94.6% were male of which 64.9% were below graduation level, and consisted of 6.6% illiterate, 49.2% had nuclear family, 49.2% had farming and Animal husbandry system and 24% had farming system, 55.5% of respondents used seasonal labor in their farms, and majority (54.3%) of their occupation was farming alone, 51.1% were small and marginal farmers and 15.5% were landless farmers (Table 1).

Table 1: Frequency, Percentage and Cumulative percentage of farmers in Iran and India

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative percent</th>
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<td>INDIA</td>
<td>IRAN</td>
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<td></td>
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<td>36</td>
<td>55</td>
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<tr>
<td>56-65</td>
<td>49</td>
<td>54</td>
<td>19.8</td>
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<tr>
<td>&gt; 65</td>
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<tr>
<td><strong>SEX</strong></td>
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</tr>
<tr>
<td>Male</td>
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<tr>
<td>Female</td>
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<td>Husbandry</td>
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<tr>
<td>Horticulture</td>
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<td></td>
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<td>Mix agri system</td>
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<td>56</td>
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<td></td>
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<tr>
<td>Seasonal</td>
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<td>176</td>
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<tr>
<td>Permanent</td>
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<td>52</td>
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<tr>
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<td>Large</td>
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<td>45</td>
<td>22.2</td>
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Objective 1: Study of Extension- Education Methods being used in Iran and India with regard to Agriculture Extension Services.

Table 2 shows the Frequency of each response (always=2 and sometimes=1), Mean, Standard division, Score and Ranking of 47 Educational- Extension Methods that were being used in Extension Services in Iran and India separately as reported by farmers of the two countries. It was found that Individual ‘farm visits’ (Mean=.976), ‘Informal meetings’ (Mean=.762), ‘Office calls’ (Mean=.383), were the most extensively used Methods in Iran; whereas ‘Group farm visits’ (Mean =1.492), ‘Mass Meetings’ (Mean = .508) and ‘Group Home Visits’ (Mean =.183) were the most extensively used Methods in India. The least of the Educational Extension Methods (EEM) in Iran used, were ‘Posters’ (Mean = .000), ‘Method Demonstrations’, ‘Pictures & Images’ (Mean = .004), and ‘Television talks, Radio talks and Mass Meetings’ (Mean = .0081). In India the least Educational Extension Methods used were ‘posters’ (Mean=.0095), ‘slides’ (Mean=.0101) and ‘Models & Exhibits’ (Mean=.0221).

Table 2: Frequency of responses (always=2, sometimes=1), Mean, S.D. Score and Rank of all different Methods between the two countries.

<table>
<thead>
<tr>
<th>Methods</th>
<th>Frequency of each response</th>
<th>Mean</th>
<th>S.D</th>
<th>Score</th>
<th>Rank</th>
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<td>Iran</td>
<td>India</td>
<td>Iran</td>
<td>India</td>
<td>Iran</td>
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<tr>
<td>N=248</td>
<td>N=317</td>
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<td>Standard Deviation</td>
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</tr>
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<td>Farm literatures</td>
<td>23</td>
<td>0.0927</td>
<td>0.1640</td>
<td>0.3173</td>
<td>0.3709</td>
</tr>
<tr>
<td>Leaflets</td>
<td>21</td>
<td>0.0847</td>
<td>0.0789</td>
<td>0.3195</td>
<td>0.2699</td>
</tr>
<tr>
<td>Pamphlets</td>
<td>27</td>
<td>0.1089</td>
<td>0.0978</td>
<td>0.3371</td>
<td>0.2975</td>
</tr>
<tr>
<td>Bulletins</td>
<td>37</td>
<td>0.1492</td>
<td>0.2303</td>
<td>0.3998</td>
<td>0.4217</td>
</tr>
<tr>
<td>Folder</td>
<td>60</td>
<td>0.242</td>
<td>0.0915</td>
<td>0.5069</td>
<td>0.2887</td>
</tr>
<tr>
<td>Farm magazine</td>
<td>16</td>
<td>0.0645</td>
<td>0.0631</td>
<td>0.2913</td>
<td>0.2435</td>
</tr>
<tr>
<td>Books</td>
<td>3</td>
<td>0.0121</td>
<td>0.0505</td>
<td>0.1417</td>
<td>0.2193</td>
</tr>
<tr>
<td>Films</td>
<td>12</td>
<td>0.0484</td>
<td>0.0347</td>
<td>0.2655</td>
<td>0.1833</td>
</tr>
<tr>
<td>Slides</td>
<td>65</td>
<td>0.2621</td>
<td>0.0101</td>
<td>0.5397</td>
<td>0.3017</td>
</tr>
<tr>
<td>Flash-Cards</td>
<td>63</td>
<td>0.2540</td>
<td>0.1735</td>
<td>0.5436</td>
<td>0.3793</td>
</tr>
<tr>
<td>Charts &amp; diagrams</td>
<td>18</td>
<td>0.0726</td>
<td>0.694</td>
<td>0.3136</td>
<td>0.2545</td>
</tr>
<tr>
<td>T.V.</td>
<td>48</td>
<td>0.1935</td>
<td>0.0536</td>
<td>0.4706</td>
<td>0.2256</td>
</tr>
<tr>
<td>Computer</td>
<td>5</td>
<td>0.0202</td>
<td>0.1167</td>
<td>0.1898</td>
<td>0.3216</td>
</tr>
<tr>
<td>Video set</td>
<td>9</td>
<td>0.0363</td>
<td>0.0883</td>
<td>0.1874</td>
<td>0.2842</td>
</tr>
<tr>
<td>Blackboard &amp; whiteboard</td>
<td>5</td>
<td>0.0202</td>
<td>0.0379</td>
<td>0.1671</td>
<td>0.1911</td>
</tr>
</tbody>
</table>
For gaining the score of each EEM being used, the following formula (Chizari, et al. 1999): value of each response (always=2 and sometimes=1) × Its Frequency × Mean × S.D = Score

**Objective 2: Study the differences in the Extension- Education Methods being used in Iran and India with regard to Agriculture Extension Services.**

Mean of the two countries does not differ significantly so far as Extension Individual Methods is concerned and reported by farmers of the two countries. In India, the Individual Approach was found to be higher than that in Iran, though the mean value was found to be on a very lower side (the maximum score would have been 18), in both the countries(Table 3).

### Table 3: T-test results for the Extension- Education Methods being used in Iran and India with regard to Agriculture Extension Services.

<table>
<thead>
<tr>
<th>Country Method</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iran</td>
<td>248</td>
<td>2.863</td>
<td>2.09</td>
<td>.1353</td>
<td>not significant</td>
</tr>
<tr>
<td>India</td>
<td>317</td>
<td>2.889</td>
<td>2.465</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group Methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iran</td>
<td>248</td>
<td>1.629</td>
<td>1.85</td>
<td>.243</td>
<td>not significant</td>
</tr>
<tr>
<td>India</td>
<td>317</td>
<td>1.671</td>
<td>1.843</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mass Media Methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iran</td>
<td>248</td>
<td>.0766</td>
<td>.410</td>
<td>14.68**</td>
<td>Highly significant</td>
</tr>
<tr>
<td>India</td>
<td>317</td>
<td>1.069</td>
<td>1.111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printing Methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iran</td>
<td>248</td>
<td>1.105</td>
<td>2.194</td>
<td>.1645</td>
<td>not significant</td>
</tr>
<tr>
<td>India</td>
<td>317</td>
<td>1.133</td>
<td>1.682</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Visual Methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iran</td>
<td>248</td>
<td>1.153</td>
<td>2.547</td>
<td>.2152</td>
<td>not significant</td>
</tr>
<tr>
<td>India</td>
<td>317</td>
<td>1.114</td>
<td>1.563</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iran</td>
<td>248</td>
<td>6.826</td>
<td>7.62</td>
<td>1.745</td>
<td>not significant</td>
</tr>
<tr>
<td>India</td>
<td>317</td>
<td>7.873</td>
<td>6.298</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** The result is significant at .01 level of significance
Group Methods in Extension Services do not differ significantly in the two countries. It means that farmers of the two countries feel the same about the Extension services through Group Methods. Mean of the two countries differs significantly so far as Extension Services through Mass Media Methods as reported by farmers of the two countries. In India, the Mass Media Methods was found to be better than that being practiced in Iran. In both the countries the mean score on Mass Media Methods was found to be on the lower side (its maximum score would have been 10). It reflects that a lot of improvement is required in both the countries to approach farmers through Mass Media Methods. And Print Media Methods was the same in both the countries. Also, it can be inferred that there is a large scope of improvement in Printing Media Methods in both the countries as mean of scores on PMM is very low (As the maximum attainable score would have been 18) in both the countries. The mean of the use of Audio Visual Methods between the two countries does not differ significantly so far extension methods (Audio-Visual) is concerned as reported by farmers of the two countries and Audio Visual Methods (AVM) was the same in both the countries. Also, it can be referred that there is a large scope of improvement in AVM in both the countries as mean of scores on AVM is very low (As the maximum attainable score would have been 28) in both the countries. The mean of the two countries does not differ so far as Total Extension Methods (TEM) is concerned in the two countries as reported by farmers of the two countries. In India, the Total Methods was found to be higher than that in Iran, though the mean value was found to be on the lower side (the maximum score would have been 94). The mean value on the Total of all the Methods shows a significant scope for improvement in the Extension services in both countries.

The researcher in order to compare ETM in the two countries categorized the above 47 Educational Technology Approaches into 5 groups (Individual, Group, Mass Media, Print Media and Audio Visual Approaches) and computed variables in SPSS version 15 and the result of the same is being presented in the following Table 4:

Table 4: Frequency of responses (always=2, sometimes=1), Mean, S.D. Score and Rank of Individual, Group, Mass Media, Printing and Audio Visual Methods between the two countries.

<table>
<thead>
<tr>
<th>Approach</th>
<th>Frequency of each response ×Value of that</th>
<th>Mean</th>
<th>S.D</th>
<th>Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Iran N=248</td>
<td>India N=317</td>
<td>Iran</td>
<td>India</td>
<td>Iran</td>
</tr>
<tr>
<td>Individual Approach</td>
<td>417</td>
<td>520</td>
<td>2.863</td>
<td>2.886</td>
<td>2.092</td>
</tr>
<tr>
<td>Group Approach</td>
<td>266</td>
<td>545</td>
<td>1.6290</td>
<td>1.6719</td>
<td>1.853</td>
</tr>
<tr>
<td>Mass Media Approach</td>
<td>16</td>
<td>289</td>
<td>.0766</td>
<td>1.0694</td>
<td>.41012</td>
</tr>
<tr>
<td>Printing Approach</td>
<td>340</td>
<td>238</td>
<td>1.048</td>
<td>1.133</td>
<td>2.194</td>
</tr>
<tr>
<td>Audio Visual Approach</td>
<td>137</td>
<td>248</td>
<td>1.1532</td>
<td>1.1136</td>
<td>2.547</td>
</tr>
</tbody>
</table>

The investigator for gaining the score of each ETA used the following formula (Chizari, et al. 1999): value of each response (always=2 and sometimes=1) × Frequency of that × Mean × S.D = score.

A perusal of table 4 shows that Individual Approaches (Mean=2.863) and Group Approaches (Mean=1.63) were the most extensively used for farmers and Mass Media Approaches, (Mean=.0766) were the least used in all the Approaches in Iran. It was further found that Individual Approaches (Mean=2.886) and Group approaches
(Mean=1.672) were the most extensively used for farmers and Mass Media Approaches (Mean=1.0 694) were used the least in India as well. The above results showed that the Individual Approaches, Group Approaches and Mass Media Approaches were used more in Iran as compared to India where as Print Media Approaches was found to be more in India.

DISCUSSION

The result of the present study shows, that there is no significant difference in the Individual Methods being used in Iran and India. According to Mean value of this Method in the two countries it seems that there is need to have more active Extension services in both countries. The investigator in the fieldwork observed that: most of the Farmers in Iran were interested in individual contacts (face to face contact) with extension agents besides taking participation in the formal or informal classes and or in other Methods in their farm problems. They preferred inviting extension agents or educators to their farms or home (Home and Farm Visits) and they would discuss with them about everything they are involved (animal diseases, Fertilizers, Irrigation methods, seeds, pests, garden and farm spray, and so on), so; The results of table 2 and 4 show that Individual Methods (Mean=2.863) were the most extensively used for farmers amongst all the Methods used in Iran. It was also found that Individual farm visits (Mean=.976), Informal meetings (Mean=.762), Office calls (Mean=.383), were the most extensively used Methods in Iran; where as Group farm visits (Mean =1.492), Mass Meetings (Mean =.508) and Group Home Visits (Mean =.183) were the most extensively used Methods in India, this being consistent with results obtained by Sharecho (2009) found, field visits (35.71%) in India and joint visits or meetings with the farmers (39.08%) was the most popular methods in Ethiopia, and this supports the previous study of Warmund and Schrock (1999) found that a majority of participants felt it would be easier to learn material in a face-to-face setting.

Moreover, significant difference in the Group Methods being used in Iran and India as reported by farmers. Results show (Table 4) that Group Methods stands second rank in Total Methods in Iran and in India. It was also found that lectures (Mean=.427), Group meetings (Mean= .4355) and Group discussion (Mean=.379) in Iran, and Group discussion, Panel discussion (Mean =.306) and Seminars (Mean=.208) and Workshops (Mean=.1987) for farmers and were popular on Group Methods in India. This supports previous study of Shareecho (2009), Okorley et al (2008) and Oommen (2001).

Therefore, there is a need to strengthen Extension services through Group Methods in the two countries as felt by Farmers (end users). But the Mean value on Mass Media Methods in both Iran (Mean=.076) and India (Mean=1.069) shows that Mass Media Methods was the least used Methods used in both the countries and it was on the lower side (the Maximum score would have been 10). Table 2 shows that Television talks, Radio talks and Mass meetings (Mean=.008) were the least used Mass Media Methods (rank=35) in Iran. While Mass meetings Methods (Mean=.508) was popular Mass Media Methods for farmers in India. This, support previous study of Acker et al (2008), Akpabio (2007), Oommen (2001) and Sing (1997). Thus it needs to be more active through Extension services in the two countries.

The results on Print Media Methods show that there is no significant difference in Iran and India as reported by farmers. Table 2 shows that Folders (Mean=.242) and farm literature (Mean=.1774) in Iran and Newspapers (Mean=.2366) and bulletins (Mean=.2303) in India were the popular Print Media Methods for Farmers and the least Approaches among the Print Media Methods were books in both Iran (Mean=.0121) and India (Mean=.0505). Table 1 shows the level of ‘farmers’ illiteracy’ and ‘low literacy’ of farmers in both Iran (60.4%) and India (40%) is very high and that may be one important reason for low mean i.e. the use of Print Media is on the lower side in the two countries. Adequate Literacy is an essential condition for the effective use of Print Media Methods for farmers. Oommen (2001) found that the pamphlet was the most extensively used Print Media contact method to approach by farmers and farm magazines were the least used Print Media contact method by the HDOS.

The results of the study show that there is no significant difference in the Audio Visual Methods being used in Iran and India. It was also found that Slides (Mean=.2621), Flash-Cards (Mean= .2540) and Television (Mean=.1935) were popular in Iran, whereas Opaque Projector (Mean=.2208), Charts and Diagrams (Mean
Audio-Visual Methods were as a luxury aids or methods among farmers; and farmers were interested more in the face to face contact or Group Methods especially with the presence of owner in their farms. It was also found that Overhead projector and Opaque Projector (Mean=1.679) and Flash-Cards (Mean=1.566) in Iran, and Blackboard and whiteboard (Mean=1.418) and Posters (Mean=1.176) were the popular Audio Visual Methods in the both the countries. This being consistent with results obtained by Ravinder et al (2007), Akpabio et al (2007), Frempong et al (2006), and Sing (1998).

Total Approaches in Iran and India, which reveals farmers' viewpoints on the use of Educational Methods through Extension system in the country level almost are same. It can be said that, most of performance program are useful for middle and capital farmers, in the present study more than 43.1% of farmers in Iran and 66.6% in India were small, marginal and landless farmers. 87% of Iranian farmers and 64.9% of Indian farmers were under graduates (high school and lower), as a result the Group Media, Mass Media, Printing Media, and Audio Visual Methods, are not useful for these farmers. They are only benefited of Individual approaches (Farm Visits, Home Visits and etc). Based on the results of this research:

- Farmers should enhance their level of education in order to use various Educational Methods.
- Farmers could promote their awareness towards agricultural information through participating and getting membership in the farmers’ societies and communities.
- Farmers should expand their relation with Extension Agents and Agriculture Educators in order to promote their awareness and agricultural information.
- Farmers should continue their relationship with local leaders and keep in touch with pioneer farmers to cope with their Agriculture problems.

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EXPLORING THE GAP BETWEEN RHETORIC AND REALITY IN SCHOOL-BASED MANAGEMENT IN EGYPTIAN SCHOOLS

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Abstract
School-based management (SBM) has been a prominent topic in the literature related to decentralisation reforms in western countries such as Canada, Australia, New Zealand, the USA and the UK. SBM has been promoted as a decentralising strategy, aiming to decentralize and democratize educational policymaking. It is based on a widely accepted view that better quality education can be obtained when schools possess their own decision-making.

Egypt has been no exception to the decentralizing movement sweeping the world. In the early 90s, Egypt’s government started a comprehensive educational reform programme with educational decentralization being a key theme on the reform agenda. As part of this move, SBM has been promoted through a number of decentralization initiatives aiming to devolve more decision-making powers to the local school level. However, evidence from recent research indicates that the rhetoric surrounding this move is much more significant than its substance. This paper highlights the apparent paradox between policy and practice and provides possible explanations for it.

Key Words: school-based management, boards of trustees, school governance, decentralization.

INTRODUCTION

School-based management (SBM) arose as a prominent theme in the literature related to decentralisation reforms in western countries such as Canada, Australia, New Zealand, the USA and the UK. Researchers have asserted its close connection with the shift towards more decentralised educational systems that marked the last three decades of the past century (Smylie & Denney, 1990; Levacic, 1995; Dempster, 2000; Caldwell, 2005). SBM has been presented in the literature as a decentralising strategy, aiming “to decentralize and democratize educational policymaking... and revitalize school systems” (Malen & Ogawa, 1988; 51).

Egypt has been no exception to the rising international interest in decentralization. Since the early 90s, the Ministry of Education (MOE) has been pursuing an ambitious education reform policy with decentralization being a key theme on the reform agenda. Egypt’s move toward decentralization took on more serious dimensions in 2000 when the MOE started a series of decentralization initiatives which included the Alexandria Pilot Project, the National Standards of Education, the Secondary Education Reform Programme (SERP) and, most recently, the establishment of Boards of Trustees (BOTs) in public schools. The stated aim of the policy has been to promote SBM and community participation through devolution of decision-making authority to the local school level. However, evidence from recent research suggests that the Egyptian version of SBM reflects rhetoric more than reality. It seems that, similar to what happened in its countries of origin, SBM is facing implementation problems in the Egyptian context. Drawing on findings from recent empirical research on SBM in Egypt, this paper explores the existing gap between the rhetoric surrounding SBM and its perceived reality. Possible explanations for the gap are then discussed by contrasting the findings of recent Egyptian research with the wider international literature on SBM.
School based management: the concept and rationale

Caldwell (2005, p.1) defines SBM as “the systematic decentralization to the school level of authority and responsibility to make decisions on significant matters related to school operations within a centrally determined framework of goals, policies, curriculum, standards, and accountability”. However, Malen et al. (1990, p.298) believe that SBM is “an ambiguous concept that defies definition.” Cotton (1992) attributes the ambiguity of the concept to variations in the ways in which SBM programmes can be implemented. Having considered these variations, Dempster (2000;47) argues that it is possible to create “a continuum of school-based management meanings” where various degrees of devolution can be exercised. At one end of the continuum resides “small scale devolution” where the power of the head teacher has been slightly extended over certain areas of school decisions. At the other end there is “large scale devolution” where school councils have been established and afforded greater responsibilities for a wide range of internal school matters.

SBM has been heralded as a vehicle for educational change; it has been initiated in response to concerns about the efficiency of educational systems and their ability to produce the desired outcomes. It is seen as an alternative to centralised approaches to educational management which have proved unsuccessful in bringing about educational improvement. Although the defects associated with these approaches have been outlined in a variety of ways, a key argument centres on the inflexibility of bureaucratic structures which leads to their failure to tackle local differences (Levacic, 1995; Walker, 2002). This argument is consistent with the growing view of “the school as the unit of change” (Dalin et al., 1993;2).

Researchers studying decentralisation have reported many attempts to adopt SBM throughout western countries, especially the English-speaking world. They have considered the political, social and economic circumstances affecting these countries as factors associated with the move toward SBM. In the American context, researchers (Conley & Bacharach, 1990; Smylie & Denny, 1990; Conley, 1991) suggested that SBM emerged at the heart of the so-called “second wave” of educational reform which took place in the US in the late 1980s following increasing public criticism of the quality of schooling. Unlike the first wave of reform which attempted to improve quality through centralised arrangements, the second wave espoused more democratic approaches to school management. Calls for giving teachers a greater say in the decisions affecting the school have resulted in many SBM programmes being implemented throughout the States. While variations of SBM programmes existed, most initiatives involved the creation of school councils as avenues for the involvement of teachers and parents in making school decisions (Malen & Ogawa, 1988; David, 1996).

Similar developments have been reported in Australia. During the 1970s and 1980s, and in response to economic and social factors such as funding cutbacks and concerns over the quality of Australian education, school systems underwent attempts to decentralise administrative arrangements and devolve authority to the local school level through the establishment of local units in several states (Caldwell, 1993). Like the US, creating formal structures for SBM was mandated by the Victoria government and, in 1975, all Victorian public schools were required to establish school councils consisting of teachers, parents and other members of the local community (Caldwell, 1990).

In the UK context, Levacic (1995) reported a number of political and economic factors which have pushed towards implementing SBM. These factors included concerns over the ability of the British workforce to be internationally competitive, dissatisfaction with the performance of the public sector and the influence of the humanist school of management advocating democratic approaches to decision-making. These pressures have resulted in SBM taking root under the name of “local management of schools”. The 1988 Education Reform Act mandated measures by which schools were given enhanced autonomy. By April 1993 full implementation of local management was accomplished and school governing bodies were afforded greater responsibilities over school budgeting and financial management, hiring and firing staff and supervising the teaching of the National Curriculum (Peck, 1997).

It is evident from the preceding discussion that most of the influential research on SBM has been produced in Western countries, especially the US, Australia and the UK. The move towards SBM was triggered by certain economic and social factors pertinent to these countries. This might raise concerns over the plausibility of...
implementing such a policy in the Egyptian context. Most of the rhetoric as well as experiments on SBM have developed in countries which, although different, have more in common with each other than with Egypt. Existing differences between these countries and Egypt in terms of the economic and social structures accommodating schools suggest that it is not clear whether this trend will have the same resonance in the Egyptian setting.

**Egypt’s Decentralization Movement**

As part of its continuous pursuit of educational reform, Egypt has undertaken to decentralize its education system. Early decentralization attempts started in 1979 when the government passed the Local Administration Law which gave governors wider educational powers within their respective governorates, including the construction and equipping of schools as well as their administration (Messeil, 2002). Another important move was Education Law 139/1981 which delineated the responsibilities of both the MOE and local authorities in the decentralised context (NCERD, 2004) and authorised local authorities to implement and monitor the MOE’s educational strategies and manage schools in conformity with national guidelines and allocated resources. However, these attempts have failed to make much difference in terms of shifting to a more decentralised system especially at the local school level (World Bank, 2002; Khaleel, 2003; HDP, 2004).

Further attempts to decentralize followed when the MOE launched its education reform programme in the early 90s. The recent decentralisation movement has been partly fuelled by the problems caused by centralised control, as well as in recognition of the benefits embedded in more decentralised approaches to education management (NDP, 2002). However, such a movement seems also to have been prompted by pressures from international donors such as the World Bank and the United States Agency for International Development (USAID), and, as suggested by HDP (2004; 2,3), “from the critical mass of reform-minded members of the intelligentsia and senior members of the executive and political elite.”

However it has come about, Egypt’s interest in decentralisation is not in question. Such interest is evidenced by a number of official reports and government documents advocating decentralisation. Most notable, perhaps, is an official policy document issued by the then ruling party (National Democratic Party), which states:

> “Centralized authority should be replaced in each governorate by a miniature ministry of education that has few departments, limited numbers of officials, and a totally authorized director. It has to be run far away from bureaucracy, taking into consideration that the school is the basic decentralized unit … which should be managed by a board of directors representing teachers, parents and civil society…” (NDP, 2002;15).

Hence, supported by international organisations such as USAID and the World Bank, Egypt took further steps toward actualizing its decentralization policy with SBM being a key strategy. One of the prominent initiatives took place in December 2001 when a pilot decentralisation project was launched in Alexandria through a partnership between the MOE, the Governorate of Alexandria, the Alexandria Development Centre and USAID. The project sought to improve the quality of education in Alexandria through decentralising educational decision-making within the governorate. It promoted SBM through providing “encouragement, support and a mechanism to community members to become more involved in the management of the pilot schools [and] to transfer more responsibility and authority for school management to the school administrators” (USAID/Egypt, 2002, cited in Ginsburg et al., 2010;21). As indicated by HDP (2004), the governor was afforded “unprecedented authorities” in order to support the implementation of the project. According to some official reports (e.g., HDP, 2004; USAID/Egypt, 2004), the project has been successful in promoting decentralised decision-making and empowering members of the local community. The reported successes have encouraged the MOE to decide to expand the project to six other governorates, namely Cairo, Minya, Fayoum, Beni Suef, Qena and Aswan (HDP, 2004).

In 2003, the MOE launched the National Standards of Education project with the aim “to set comprehensive quality education standards in Egypt and [raise] awareness about quality learning” (UNESCO, 2006;11). The standards comprise five domains representing five pillars of the educational process. Two of these domains, i.e. educational management excellence and community participation, advocate decentralisation as they emphasise the role of stakeholders at the local level in educational decision-making processes. A key objective
of the standards for “educational management excellence” is to “[c]onsolidate the concepts of transparency, accountability, competition and decentralization in the educational institutions to deepen the feeling of belonging among its members” (MOE, 2003:92). “Community participation” standards include: “encourage participation of parents in educational decision-making, and their effective involvement in drawing up a future vision for the school and in the implementation of various programs;” “obtain material assistance for educational institutions and schools from the local community, companies, and business community;” and “provide the mechanisms to organize voluntary work for parents and citizens to support the educational and social activities in the school” (ibid, pp. 132,133). Another important feature of the project is that while the MOE retains the right to set goals and standards for accountability, schools have been afforded the authority to determine their own ways of achieving these standards and goals (UNESCO, 2006).

While the above-mentioned initiatives are general in nature, another important initiative relates to secondary education in particular, namely the Secondary Education Reform Programme (SERP) launched in 1999 in collaboration with the World Bank. The project sought to improve secondary education through a variety of strategies including improvement of the existing management practices and decision-making processes at national, regional, district and school levels. SBM was encouraged through promoting community involvement in the management of schools. Under the programme, Parent-Teacher Councils were afforded greater responsibilities including monitoring the quality of education at the governorate and school levels. Training was also provided in order to prepare council members for the devolved responsibilities (World Bank, 1999; Megahed, 2001).

The year 2005 witnessed one of the most interesting shifts toward SBM when the MOE passed ministerial decree 258/2005 (later modified by decree 334/2006) regarding the establishment in all public schools of Boards of Trustees (BOTs). BOTs have been introduced to replace the previous parents’ councils which have been operative in Egypt’s schools since 1993. Recommendations by researchers and reform-minded educators called for empowering the parents’ councils as they failed to provide the required support to schools due to weak performance and limited authority. The introduction of BOTs was based on the idea of expanding council membership to include school teachers and civil society representatives with the view to promote community participation in managing schools (El Baradei & Amin, 2010). As stipulated by the above-mentioned decree, the main aims of BOTs are as follows:

1. Achieving the decentralisation of administration, evaluation and decision-making.
3. Approving budgetary decisions.
4. Encouraging voluntary participation of members of the local community in the development of the educational process.
5. Evaluating the performance of the school head teacher.

According to ministerial decree 334/2006, a BOT is composed of 15 members, namely the head teacher, five parents, five community members selected by the governor, three teachers elected by the school teachers, and a social work specialist. The decree stipulates that the BOT chairman and his/her deputy should be elected by the BOT members. Unlike traditional parents’ councils, BOTs have been given more flexibility to accept donations and in-kind contributions for their respective schools. The activities of BOTs are overseen by coordination committees at the directorate level and a central coordination committee at the MOE level (MOE, 2005; MOE, 2006).

Noting the paradox

Evidence from recent research in Egypt indicates a number of paradoxes associated with the implementation of decentralization projects including SBM. Research studies and reports reveal a gap between the government’s stated policy regarding decentralisation and the actual practice as perceived by local stakeholders. While the stated policy celebrates SBM through local participation in school decision-making (MOE, 2003; NDP, 2002), the actual practice shows that no genuine opportunities to do so are being afforded to local decision-makers. Undeniably, many responsibilities have been devolved to educational directorates in the governorates by Law 139/1981 (UNESCO, 2006). However, devolution of authority has yet to reach the local school level. As suggested by recent research findings, the locus of power still resides in the hands of central administrators
based in the directorates and district offices. For instance, in a study of shared decision-making in Egyptian schools, Hammad and Norris (2009) found that centralized control emerged as a significant issue in the schools visited. Interviews with stakeholders at the school level revealed that despite all the rhetoric that is being reiterated about empowering schools through devolution of decision-making powers, Egyptian schools are still considerably constrained by central directives and regulations. A detailed typology of the decisions made in the sample schools pointed out that the decision-making authority afforded to schools was confined to issues that were viewed by research participants as 'marginal' and 'meaningless'. This was perceived to be a fundamental challenge to schoolteachers taking part in school decision-making processes as it left no room for them to make 'meaningful' decisions about issues they held as closely relevant to their work in the classrooms. These unfavourable conditions inevitably run counter to the development of SBM practices.

Another apparent paradox relates to the Alexandria decentralization project. Official documents have reported some positive achievements associated with the project in terms of promoting community involvement in school decision-making (HDP, 2004; USAID/Egypt, 2004). However, Nasser-Ghodsi (2006) cautions that one should not take such achievements for granted as they are all 'anecdotal' and lacking empirical evidence. More research is needed in order to explore this area. However, there is some evidence that while the stated aim of the project was to decentralize decision-making to the school level, no genuine decision-making powers have really been devolved to schools under the project. Ginsburg and Megahed (2010) substantiate this, quoting an Egyptian staff member of USAID who described the project as merely a limited form of decentralization based on delegation from the Minister to the Governor:

_The whole idea of decentralization was deconcentration... They wanted the Governor to become a decision-maker without having to go back to the Minister... The idea of delegation to the Governor was proposed and he agreed... But there was no devolution of finance or of authority at the school level._

The paradox is even more evident in the case of BOTs. Two recent studies examined BOTs in the Egyptian context, one investigating their role in promoting shared decision-making in secondary schools in Damietta County (Hammad, 2010), and the other exploring their contribution to increasing community involvement in school management in Fayoum (El-Baradie & Amin, 2010). The two studies indicate that although policy documents clearly emphasise decentralising decision-making through encouraging the involvement of teachers and community representatives in the management of schools (MOE, 2005 & MOE, 2006), such involvement is considerably constrained by the need to comply with central rules and regulations. The BOTs were therefore seen by the participants as a form of 'pseudo-participation' where emphasis is merely placed on issues relating to the supervision of school activities and mobilizing resources. Significant issues like designing policy, curriculum development, teacher hiring and firing and textbook design and distribution remain largely untouched. This is unlike school councils in other developing countries like Chile (Schiefelbein & Schiefelbein, 2000) and Nicaragua (Fuller & Rivarola, 1998) which have discretion over such important issues. It seems that far from fostering SBM through encouraging genuine participation of stakeholders in making significant school decisions, these bodies are mainly used as a means of securing more funds for the schools. This is evidenced by the great emphasis which the ministerial decrees related to BOTs place on the role of community members in supporting their local schools through fundraising and other voluntary contributions. As such, BOTs appear to correspond perfectly with what Hanson (1998) describes as “low authority councils” which usually have little more than an advisory role in school decision-making and exert minimal influence over the educational process. They act only as “auxiliary units to raise funds and organize maintenance assistance in the community for the schools” (ibid, pp.122-123).

**Explaining the paradox**

Angus (1993) cautions against uncritical acceptance of the notions associated with decentralization and SBM such as “devolution” and “participation”, reasoning that such terms cannot be clearly understood in isolation from the wider educational policy agenda. He criticises the versions of local school management being adopted in the UK, Australia and New Zealand, describing them as forms of “token participation” within which the inputs of local stakeholders can be directed into safe paths. Within this limited view of participation, no genuine power is in fact transferred to schools. In trying to explain this paradox, Angus suggests that, far from empowering local stakeholders, such forms of participation are merely tools that are often used by central governments to shift the blame for cost-cutting to local schools.
Anderson and Dixon (1993) refer to this as “hidden functions” for decentralisation. In trying to explain the paradox associated with decentralisation in the US, the authors draw on Weiler’s (1990) argument that the rhetoric of decentralisation can serve to accomplish two functions, namely “conflict management” and “legitimation”. Conflict management can be achieved when central authorities utilise the rhetoric of devolution as a means of dispersing conflict throughout the educational system. For instance, by decentralising fiscal decisions to local schools, district personnel actually diffuse criticism for budget cutbacks to the institution level. As to legitimation, it happens when the state devolves decision-making to lower levels as an attempt to increase its legitimacy by creating the appearance of being “responsive to democratic expression and local needs” (cited in Anderson & Dixon, 1993; 56).

It is not clear whether the argument put forward by Weiler (1990) can be helpful in providing an explanation for the paradox in the Egyptian context which has a different set of political, economic and social conditions. Alternatively, it might be appropriate to dwell on certain issues raised by Egypt’s educational literature, which may provide better insights into understanding this paradox.

One issue centres on grassroots resistance to change as a feature of Egypt’s school culture. Resistance to change may be triggered by the complexities imbedded in the implementation of external policy change at the local level. As indicated by Van der Vegt et al. (2001;11), “implementation has a system-unsettling potential” as both the organisation and the individuals are challenged by the mandated policy change. Under such circumstances, people are asked to “[redesign] and [rearrange] customary ways of doing things in line with the newly-arrived program or new policy concept.” This has always proved to be a difficult process. As Fullan (1993; 23) suggests, “If there is a cardinal rule of change in human condition, it is that you cannot make people change. You cannot force them to think differently or compel them to develop new skills.” Fullan’s (1993) suggestion appears to be rather more applicable to the situation in Egypt. Change seems to be even more difficult in the Egyptian setting where organisational factors and cultural norms seem to be more significant than government initiatives. In every educational system there are such factors which condition the way people think they have to work. One factor that is worth considering in the Egyptian context is that teachers are poorly paid, and the consequence of poor pay is low commitment. Low commitment is not necessarily due to lack of professionalism but simply economic necessity. Therefore teachers’ loyalty will be inevitably split between teaching and other businesses such as private tutoring or taxi-driving. Lack of organisational loyalty means that such changes as decentralization and SBM will be seen by teachers as extra work which they do not want.

The authors of the Egypt Human Development Report (2004) provide information that might shed further light on this point. They present a hypothetical analysis of stakeholders influencing or influenced by the drive towards a greater degree of decentralisation. According to this analysis, while schools are likely to support further decentralisation looking for more independence, teachers are expected to oppose this move. The model hypothesises that teachers’ opposition would result from concerns over their involvement in the business of private tutoring being disturbed by the implementation of decentralisation initiatives at the school level.

Another possible explanation might be the reluctance of the MOE to undertake further decentralisation. The authors of the EHDR (2004) hint at this issue, suggesting that the MOE has several arguments against greater devolution to local levels. One argument relates to inadequate human and technical resources at lower administrative levels and the consequent incapability of coping with more devolved responsibilities. Indeed, this argument has relevance to the success or otherwise of decentralisation efforts because, as Hanson (1998; 118) states, “[dropping] a decentralization reform into a weak regional management infrastructure is like dropping it into quicksand.” He indicates that in most Latin American countries, where inadequate local management infrastructures prevail, decentralisation efforts have struggled as they were driven by what he calls “the informal system” which includes “personalism”, “informal power centres” and “ignored rules”. This indicates the need for capacity-building at the local level prior to introducing decentralisation.
Security concerns have also been advanced as potential reasons for the reluctance of the MOE to further decentralise. The idea of promoting national unity through education has always been used by central officials to justify their continuous attempts to preserve maximum control over the education system (Nasser-Ghodsi, 2006). A government document illustrated this idea very clearly, citing, “Education in Egypt is subjected to state supervision in order to provide the minimum shared amount of culture and social upbringing basis, and to secure homogeneous social texture” (NCERD, 2004; 13). This is consistent with the state’s view of education as an issue of national security (NCERD, 2001).

There is another question about whether policies of education decentralisation in Egypt are the outcome of a felt need to change and are therefore welcomed by those at the grassroots, or rather reflect an external agenda that is imposed by donors. Official documents (e.g., NDP, 2002; UNESCO, 2006) suggest that the move toward decentralisation is prompted by a realisation of the benefits associated with this trend. More specifically, the NDP policy document (2002; 12) raises some points as potential positive achievements of moving toward decentralisation. The document states:

*The objective of the gradual tendency towards decentralization is better management and higher efficiency, and gives the opportunity to a larger sector of workers in the educational sector to participate, innovate and create. This tendency also enables the realization of the philosophy that the school is the main cell of the educational process ... It [also] enables the optimal use of available resources, and even gives the chance for increasing these resources in new manners.*

Nevertheless, it seems also that the current decentralisation move and other consequent changes have been embraced in part as a solution for securing financial aid from international agencies. Such international aid is often tied to particular kinds of structural reforms that are significantly influenced by the USA. One of the US agencies working in Egypt is USAID whose activities appear to be a contributory force to the processes of decentralisation now taking place throughout the country. USAID is Egypt’s largest unilateral donor, which has funded several decentralisation programmes (Nasser-Ghodsi, 2006). The World Bank is another important donor which has been involved in many educational reform programmes (e.g., Secondary Education Reform Project) of which decentralisation and SBM form a significant component.

The involvement of such international organisations in the ongoing education reform efforts, combined with decentralisation being on their agenda, raises concerns about potential external pressures being exerted upon policy-makers in Egypt to adopt decentralisation as a reform strategy. As suggested by Ornelas (2000), the World Bank’s loans to developing countries have been for many years tied to decentralisation reforms. Ornelas (ibid, p.430) indicated that, because decentralisation is in line with “the World Bank’s neoliberal economic views”, the Mexican government has adopted a policy of decentralisation as a means of securing more funds. However, as Ornelas suggests, it is easy to overestimate the impact of this factor and overlook the complexity of forces that might be pushing toward this type of action. This is particularly so in a country like Egypt which has a complex economic and political structure, as well as one of the largest educational systems in the world.

**CONCLUSION**

What this paper suggests about the persistent prevalence of centralized control in the Egyptian schooling system as well as the way recent decentralization projects have been perceived by local stakeholders is quite disconcerting, given the popularity of educational decentralisation as a dominant theme in Egypt’s educational discourse. This raises many questions about the reality of decentralisation policies adopted by the MOE. It may be indicative that there is more rhetoric than reality in the debates over decentralisation in the Egyptian context. This is not to argue that Egypt’s decentralisation reforms have failed or have been ineffective. I am not in a good position to evaluate the whole Egyptian decentralisation experience, which is beyond the scope of this paper. What this paper is trying to achieve is a better understanding of the discourse of decentralisation in Egypt through identifying any apparent contradictions and proposing appropriate explanations for them.

Based on the preceding reflections, I would like to conclude this article by arguing that, under existing circumstances, greater decentralisation to local and school levels may not necessarily be the best solution for
Egypt’s education problems. Decentralisation is not a “panacea” (IIEP, 2004). The implementation of decentralisation demands an appropriate balance between greater devolution and the qualities of its “beneficiaries” (IIEP, 2004). Existing concerns over weak local management infrastructures, risks of manipulation and “nepotism” and unfavourable organisational and cultural norms make it possible to argue that the existing beneficiaries in Egypt are not yet ready for a large move toward decentralisation.

More specifically, there is an issue around whether SBM as a form of management fits the organisation and culture in the Egyptian context. Such reforms as SBM and shared governance cannot be “a panacea for the ills of the organization” as they only produce positive results when used under certain circumstances (Wood, 1984, p.63). Based on previous research, there appear to be good cultural and organizational reasons why SBM may not be the best form of management and that traditional hierarchical management may operate much better. This is particularly true in the context of change. Under certain circumstances a strong exercise of authority is sometimes required to secure a smoother change process. There is a concern that if we put too much emphasis on issues like SBM within the existing organisational and cultural conditions, we would actually slow the capacity of change. As argued by Hargreaves (1997), in the absence of agreement to change, collegial approaches to management may result in delaying the change process. One of the prevalent features of school culture in Egypt is that there is a low level of interpersonal trust (Hammad, 2010). This has implications for successful implementation of change. In organisations where interpersonal trust is difficult to be established, it will be difficult to reach agreement over how the proposed change can be implemented.

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FACTORS MILITATING AGAINST THE INTRODUCTION OF COMPUTER EDUCATION IN SECONDARY SCHOOLS

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Abstract
The current study was undertaken in order to establish the factors militating against the introduction of computer education in secondary schools in Chegutu district, Zimbabwe. The study adopted the descriptive survey design for it was concerned with the gathering of people’s perceptions on the factors hindering the implementation of computer education. The population for the study was made up of 50 secondary schools. Out of these 50 schools, only 40 made it into the sample which was chosen through stratified random sampling. Data were gathered through the use of questionnaires and interviews. The use of these two instruments enabled data triangulation thus enhancing data validity and reliability. Major findings of the study reveal that there were no budgets for computer procurement in the majority of schools. Funds were inadequate for computer procurement as central government and the SDCs did not avail finances for computer procurement. However, stakeholders were willing to contribute towards the purchase of computers for computer education. Results also show that there were no teachers qualified to teach computers in schools. Those teachers who offered the subject were not willing to teach the subject mostly likely due to shortages in equipment and the unavailability of in-service computer training programmes. On a positive note, heads of schools and students had a positive attitude towards computer education. The study recommended that SDCs should source for computers from organisations such as banks. Schools through the SDCs should charge levies for computer education and government should make it compulsory for schools to offer computer education through policy statements. Teacher training institutions should incorporate computer education into their curriculum. Teachers should be offered administrative and technical support through in-service training programmes. Lastly, communities should be conscientised on the importance of computer education to inculcate in them a paradigm shift.

Key Words: Computer Education, Secondary Schools, Zimbabwe.

INTRODUCTION

In the globalised world, technology has become the in-thing as countries and/or organisations devise means of gaining a competitive edge over the others. In view of this, education systems in individual countries need to be tailor-made to suit this endeavour. Information and Communication Technology (ICT) has played a major role in linking business and individuals far apart in terms of geographical distance. Transactions are being carried out in or outside offices, twenty-four hours a day. In pursuit of the objectives to ensure that the country advances its technology base, Zimbabwe, through the Ministry of Education, has introduced computer education in the school curriculum. However, the introduction of computer education has failed to take off in the majority of schools, primary and secondary, rural and urban. Given this scenario, it is necessary for this study to look into factors militating against the implementation of computer education in secondary schools. In view of the fact that secondary schools are immediate sources of manpower for industry and commerce, it is hoped that ICT literacy could have been taught to students in preparation for employment. This however, has
not been the case for the majority of secondary school graduates who have gone job seeking without any knowledge of computers despite their being a prerequisite for employment in many institutions.

BACKGROUND TO THE STUDY

Computer education is of paramount importance to national development and it is on this premise that the government of Zimbabwe sought to introduce computer studies in the education system from primary through to tertiary institutions. Secretary for Education, Sport, Arts and Culture Circular Number 3 of 1999 stipulates that schools should offer technical and vocational subjects to students. At secondary school, a student should enroll for two technical/vocational subjects among which is Computer Studies. It against this background that the State President, His Excellency Comrade Robert Mugabe went about distributing computer equipment in schools across the country. Complementing these efforts, private companies donated and distributed computers to various schools in the district and the country. However, despite such efforts document analysis carried out in districts in Mashonaland West region shows that the majority of schools are not offering the subject. This has been the situation prevailing even in the schools which received the donations of computer packages, for free. This, therefore, has prompted this current research study to find out why computer studies are not being undertaken in the majority of schools despite the significance of the subject to national development and in the face of support from the political and corporate leadership. The study therefore aimed at unearthing those problems hindering the implementation of computer studies in the school curriculum in Zimbabwean schools located in Chegutu district, Mashonaland West Province.

Statement of the problem

Due to the fact that computer education has failed to take off in the majority of schools, fears are that technological development may be a pipe dream for the country. Given this scenario, it is necessary for this study to look into factors militating against the introduction of computer education in secondary schools. The question to be answered by this current study is: What factors have impeded the implementation of computer education in schools?

Research questions

In an attempt to answer the major research question, the following sub problems stood as research questions.
1. What is the state and availability of computer resources in the schools?
2. Are there any budgetary and funding constraints militating against computer education in schools?
3. Is there trained manpower to teach the subject in the schools?
4. What is the attitude of the school community towards the teaching and learning of computers in schools?
5. Is time adequate for the computer lessons to be incorporated on the timetable?
6. What remedies can be put in place to make sure computer education is fully implemented in schools?

REVIEW OF LITERATURE

There are many hindrances confronting schools in their quest to implement curricula as required by law and computer education faces similar challenges. In this section, we review frequently occurring factors affecting implementation of the computer education and curricula in general.

The state and availability of resources in the schools

A survey study elsewhere by Ginsberg and McCormack (1998) of 1163 teachers to establish what barriers teachers encountered in using computers revealed that issues surrounding computer hardware were the most serious barriers affecting implementation. The study showed that teachers in both highly and less effective schools reported "too few computers" and "too few printers." In the same study Ginsberg and McCormack (1998) found out that teachers in less effective schools also reported concerns about computers being too limited. Another study by Middleton, Flores and Knaupp (1997) also established the hardware factor as a significant barrier to computer education implementation. Middleton, Flores and Knaupp (1997) also contend that the accessibility to computer hardware may also be dictated whether or not the subject was taught.

Computer education requires a lot of capital outlay and funding for accessories and consumables. According to most research studies, teachers felt more money was needed for gadgets such as printers, scanners, digital
producers and screens. In the cited website, it was also established that quality of computers was not reliable since they lacked modernity to the extent that internet access and intranet were both deterred, all these due to limited finances. Time as a resource may also play its part in the full implementation of computer education in schools. Preston et al (2000) found out that lack of time to explore ICT and prepare ICT resources was a barrier in implementing ICT in schools. Teachers are sometimes unable to make full use of technology because they lack time needed to prepare ICT resources for other lessons, including of course time for computer education lessons. Time is also needed for teachers to become more familiar with hardware and software, without which the teachers are unable to prepare fully for computer lessons.

**Budgetary and funding constraints militating against computer education in schools**

In researches carried out elsewhere, costs of training have been identified to be high so much that some schools cannot meet the expenses of making provisions for the teaching and learning of computers. In some cases, teachers who have trained in computers have done so at their own expense. Even where the training has been organised by schools and computer centres, payments in many of the cases have been from personal purses (Bukaliya and Mubika, 2011; Jegede, 2009).

**Availability of trained manpower to teach the subject in the schools**

Seidmen (1996) conducted a study into issues surrounding teacher training and its relationship with the successful implementation of computers. The majority of teachers in schools lacked computer training and a few of them had some sound working knowledge of computers. Along with the statistical analysis, Seidmen (1996) established that the handwritten comments to his research instruments by teacher respondents overwhelmingly expressed a need for teacher training on basic computer skills. Seidmen also states that teacher training should not be limited to teachers who teach computing. Seidmen (1996) refers to the need for an international trend on the part of educators to train all teachers on the use of computers and the pedagogy of teaching computers in the curriculum.

This need for teacher training is explained by the fact that most of the presently hired teachers received little or no training in their formal education. It could also be a reflection of the need to update teachers' knowledge in the world of fast moving technology of communication (Bukaliya and Mubika, 2011). Training all teachers on the educational use of computers is of special importance when considering integrating the computer into the regular curriculum. Teachers need to know how to use computers first before they can integrate them (Seidmen, 1996; Madden, 1989).

Research also goes to show that teachers the majority of teachers, even those trained to teach computers in schools are reluctant to do so. Seidman (1996) found out that subject matter teachers were reluctant to consider the implementation of computers in teaching. The relatively cautious position of the subject matter teachers was perhaps due first to their limited experience with software and hardware, and second to the uneasiness about changing their habits and techniques.

According to a study by Bukaliya and Mubika (2011), the qualifications of the majority of the teachers are far from being satisfactory due to lack of exposure to college curriculum that does not cater for ICT training. The teachers have poor practical skills in ICT usage since the majority of them could not even use the basic software in computers for the delivery of their lessons and indications are that the teachers lack the necessary skills and knowledge of computers in basic software usage. Mintz (1997) echoes Seidmen's view that teachers are unprepared to use computers in their classrooms and they lack support and educational guidance. Mintz points to professional development and training as a solution to successful implementation.

The Office of Technology Assessment Report (cited in Geisert and Futrell, 1995) was written for the U. S. Congress to provide federal policy-makers an information base for making long-term decisions about computers in education. The OTA Report states that technologies have the potential to enrich the teaching and learning process but only under certain related conditions: adequate teacher training in the skills needed to operate the technology a clear vision and understanding among educators of state-of-the-art development and applications support for experimentation and innovation time for learning and practice.
The most commonly identified factor, in the literature affecting ICT use by teachers is their level of knowledge and skill in using computers. This factor was identified by Zammit (1991), Ely (1990), Pelgrum and Plomp (1991) and Brummelhuis (1991). Van Lengen (cited in Morton, 1996) found that for the most part all teachers were willing to implement computer education but the problem was that most of them were either infrequent users or they did not know how to use them. Compounding this problem is the need for infrequent teacher users to have structured opportunities to develop and practice computer skills on their own (Bukaliya and Mubika, 2011). In addition is the startling revelation that those that do not know how to use computers have successfully avoided the many basic staff development activities that have run over the years.

Another setback in computer implementation is schools has been identified in several studies which have shown that the learning potential of computers is deprived as many teachers are still not fully computer literate and do not the computers in instructional processes. Newhouse (1995) concurs when he identifies teachers’ lack of computer literacy as being an obstacle to their using computers in classrooms. Studies by Ya`acob et al (2005) and So and Swatman (2006) on teachers’ readiness for ICT generally, suggest that there is still a long way to go before schools can embrace on modern technology.

**Attitudes of school community towards the teaching and learning of computers in schools**

Individual teacher initiative accounts for much of the implementation of computer technology in schools. Lack of support by administrators is identified as a significant barrier toward implementation of computers in classrooms (Morton 1997; Brand 1998). Arzt, (1991) and Lockard et al (cited in Mann, 1997) argue that successful implementation of computers can only occur if administrators offer teachers support and leadership. Persky (cited in Brand, 1998) states that in addition to administrators developing a philosophy to guide the implementation of computer technology, they can support the technological professional development of teachers by establishing flexible schedules so teachers can practice what they have learned (or to continue their learning); encouraging and facilitating team teaching and peer coaching allowing teachers to visit each other's classrooms to observe computer technology integration; and scheduling regular meetings among teachers using technology to plan and evaluate instruction.

Teacher attitudes toward computer technology may be a significant factor in the implementation of computers in education. Griswold (1984), Stevens (1984) and Stephenson and deLandsheere (1985) cited in Madden (1989) express a concern that computer literate individuals will reap greater benefits than their counterparts who lack that knowledge. Their concern is that the development of computer literate individuals is dependent on computer literate teachers who have in general demonstrated a resistance to learning about computers.

A research by Madden (1989) reveals that teachers are reluctant to embrace computer technology due to a number of factors that include anxiety from dealing with equipment, a sense of loss of control over the teaching situation, hardware and software availability, lack of technical support, time and effort for training, remaining current in the field, and appropriately implementing the technology in the classroom. Results indicated that while teachers did not feel that their own jobs were threatened by computers, they still saw them as dehumanizing, isolating, prone to error and possibly as a violation of the right to privacy. Similar results were reported by Tetenbaum and Mulkeen (1984). A study by Newhouse (1995) revealed that a majority of the teachers did not believe that computers had a useful educational objective and that they were nonessential and supplemental to their teaching and classrooms, hence they had a negative attitude towards computers. These same teachers translated the same view to the introduction of computer education into a fully-fledged subject with its own budget, resources and fully time timetabled.

A research on an attempt to implement Information Technology in schools in Ontario by Drury (1995) found that only 20 percent of the teaching cohort is at least moderately committed computer users and even this 20 per cent may not be in favour of a dilution of the traditional curriculum model whereby computer education was integrated into the school system. However, the same research by Drury (1995) indicated that the main factor leading to a high level of computer education integration was a school-wide consensus on the importance of ICT and a very high level of teacher collaboration.
Observations by Kazlauskas and Koop (1995), on the barriers to the implementation of computers reveal that the most critical factor is that all staff needed to recognise and understand that integrating computers into classroom practice is a complex innovation which requires change to the whole school’s practices and culture, to the curriculum, and in teacher’s attitudes and classroom practice. They argue that such change is achieved incrementally over a long period of time.

**Availability of time**

According to Roszell (1995), the time factor surrounding the implementation process is viewed by teachers as being a major barrier in their using computers. In some instances teachers are reluctant to embrace technology because of its potential to shorten learning time for students. Teachers face a number of potential interruptions during the typical hour-long class and that, consequently, the actual time spent teaching and learning is shortened significantly. Hence, if the implementation of computer technology involves a potential interruption to teaching and learning time, teachers may avoid using the technology (Stallard, 1998; Roszell, 1995; Krysa, 1998; Madden, 1989).

**Remedies to make sure computer education is fully implemented in schools**

Due to the existing constraints in computer education implementation, remedial action needs to be taken. Lau and Sim (2008) propose the need to put in place measures to ensure that adequate access to technical support is provided. They further suggest that a teacher with computer literacy and competence be appointed as ICT coordinator in each school to provide and pedagogical support to the teachers.

Lau and Sim (2008) established that teachers needed training which should be offered on a continuous, rather than a one off basis so that their computer knowledge is upgraded over time. According to Mintz (1997) a crucial step in successful computer education implementation is the professional development for teacher that will provide them with materials, strategies and new understanding to meet the learning goals. It is indeed hoped that the use of computers in education can be fully realised and optimised in the teaching and learning processes. Mechanisms need to be put in place to ensure that teachers utilise computers for further development and communication and training programmes need to be designed to increase teachers’ familiarity a wider range of ICT applications. Bukaliya and Mubika (2011) advocated for a clear and compulsory national ICT education policy should be drafted to drive ICT development among teachers so that they are able to be conversant with the necessary skills and knowledge of computers in basic software usage. The responsibility for ICT programme development for teachers should extend to all stakeholders and should not be limited to the Ministry of Education, Arts, Sport and Culture (Bukaliya and Mubika, 2011).

**Technical Support**

Technical support is another important enabling factor identified by Krysa (1998). He states that computer hardware and software problems occur frequently and that solving these problems is time consuming. Solving many of the problems is beyond his current level of the teacher’s computer knowledge (Krysa, 1998). It is therefore incumbent upon the head of school and other responsible authorities to appoint a technical person to look at issues of hardware and software while the teacher focuses on the instructional process (Madden, 1989; Lau and Sim, 2008).

**Teacher In-Service**

In-service and training is a very important remedy in the integration of computer education in the school curriculum. According to Krysa (1998) in-service sessions for teachers have paved way for the incorporation of computer education and technology in the school set up. Furthermore, according to STEPS (2007), the education policy should be tailor-made to increase, improve and diversify teacher education and support and attempts should also be made to build computer education into general educational policies. Stakeholders should ensure access to quality equipment and learning resources in schools should develop and open knowledge-sharing school culture. Teachers should also be given the opportunity and be encouraged to reflect on, and make decisions about their own computer development needs on on-going basis.
Administrative Support
Another remedy identified by Krysa (1998) as enabling successful implementation of computers in the school system is administrative support. Krysa (1998) believes that the implementation of computers in the school is one of the top priorities that is supported by the principal of the school. This is reflected in the fact that some principals have promoted computer use in the schools for use by both the students and teachers. Some of the principals have supported the new network lab by ensuring that money is made available for hardware and software (Madden, 1989; Krysa, 1998).

Middleton, Flores and Knaupp (1997) argue that computer labs are an effective strategy for reducing the student-to-computer ratio in schools. The school administration is therefore encouraged to set up these labs so that students are given the opportunities to visit the labs at different times. However, the competition between teachers for blocks of time in the computer lab may result in some teachers giving up on scheduling time in the computer lab and thereby ceasing to implement computers in instruction (Middleton, Flores and Knaupp, 1997; Madden, 1989).

Administrative support could also take the form of policy enactments where ICT competence is made mandatory for school teachers. This can be an effective measure to improving teachers’ ICT knowledge and skills (Bukaliya and Mubika, 2011).

RESEARCH METHODOLOGY
The present study adopted the mixed methods approach. Both quantitative and qualitative paradigms were employed in the process of data gathering, analysis and presentation. The study adopted the descriptive survey design for it is concerned with the gathering of people’s perceptions. Leedy (1990) argues that where perceptions are sought, surveys are excellent vehicles for gathering data. Data for the current study were gathered through the use of questionnaires, interviews and document analysis. The use of these three instruments enabled data triangulation thus enhancing data validity and reliability.

Population and Sample
The population for the study consisted of 50 secondary schools in Chegutu District, Mashonaland West Province, Zimbabwe. Out of these schools, only 40 made it into the sample that was chosen through stratified random sampling which accorded types of schools, that is, urban day, rural day, boarding and Former Group A secondary schools, proportional representation into the sample. It was felt 40 schools were representative enough of the population under study. From these schools, the head of the school and two teachers per school were conveniently selected to answer questionnaires as well as respond to personal interviews. This gave a total of 160 respondents among which were 40 heads, 80 teachers and 20 members of the School Development Committee.
DATA PRESENTATION AND DISCUSSION

Figure 1: Distribution of respondents by status

Figure 1 shows that there were 40 school heads, 80 teachers and 40 members of the School Development Committee. These acted as respondents to the questionnaires and interviews and supplied the much needed data meant to give answers to the research question.

Figure 2: The availability and state of computer resources in the schools
Figure 2 shows that 48(30%) indicated that they had computer labs at their schools while the majority of 112 (70%) stated that they did not have such facilities. This translates to only 12 schools that have computer labs in the district out of the 50 secondary schools. This is despite the findings by Middleton, Flores and Knaupp (1997) who argue that computer labs are an effective strategy for the implementation of computer education in schools. The same number indicated there were computers in the labs and 112 (70%) indicated they did not have the computers. These findings replicate those by Ginsberg and McCormack (1998) who established that issues surrounding computer hardware were the most serious barriers affecting implementation. In concurrence, Middleton, Flores and Knaupp (1997) also established the hardware factor as a significant barrier to computer education implementation. Where the computers were available, only 36 (23%) stated that the computers were functional. Where the computers were functional and available, only 4 (3%) stated that these were adequate for the students. The majority, 156 (97%) said these computers were inadequate for the student numbers. Twenty (13%) stated that computer accessories were available in the labs with a majority of 140 (87%) indicating otherwise. Computer literature was available in form of books only for a few respondents, 3 (2%) while 157 (98%) indicated the non-existence of these books.

In an attempt to find out how the existing computers in the few schools had been sourced, one interview was quoted as saying that the President had donated them to their school. However, another respondent remarked that the models that had been donated were complicated to service hence this answers the problem why in most of the labs visited, the majority of the computers were not functioning. In another school, computers were donated by a local bank after they became obsolete. However, these remained useful in computer appreciation, in the words of one interviewee.

Figure 3 shows that 56 (35%) of the respondents indicated that there was a budget for computer procurement in their schools while the majority of respondents, 104 (65%) stated that there were no such budgets in their schools. These findings are in contrast with those by Jegede (2009) who established that budgets for computers were high in some institutions and computer budgets were a major consideration. However, these high costs may help in ascertain why some schools have abandoned budgeting for computer education. They simply cannot afford the high costs. According to the majority of the respondents, 156 (97%) funds in the schools were inadequate for computer procurement as all the respondents, 160 (100%) indicated that central government did not avail funds for computer procurement. Another majority overwhelming majority of 112
(70%) stated that the SDC did not avail funds for the procurement of computers. Only 48 (30%) said the SDC made funds available for the procurement of computers. In most of the cases, 148 (92%) said funds for computer accessories were not available. However, on a positive note, according to 90(56%), parents and other stakeholders were willing to contribute towards the purchase of computers for computer education. Notably, their willingness could only be a wish since most school communities in Zimbabwe are predominantly poor and living below the poverty datum line. Computer purchases could therefore be a luxury bearing in mind that such communities have struggled to raise funds for the basic educational requirements.

Table 1: Availability of trained manpower to teach computers in schools

<table>
<thead>
<tr>
<th>Variable</th>
<th>YES</th>
<th></th>
<th></th>
<th>NO</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there any teachers to teach computers in the school?</td>
<td>64</td>
<td>40</td>
<td>96</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Are the teachers qualified to teach computer education?</td>
<td>4</td>
<td>3</td>
<td>156</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>Are the teachers willing to teach the subject in the school?</td>
<td>56</td>
<td>35</td>
<td>104</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Are there any in-service computer training programmes for</td>
<td>64</td>
<td>40</td>
<td>96</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>teachers?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are the computer teachers adequate considering the student</td>
<td>0</td>
<td>0</td>
<td>160</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>enrolment?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows that the majority 96(60%) acknowledged that there were no teachers to teach computers in the school. Only 64(40%) stated that teachers were available. However, where the teachers were available, the majority of the respondents, 156(97%), indicated that the teachers were not qualified to teach computer education with a minority of only 4(3%) stating otherwise. Newhouse (1995) concurs when he identifies teachers’ lack of computer literacy as being an obstacle to their using computer education implementation in schools. Ya`acob et al (2005) and So and Swatman (2006) also concur by remarking that teachers’ readiness for ICT is a significant factor the attempt to embrace on modern technology in the schools. In concurrence, Bukaliya and Mubika (2011) noted that the qualifications of the majority of the teachers are far from being satisfactory due to lack of exposure to college curriculum that does not cater for ICT training. The teachers have poor practical skills in ICT usage since the majority of them could not even use the basic software in computers for the delivery of their lessons and indications are that the teachers lack the necessary skills and knowledge of computers in basic software usage. This obviously militated against the implementation of computer education in schools.

A majority of 104(65%) stated that teachers were not willing to teach the computer as a subject in the school. The present findings concur with those by Seidman (1996) who found out that subject matter teachers were reluctant to consider the implementation of computers in teaching due to their limited experience with software and hardware, and the uneasiness about changing their habits and techniques. Asked if there were any in-service computer training programmes for teachers in the schools, 64(40%) said yes against a majority of 96 (60%) who indicated otherwise. Interview results show that those who said yes had been in-serviced at one point or another despite the fact that the in-service training was a once off event despite the dynamism in technology. The Better Schools Programme of Zimbabwe (BSPZ) held in-service training courses for primary school computer teachers whereas secondary school teachers were in-serviced by the Higher Education Examination Council (HEXCO). Interviews also revealed that there were no staff development computer programmes for teachers and at most, the majority of teachers with computer literacy had done so through their own initiatives with the intention of securing better paying jobs in the private sector. Lau and Sim (2008) and Mintz (1997) teachers needed training on a continuous basis and successful computer education implementation was based on the professional development for teacher. Table 3 also goes to show a bleak picture for computer education in the district where all the respondents remarked that computer teachers were inadequate considering the student enrolment, a factor most likely to impede the implementation of the subject ion the country’s education system.
Table 2: Attitude of school community towards computer education in schools (N=160)

<table>
<thead>
<tr>
<th>Variable</th>
<th>YES</th>
<th>%</th>
<th>NO</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heads have a positive attitude towards computer education.</td>
<td>90</td>
<td>56</td>
<td>70</td>
<td>44</td>
</tr>
<tr>
<td>Teachers have a positive attitude towards computer education.</td>
<td>54</td>
<td>34</td>
<td>106</td>
<td>66</td>
</tr>
<tr>
<td>Students have a positive attitude towards computer education.</td>
<td>130</td>
<td>81</td>
<td>30</td>
<td>19</td>
</tr>
<tr>
<td>Parents have a positive attitude towards computer education.</td>
<td>40</td>
<td>25</td>
<td>120</td>
<td>75</td>
</tr>
<tr>
<td>All the stakeholders are willing to have computer education succeed in the school system.</td>
<td>56</td>
<td>35</td>
<td>104</td>
<td>65</td>
</tr>
</tbody>
</table>

Table 2 shows that the majority of respondents, 90(56%) indicated that heads of schools had a positive attitude towards computer education while 70(44%) thought otherwise. This is in concurrence with the findings by Madden (1989) and Krysa (1998) who established that some of the principals have supported labs by ensuring that money was made available for hardware and software. According to 106(66%) respondents, teachers had a negative attitude towards computer education unlike the views expressed by a minority of 54(34%) who felt teachers had a positive attitude towards computer education. Newhouse (1995) also established the same in a research that revealed that a majority of the teachers did not believe that computers had a useful educational objective and that they were nonessential and supplemental to their teaching and classrooms, hence they had a negative attitude towards computers. Interview results show that the majority of the teachers indicated phobia for computers as a reason for resenting the subject. One elderly teacher respondent indicated that due to age they could not be expected to be involved in the intricacies of computer technology. Students had a positive attitude towards computer education according to an overwhelming majority of 130(81%). Probed further to substantiate this claim, in the interview, both parents and teachers admitted that students showed the desire to embrace computer education through their use of cellular phones and regular visits to internet cafes, particularly so for those in urban, peri-urban and growth points. Out of the 160(100%) respondents, only 40(25%) thought parents had positive attitude towards computer education. All the stakeholders were willing to have computer education succeed in the school system as suggested by the results in Table 2. However, contrary to this, a majority of 104(65%) indicated that all stakeholders had not given any meaningful support to the implementation of the subject. Findings by Bukaliya and Mubika (2011) however, show that the responsibility for ICT programme development for teachers should extend to all stakeholders and should not be limited to the Ministry of Education, Arts, Sport and Culture.

Table 3: Adequacy of time for the computer lessons on the timetable (N=160)

<table>
<thead>
<tr>
<th>Variable</th>
<th>YES</th>
<th>%</th>
<th>NO</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is computer education timetabled at the school?</td>
<td>48</td>
<td>30</td>
<td>112</td>
<td>70</td>
</tr>
<tr>
<td>Is computer education accorded the same number of hours per week as other subjects?</td>
<td>36</td>
<td>23</td>
<td>124</td>
<td>77</td>
</tr>
<tr>
<td>Is computer timetabling given priority in the school?</td>
<td>34</td>
<td>21</td>
<td>126</td>
<td>79</td>
</tr>
</tbody>
</table>

Table 3 shows that computer education was timetabled at most of the schools that offered the subject as an examinable course at Form 4 (Ordinary Level). Asked if computer education was accorded the same number of hours per week as other subjects, a minority of 36(23%) said yes whereas 124(77%) thought otherwise. Thirty-four (21%) agreed that computer timetabling was given priority in the school as other subjects but the majority of 126(79%) disagreed. Roszell (1995) concurs by suggesting that the time factor surrounding the implementation process is viewed by teachers as being a major barrier in the implementation of computer education in schools.
Table 4: Remedies to make sure computer education is fully implemented in schools

<table>
<thead>
<tr>
<th>REMEDY</th>
<th>NUMBER</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source for funds and computers from well wishers</td>
<td>120</td>
<td>75</td>
</tr>
<tr>
<td>SDC to charge levies for computer education</td>
<td>67</td>
<td>42</td>
</tr>
<tr>
<td>Government to make it compulsory for schools to offer computer education through policy statements that should be enforced.</td>
<td>100</td>
<td>63</td>
</tr>
<tr>
<td>Government to provide funding to schools for computer procurement</td>
<td>132</td>
<td>83</td>
</tr>
<tr>
<td>Invigorating the training of manpower to teach computers in schools.</td>
<td>148</td>
<td>93</td>
</tr>
<tr>
<td>Teacher education institutions to incorporate computer education into their curriculum.</td>
<td>76</td>
<td>48</td>
</tr>
<tr>
<td>Teacher support through in-service for computer education teachers should be regularised.</td>
<td>89</td>
<td>56</td>
</tr>
<tr>
<td>Communities to be conscientised on the importance of computer education.</td>
<td>51</td>
<td>32</td>
</tr>
<tr>
<td>Efforts to be made to motivate the school community into accepting computers as a valuable piece of technology</td>
<td>56</td>
<td>35</td>
</tr>
<tr>
<td>Administrative support should be given by heads that should make sure gadgets for the purpose are available.</td>
<td>80</td>
<td>50</td>
</tr>
</tbody>
</table>

A majority of 120(75%) thought that sourcing for funds and computers from well-wishers would contribute significantly to the implementation of computer education in schools. According to 67(42%), the SDC should charge levies for computer education while 132(83%) suggested that government should make it compulsory for schools to offer computer education through policy statements that should be enforced. STEPS (2007) concurs with the findings of the present study by remarking that the education policy should be tailor-made to increase, improve and diversify teacher education and support and attempts should also be made to build computer education into general educational policies. According to 132(83%), government should provide funding to schools for computer education. Invigorating the training of manpower to teach computers in schools was suggested by an overwhelming majority of 148(93%). According to 76(48%), teacher education institutions must incorporate computer education into their curriculum. Currently, computer education is not among the curricula for teacher training colleges though in some isolated cases computer short courses are offered to interested students by the colleges. Eighty-nine (56%) respondents suggested that teacher support through in-service for computer education teachers should be regularised whereas 51(32%) thought that communities should be conscientised on the importance of computer education, with the hope of challenging them towards a paradigm shift. Fifty-six (35%) suggested that efforts must be made to motivate the school community into accepting computers as a valuable piece of technology (Drury, 1995) whilst 80(50%) were of the idea that administrative support should be given by heads who should make sure gadgets for computer education are available. This is in agreement with the findings by Krysa (1998) who identifies administrative support as enabling successful implementation of computer education in the school system. Lack of support by administrators is identified as a significant barrier toward implementation of computers in classrooms (Morton 1997; Brand 1998).

CONCLUSIONS

The results of the current study paint a very gloomy picture of computer education in schools in Chegutu district of Mashonaland West, Zimbabwe. Results show that of the 50 secondary schools in the district, only 12 are offering computer education in their schools and of these only 4 are offering computer studies as an examinable subject at Ordinary level. From the results obtained in the study the following challenges have impeded the implementation of computer education in schools:

1. There are no budgets for computer education in most schools and were funds exist these are inadequate for computer procurement as all the respondents,
2. Central government as well as the SDCs do not avail funds for computer procurement in most cases.
3. The majority of teachers and parents have a negative attitude towards computer education there are no teachers qualified and trained to teach computers in the schools.
4. The few teachers available are not willing to teach the computer as a subject in the schools and computer teachers were inadequate considering the student enrolment
5. There is a negligible number of in-service computer training programmes for teachers in the schools.
6. Phobia of computers is another significant factor for resenting the subject.
7. Stakeholders are unwilling to have computer education succeed since they have not given any meaningful support to the implementation of the subject.

RECOMMENDATIONS

From the above conclusions the following recommendations are made:
1. SDCs should source for funds and computers from well-wishers.
2. Schools through the SDCs should charge levies for computer education.
3. Government should make it compulsory for schools to offer computer education through policy statements that should be enforced.
4. Government should provide funding to schools for computer procurement and invigorate the training of manpower to teach computers in schools.
5. Teacher training institutions should incorporate computer education into their curriculum.
6. Teachers should be offered administrative and technical support through in-service training programmes.
7. Communities should be conscientised on the importance of computer education, with the hope of challenging them towards a paradigm shift.
8. Authorities should motivate both the school and the local communities into accepting computers as a valuable piece of technology.
9. Administrative and technical support should be given by heads that should make sure gadgets for computer education are available.

REFERENCES


THE STUDY OF THE DEGREE OF ONE OF THE IRANIAN GOVERMENTAL ORGANIZATION’S WITH CORRESPONDENCE CHARACTERISTICS OF A LEARNING ORGANIZATION

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Abstract  
The present study has been carried out to recognize the degree of one of the Iranian governmental organization’s with correspondence characteristics of a Learning Organization based on the Marquardt’s system model. For its purpose, the research is applied and for the data collection method, it is descriptive and survey. Statistical population of the research was the employees of the headquarters of under study organization which 149 persons were chosen as sample in a simple random manner. In order to collect data, the questionnaire “learning company profile” prepared by Marquardt, with0.96 as its reliability, is used. The data was analyzed by SPSS software. One-group t-test is used to compare the average of research sample characteristics based on the learning organization subsystems in Marquardt’s system model with the desirable average of subsystems; the result showed that under study organization lacks the characteristics of a learning organization based on the Marquardt’s system model.

Key Words: Organizational learning, learning dynamics, organizational reform, people enforcement, knowledge management.

INTRODUCTION

Nowadays velocity of environmental changes and IT advances fundamentally challenged organization’s managers, in a way that lack of coordination with the reforms may be considered as the destruction of the organizations. One of the modern theories on new organizational structures is “learning organization” that attracted many theorists’ attentions. A learning organization learns in long time and its performance makes transformation. Indeed, when organizations can capture true analysis and presumption from their history and experiment and utilize them in action, they will be learners and knowledge instructors. In other word, a learning organization is one that has the skill of making, capturing and transferring knowledge, and act to change and reform its behavior by the help of new earned information. Because of the importance of the role of the educational management between other kinds of managements for the reason of concentration on training and transformation of human resources, educational managers have an influential role in creation and leadership of learning organizations. They can play a significant role on continuous training and learning of organization’s employees, the organization’s adaptation with rapid organizational changes, promote organization and achieve the goals in order to gain knowledge, by using incorporation of principles of management and educational leadership’s and principles of learning organizations. Because in facing new and variable structures challenges, continuous education and adaptation of organization’s characteristics with learning organization’s characteristics seems to be essential.

1 - Because of private information of the under study organization, mention the name of the organization is avoided.
Necessity of changing the organizations to learning organization is originated because of sever competitive market and increasing the environmental uncertainty, organizations need more knowledge and awareness of the environmental factors to be able to adapt themselves with current changes and evolutions. The problem of majority of modern organizations is that they often can’t recognize threats and their destructive effects and they are unable to create options and alternative solutions for evolution (Rezai Manesh and Noorbakhsh, 2009; 128).

In regard to discussed subjects, in this research we try to use “Marquardt’s System Model” to compare characteristics of one of the Iranian governmental organization with the learning organization based on mentioned theory. Then with the earned information, the under study organization managers can be able to approach the goals of the learning organization.

**Goals of research**
The main purpose of this research is to study the degree of one of the Iranian governmental organizations with correspondence characteristics of a Learning Organization, based on Marquardt System Model. Subordinate purposes are:
1- Determining the indexes and characteristics of learning organization based on discussed theory up to now.
2- Identifying the amount of learning dynamics in under study organization and comparing with the existing standards.
3- Studying the state of acquaintance with the structure of learning organization and quality of organizational evolution of under study organization toward a learning organization.
4- Evaluating the empowerment of the human resources on under study organization.
5- Evaluating the situation of knowledge management in under study organization.
6- Studying the effectiveness of IT in under study organization.

In order to improve the acquired results of the research, some solutions are also suggested to change learning organization as applicable goals.

**Research questions**
The main question of the research is “How much is the under study organization adapted with the learning organization characteristics?”

With the regard to chosen model of the learning organization, following subordinate questions are presented:
1- Is learning dynamics of under study organization has the standard conditions of learning organization?
2- Does the under study organization have necessary acquaintance with structure and the quality of the learning organization?
3- Does the necessary solutions exist in the under study organization?
4- Is knowledge managed in the under study organization?
5- Does under study organization have effective Information Technology?

**Theories of learning organization**
From 1990 with emerging new condition, change, and evolution in organizational environment, a new phenomenon with subject “Learning Organization” was discussed. In such situations, organizations in order to maintain their positions in turbulent environment of those days, should go out from static frame and move toward learning organization. In other words, it was necessary to make transformation in their structure and bases (Behrouzi, Farrokhehrad and AmirAhmadi, 2009;21).

Based on this necessity, variable views and theories were formed. One of these important and effective theories was Peter Senge’s theory. Peter Senge is considered by most people to be the “father” of organizational learning. He made an evolution in organizations’ structure and attitude by suggesting five major disciplines about learning organization in 1990. These five disciplines were: personal mastery, mental models, shared vision, team learning and at last systems thinking. Senge knew the learning organization as one that continually expands its capacity to create the future, in way that people can expand their abilities in order to achieve desired results. The organization in which new methods of thinking are brought up, collective aims are chosen freely, and people instantly realize how to learn (Cors, 2003; 4).
Another one of the theorist in learning organization, is Pedler. Pedler, Burgoyne, and Boydell (1991) define the learning organization as “an organization that facilitates the learning of all of its members and continuously transforms itself in order to meet its strategic goals” (Yang, Watkins & Marsick, 2004;32).

According to Peddler’s theory (1995) people are different in some ways from the way they were before. He mentions four types of learning in his theory: knowledge; skills, personal development; collaborative enquiry. The last two, are essential elements for learning organizations (Hung, 2007; 4). He, also, suggested a model with eleven characteristics to explain learning organization which are:
1) a learning approach to strategy,
2) participative policy making,
3) informing,
4) formative accounting and control,
5) internal exchange,
6) reward flexibility,
7) enabling structures,
8) boundary workers as environmental scanners,
9) inter-company learning,
10) a learning climate,
11) self-development opportunities for all (https://dspace.lib.cranfield.ac.uk).

In 1992, two theorists Carre and Pearn, too, proposed a two-dimensional model of learning organization that was considered as a tool to categorize an organization in terms of the organizational learning taking place. They suggested two dimensions for a learning organization: firstly, the extent to which the general environment (including structure and culture) of the organization enhances, supports and sustains the learning of all employees. Secondly, the extent to which the workforce as a whole is confident, motivated and competent to learn. According to them, the learning organization can be measured on both dimensions, resulting in one of four quadrants: a Stagnated Organization, a Frustrated Organization, a Frustrating Organization and a Learning Organization (https://dspace.lib.cranfield.ac.uk).

Garvin (1993) is one of the other learning organization theorists that proposed 3-M models to learning organization. Garvin’s model suggests that learning organizations are develop by agreeing on a meaning of learning, then purposefully measuring and managing their learning. He constructed a fairly general definition: “A learning organization is an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights. Edmondson, Garvin and Gino identified three building blocks of a Learning Organization: Learning Environment and Culture, Learning Processes, and Leadership for Learning (Garvin, Edmondson and Gino, 2008;3-6).

Watkins and Marsick are of theorists that paid attention to concept of learning organization in 1994. They originally defined the concept of the learning organization as “one that learns continuously and transforms itself. The model that is proposed by them, has seven dimensions as following:
1) continuous learning,
2) inquiry and dialogue,
3) team learning,
4) empowerment,
5) embedded system,
6) system connection,
7) strategic leadership (Yang et al.,2004;34).

Marquardt and Reynolds are two other theorists that for first time in 1994 indicated the conception of learning organization and defined it as an organization that is a system of actions, actors, dogmas and processes. It may change information into valuable knowledge and improve the organization’s adaptation at a long time. Then Marquardt (1996) suggested sixteen steps to create a learning organization: to make promises to the Learning Organization;
2) to combine learning and the practical work of the Learning Organization;
3) the evaluation ability to the Learning Organization at every secondary systems;
4) to communicate the shared vision;
5) to recognize the importance of systems thinking and actions;
6) the leaders’ show and their promises to the learning;
7) to transfer the culture of the Learning Organization into the successive learning and improvement;
8) to make strategies of learning and cooperation;
9) to eliminate the bureaucracy;
10) to strengthen the staffs’ ability;
11) to extend the Learning Organization to the enterprise aspect;
12) to learn and propagate knowledge;
13) to use the best technology on the learning;
14) to encourage and expect for the learning of individuals, team and the organization;
15) to understand more about the Learning Organization;
16) the Learning Organization should constantly make adaptation and improvement in learning (www.getcited.org).

In 2002 he defined a learning organization systematically by publishing the book with the subject “creation a learning organization” and enumerated its characteristics. In this book, Marquartd indicated five subsystems that should be interacted together in regard of Senge’s factors. These subsystems are following:

1) Learning: learning, traditionally, is known as a process that by which, people achieve knowledge and new sights in result of behavior and acts changes. Learning has cognitive, perception and physical aspects.

2) Organization: in this subsystem, four dimensions strategy, structure, culture, view and their interaction together are discussed to be converted to a learning organization.

3) People: this subsystem includes six elements: managers and leaders, employees, clients, business participants, tenders and sellers, and society. This subsystem paid attention to enforce people to achieve needed resources to gain effective knowledge to do the jobs.

4) Knowledge: this subsystem indicates the business management and creating knowledge. It includes getting, creating, saving, analyzing, transforming, publishing and applying knowledge. It should be considered that these elements are continuous and interactive instead of being consecutive and independent.

5) Technology: the subsystem in the system model of learning organization, is formed of integrated technology networks and information tools that makes it possible to achieve and exchange information and learning (Marquardt, 2002).

In this research for the reason of Marquardt System Model more attention is paid to technology, people enforcement, knowledge management, and its being newer than other theories, this model is used to assess the under study characteristics and to study its correspondence with learning organization.

METHOD

This research is applicable for its purpose and for the data collection method which is descriptive and survey. In order to collect data, the questionnaire titled as “learning company profile”, prepared by Marquardt is used. In order to determine the reliability of the questionnaire, Cronbach’s Alpha was employed and the figure of 0.96 was achieved. The questionnaire titled as “learning company profile”, is a standard one and is used for frequent research; so in order to be certain of validity of the questionnaire’s content, it is verified by the relevant scholars (educational management, knowledge management and human resource management). The validity of questionnaire’s appearance was verified, too. Statistical population of this research was the employees of the headquarters of the under study organization that includes 614 people. The sampling is used by Cochran's formula and the figure 149 was gained. In order to analyze data, descriptive and deductive statistical methods are used. The used statistical methods are following:

- Kolmogorov-Smirnov test to determine the normality or inormality of data distribution.
- One-sample T test to compare the mean of characteristics of the sample based on learning organization’s subsystems in Marquardt System Model with the mean of subsystems’ desired situation.
The following lateral analysis is carried out too:
- Friedman test in order to assess the meaningful difference is between the five characteristics of learning organization or not.
- Independent-sample T test to assess variation between views of two groups of men and women in relation to research questions.
- One-way ANOVA to assess the difference between various groups of education, gender, organizational post and kinds of recruitment in relation to research variables.

FINDINGS

The results of descriptive statistics are:
In according to the acquired results 63.3 percent of responders are men and 31.7 percent are women. 8.7 % of responders have been holder of post diploma degrees, 62.6% holder of Bachelor’s degrees in education and 28.7 % have been holder of master’s degrees. Also, 21.3% of responders have been under than 30 years, 53.9% have been between 31 to 40 years, 23.6% have been between 41 to 50 years and 1.1% have been above 51 years.

With regard to the analyzed information, most this people have professional background from 11 to 15 years and 35.2% of the responders are expert, 42.6% superior expert, 19.4% head of group, 1.9% assistants director and 0.9% are director general. Their kind of employment 11.7% transient staff, 15.8% contractual staff, 66.7% are permanent staff. from the deductive statistics the following results are acquired:
- According to Kolmogorov-Smirnov test the significant related to variable research are bigger than considered significant (0.05) and H0 (observation distribution is homogeneous with a certain distribution (normal distribution) ) is accepted. As a result the distribution of numbers is normal.
- By using One-sample T test to responding research questions. In attention to negativity of upper and lower Limits, it could be said that the amount of mean is smaller than 3 \( \mu - 3 < 0 \).

In this way, according to the results of research we can deduce this organization doesn’t have the learning organization characteristics.

Table 1: The Evaluation Of Existence or The Lack Of Existence Of The Learning Organization Characteristics.

<table>
<thead>
<tr>
<th></th>
<th>Learning dynamics</th>
<th>Organizational transformation</th>
<th>Enforcement people</th>
<th>Knowledge management</th>
<th>Using Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>120</td>
<td>120</td>
<td>119</td>
<td>119</td>
<td>116</td>
</tr>
<tr>
<td>Normal Parameters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>2.3922</td>
<td>2.3484</td>
<td>2.2348</td>
<td>2.3373</td>
<td>2.3794</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.63067</td>
<td>.70446</td>
<td>.68510</td>
<td>.68345</td>
<td>.74214</td>
</tr>
<tr>
<td>Absolute Most Extreme</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>.091</td>
<td>.081</td>
<td>.067</td>
<td>.072</td>
<td>.068</td>
</tr>
<tr>
<td>Negative</td>
<td>-.087</td>
<td>-.077</td>
<td>-.067</td>
<td>-.067</td>
<td>-.033</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov</td>
<td>.994</td>
<td>.887</td>
<td>.736</td>
<td>.784</td>
<td>.737</td>
</tr>
<tr>
<td>Sig.</td>
<td>.276</td>
<td>.411</td>
<td>.651</td>
<td>.571</td>
<td>.649</td>
</tr>
</tbody>
</table>

According to Friedman test to rank the research variables, we can say there are meaningful differences among the existing situation five learning organization characteristics. And from the view of the people of sample statistics the highest rank is related to learning dynamics and applying technology, and the lowest rank is of the enforcement of people.
In the relation to research variables, by using Two-independent T test the difference between the views of two group of men and women (in regard to the questionnaire of research) in relation to research variables, has been examined.

H0 and H1, for this purpose are:
H0: There isn’t any meaningful difference between two groups of men and women responders, in relation to five under study variables.
H1: There is meaningful difference between two groups of men and women responders, in relation to five under study variables.

Table 4: Two-independent T test

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>T</td>
</tr>
<tr>
<td>Learning dynamics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances</td>
<td>2.555</td>
<td>.113</td>
<td>1.029</td>
</tr>
<tr>
<td>Not assumed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances</td>
<td>1.113</td>
<td>.269</td>
<td>2.113</td>
</tr>
<tr>
<td>Assumed</td>
<td>346</td>
<td>.558</td>
<td>2.177</td>
</tr>
<tr>
<td>Organization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transformation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not assumed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
With regard to the results of the table only the significant related to organizational transformation is lower than 0.05. So, it can be said in organization variable H0 is denied and H1 is accepted. That is, there is disagreement between the two groups men and women in relation to variable of organizational transformation.

By using the results of One-way ANOVA test, it can be said in relation to organizational transformation and people enforcement, there is the meaningful difference between educational groups. But for other three dimensions, there isn’t meaningful difference between educational levels. In regard to the test done, meaningful difference has been seen between different group (in general question).

**DISCUSSION AND CONCLUSION**

The result of the test done says that in the under study organization dimensions of learning dynamics (with the mean of 2.39), applying technology (with the mean of 2.37), organizational transformation (with the mean of 2.34) and knowledge management (with the mean of 2.33) are week and the dimension of men people enforcement (with the mean of 2.23) is lower than week. As a result, this organization doesn’t have the characteristics of learning organization. Therefore, in regard to the findings acquired of statistical analysis, the results of study the research questions, show:

1- The mean of learning dynamics is lower than average level and this characteristics in the under study organization is not in standard condition of the learning organization.

2- The mean of characteristics of organizational transformation is lower than average level, so, the organization has not created the needed characteristics like the view and long-term goals for learning in individual, group, organizational levels.

3- The mean of the characteristics of people enforcement is lower than average level and there is not needed solution for this purpose in this organization.

4- The mean of the characteristics of the knowledge management is lower than average level and knowledge in the organization is not managed in a suitable way.

5- The mean of the characteristics of applying technology is lower than average level and the technology in the organization has not the needed effectiveness.

Therefore, the under study organization should take measures in order to move toward organizational learning and changing into learning organization. So, it is necessary the needed changes in organizational view, people enforcement, knowledge management and applying technology in an useful form to be created.

**SUGGESTIONS**

1- Suggestions for learning dynamics:

- Emphasis on individual, group and organizational learning at the same time.
- Applying instructions not only in meaning of new learning but also for its effect on the employees improvement.
- Applying the accelerating methods of learning among in employees.
- Paying more attention to creativity and general innovation of employees.

2- Suggestions in organizational transformation:
- Announcing the organization values to the whole organization employees and customers.
- Creating a comprehensive and strategic program in order to change the existing condition into learning organization.
- Improving the organizational structures and creating flexible structures instead of vertical and formal structures, and long hierarchy.

3- Suggestions for employees enforcement:
- Enforcing the abilities, scientific and specialized qualification, the employees and professional talents.
- Paying attention to the training of the human resources and placing it in organizational priority.
- Providing the condition of expressing ideas and attitudes by all the employees.
- Evaluation of the employees performance on the bases of employees scientific and research achievement.

4- Suggestions for knowledge management:
- Familiarizing the employees with knowledge management concept.
- Providing opportunities for employees gathering in order to change experiences and knowledge and sharing them.
- Pay attention to the system of participation management and distributing the information in all organization levels.

5- Suggestions for applying technology:
- Using virtual instructions in the organization.
- Providing needed scientific and research hardware and software.
- Developing office automation system and using it as learning facilitating system.

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PHYSICAL DEVELOPMENT AND SPECIFIC WORKABILITY OF 15-YEAR-OLD BOYS
FROM THE NATIONAL BASKETBALL TEAM OF BULGARIA

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Abstract
The objective of the study is to optimize the preparation of the 15-year-old competitors (boys), listed in the expanded composition of the national basketball team of Bulgaria by analysis of the parameters of their physical development and specific workability.

The study is made during the period November 2010 – May 2011. Subject of the study is the basketball game in between growing up competitors-boys. Object of the study is the physical development signs, the special physical and specific technical and tactical preparedness.

Contingent of the study is 39 basketball players, born in 1995, listed in the expanded composition of the Bulgarian national team for the respective age group under study.

For solving the objective and tasks of the study, data for 16 indicators are registered:
✓ physical development – 7 indicators;
✓ physical preparedness - 6 indicators and
✓ technical-tactical preparedness - 3 indicators.

The following methods of research are applied for solving the objective and the tasks of the study: review study, anthropometry and sport-pedagogical testing.

The results of the study are processes mathematically and statistically by: variation analysis, sigma deviation method and the index method.

Key Words: Basketball, growing up players, physical development, specific workability.

INTRODUCTION

Sport is an exceptional phenomenon and universal instrument towards education and healthy way of life. Sport is a powerful integrating factor teaching tolerance and acceptance of the differences between the people since early child’s age (N. Mavrudieva, R. Tzarova, L. Kraydjikova, 2009).

The norm tables in use (R. Tzarova, K. Tzarov, 2005), developed for the needs of the Bulgarian Basketball Federation, give good possibility to find quantitative expression of the preparedness level of the combination under study according to all special physical and specific technical and tactical preparedness signs under observation.

The objective of the study is to optimize the preparation of the 15-year-old competitors (boys), listed in the expanded composition of the national basketball team of Bulgaria by analysis of the parameters of their physical development and specific workability.
METHODOLOGY

The study is made during the period November 2010 – May 2011. 

Subject of the study is the basketball game in between growing up competitors-boys. Object of the study is the physical development signs, the special physical and specific technical and tactical preparedness.

Contingent of the study is 39 basketball players, born in 1995, listed in the expanded composition of the Bulgarian national team for the respective age group under study. Testing in terrain environment (basketball playground) has been effected for solving the objective and the tasks of the study.

Test battery is used covering 16 tests, brining information about the physical development and specific workability of the growing up basketball players (table 1):

- physical development – 7 indicators;
- physical preparedness - 6 indicators and
- technical-tactical preparedness - 3 indicators.

The following methods of research are applied for solving the objective and the tasks of the study:

- review study;
- anthropometry;
- sport-pedagogical testing.

The results of the study are subjected to mathematical-statistical analysis by:

- variation analysis;
- sigma deviation method;
- method of the indexes (Body Mass Index).

### Table 1: List of the indicators

<table>
<thead>
<tr>
<th>№</th>
<th>Tests</th>
<th>Units of measure</th>
<th>Accuracy of measuring</th>
<th>Direction of increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Height</td>
<td>Cm</td>
<td>1,0</td>
<td>+</td>
</tr>
<tr>
<td>2.</td>
<td>Height with stretched hand</td>
<td>Cm</td>
<td>1,0</td>
<td>+</td>
</tr>
<tr>
<td>3.</td>
<td>Length with stretched hands</td>
<td>Cm</td>
<td>1,0</td>
<td>+</td>
</tr>
<tr>
<td>4.</td>
<td>Weight</td>
<td>Kg</td>
<td>0,1</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Body Mass Index</td>
<td>Kg/m²</td>
<td>0,01</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Chest measurement</td>
<td>Cm</td>
<td>1,0</td>
<td>+</td>
</tr>
<tr>
<td>7.</td>
<td>Respiratory difference</td>
<td>Cm</td>
<td>1,0</td>
<td>+</td>
</tr>
<tr>
<td>8.</td>
<td>Sprint 20 m</td>
<td>S</td>
<td>0,01</td>
<td>-</td>
</tr>
<tr>
<td>9.</td>
<td>Running within cones</td>
<td>S</td>
<td>0,01</td>
<td>-</td>
</tr>
<tr>
<td>10.</td>
<td>High jump</td>
<td>Cm</td>
<td>1,0</td>
<td>+</td>
</tr>
<tr>
<td>11.</td>
<td>Hop (step and jump)</td>
<td>Cm</td>
<td>1,0</td>
<td>+</td>
</tr>
<tr>
<td>12.</td>
<td>Flexibility</td>
<td>Cm</td>
<td>1,0</td>
<td>+</td>
</tr>
<tr>
<td>13.</td>
<td>168 m shuttle</td>
<td>S</td>
<td>0,01</td>
<td>-</td>
</tr>
<tr>
<td>14.</td>
<td>Dribbling within cones</td>
<td>S</td>
<td>0,01</td>
<td>-</td>
</tr>
<tr>
<td>15.</td>
<td>Index of the dribbling</td>
<td>S</td>
<td>0,01</td>
<td>-</td>
</tr>
<tr>
<td>16.</td>
<td>Moving in defense</td>
<td>S</td>
<td>0,01</td>
<td>-</td>
</tr>
</tbody>
</table>

RESULTS AND DISCUSSION

The detailed analysis of the indicators of the physical development shows that, in order to be able to successfully take part in the coming competitions, the team needs to improve its composition as to the height – its present status is lower than it is necessary. There are only 2 players above 200 cm and the average level for the height of the team is 191,05 cm.
Figure 1 presents the Body Mass Index (BMI) calculated on the base of the boy basketball players’ weight and height. The analysis of the figure says that the boys with BMI within the zone of the norm are 90%. This is very good sign. The limits of the zones are adapted for the respective age group under study by I. Topuzov (2002).

Only for 4 of the boy the values of the index are outside of the norm limits. That means that around 5% of the best Bulgarian 15-year-old boy basketball players are over weight and 5% - are under weight.

We think that it is necessary, together with the parents and the club coaches to take up the respective measures (appropriate nutrition regime, adequate training impacts, etc.) which shall lead to reduction of the obesity index and reach the norm zone for the players with over weight. All that shall correspondingly impact positively the technique-tactic preparedness of each of these competitors.

The variation V coefficient (fig. 2) brings important information to the study. The analysis shows that practically all the physical development indicators are stable and respectively the group is homogeneous according to the signs, about which these indicators bring information. The V values evidence it - they are within the limits.
between 2.98% and 9.31% and correspond to the respective norms of the sports statistics. The only exception here is indicator 7 (Respiratory difference), where 10% < V < 30% and consequently this indicator is relatively stable and the team under study – relatively homogeneous in relation to the functional capacity of the thorax.

The analysis of the variation V coefficient of the second group (Fig. 3) of the indicators (physical preparedness) shows that on the analogy of the first group, all the indicators are stable and respectively the group is homogeneous according to the signs, about which these indicators bring information. The only exception here is indicator 10 (high jump), but the value of the V coefficient is practically near the lower limit of the zone of the relatively stability.

A special attention has to be turn of the indicator 15 (index of the dribbling) who related to the skill of the pupils studied to lead the ball at high speed. Consequently, indicator 15 is unstable (V = 75.58%) and the group in non-homogeneous as of the skill indicated herein before. It means that during the future education-training process, it is necessary to increase the volume of work leading to improving the skill of leading the ball of those players, who have lowest marks for this indicator.

For solving the objective and the tasks of the study and by the application of the sigma method, the level of all signs under study have been assessed. As it is known, T marks are values without measures and they allow to be compared by tests of various measures (presented in s, m, cm, %, kg, number, etc).

The generalised marks, presented in Fig. 4 are quantitative expression of the preparedness level of the combination under study according to all physical preparedness signs under observation. The marks are calculated by the help of norm tables (R. Tzarova, K. Tzarov, 2005) developed for the needs of the Bulgarian Basketball Federation.
It can be seen in the figure that the best developed from the combination under study are:

- the speed on the short distance (indicator 8, \( T_8 = 48.92 \) p.); and
- the explosive strength of the lower limbs under vertical efforts (indicator 10, \( T_{10} = 37.28 \) p.).

In the same time, 3 of the indicators (11, 12 and 9) are of exceptionally low level.

The logic under making use of the T marks, as optimization criteria, proves that the efforts shall be more effective if the future activities of the whole group shall put an accent on those indications where the marks are the lowest. That means the work with the group has to be directed predominantly to developing:

- the explosive strength of the lower limbs upon coordination complicated exercises (triple jump, \( T_{11} = 20.51 \) p.);
- the flexibility (\( T_{12} = 21.10 \) p.) and
- the special speed upon moving in the playground (\( T_9 = 21.49 \) p.).

All that affects the general mark of the physical preparedness of the combination under study (29.00 p.), which is upper than the average one for Bulgaria (according to the average mark norm tables for Bulgaria, it is 25 p.).

The information about the individual level of the physical preparedness of all basketball players under study shows that 16 of the boys have average total marks T, which are higher than 30 p. and respectively these boys have high moment level of particular physical preparation.

It is a pity that some of the boys from the national basketball team of Bulgaria are in a rather bad physical state and respectively their general preparedness is thus negatively impacted.

Much more diverse is the picture in relation to the technique-tactic preparedness. As it can be seen in fig. 5, the generalised quantitative marks for all signs under study of that group are lower than 25.22 p., which is not very good reference for the work of the coaches directed towards the increase of the effectiveness of the technique-tactic actions.
That statement is supported as well by the individual marks for the technique-tactic mastership of the players – only 14 of the general marks for this side of the sports preparation are higher than 30 p. In the same time the general marks of 22 boys are lower than 25 p. and even some of the boys from the national basketball team of Bulgaria are in a rather bad technique-tactic state (under 10 p.) and respectively their general preparedness is thus negatively impacted.
Figure 6 presents the final arrangement of the 13 best prepared players resulting from the study implemented in relation to the level of the physical and technical-tactical preparation of the boys from the Bulgarian national basketball team under study.

The figure provides the possibility to establish which of the side of the sports preparation under study is in priority developed for each of the players.

That requires serious analysis of the optimization models of each boy and defining the basic accents in the future individual work.

As an example, fig. 7 presents Kaloian V.’s individual optimization model (No 5 in the fig. 6). Nevertheless the fact that at present he has got good general level of specific workability, we think the work with him will be most effective if future basketball training shall accent on developing his:

- skills to move in defence;
- particular speed upon moving in the playground in offence;
- special endurance;
- explosive strength of the lower limbs upon coordination complicated exercises and
- skills to lead the ball at high speed.

The efforts for developing the other components of the specific workability will not be so effective.

CONCLUSIONS

The analysis of the results and the summaries made in the paper allow for important conclusions about the sport practice to be formulated:

1. The team needs to improve its composition as to the height.
2. Only around 5% of the best Bulgarian 15-year-old boy listed in the enlarged national team are over weight.
3. As a whole, the combination we have studied is homogeneous and relatively homogeneous in relation to all signs of the physical development and specific workability under study.
4. In between the indicators under study, developed at the highest level are:
- the speed on the short distance and
- the explosive strength of the lower limbs under vertical efforts.

5. In the future the work with the group has to be directed predominantly to developing:
- the explosive strength of the lower limbs upon coordination complicated exercises;
- the flexibility and
- particular speed upon moving in the playground.

6. The T marks calculated by us for all signs under study allow establishing the weak sides of the preparation of each of the boys and on that base to determine the emphasis to be put in the future education-training work.

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DRAWING FOR EARLY IDENTIFICATION OF CREATIVE THINKING OF CHILDREN IN DIFFERENT CULTURES

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Abstract
The current research seeks to develop a detection method for forms of creative thinking in children of different cultures through some free activities such as drawing in preschool period. The first mentioned researcher depends on the differential analysis of more than twenty thousand free drawing in Tunisia and France, and a person's body draw; as well as (205) Saudi children, (211) Egyptian children, (255) Tunisian children and (193) French children. The researcher also analyzed the forms of motor language and graphic behavior sequentially. He used ethological reading for videos that show activities of more than a hundred children during the free drawings lessons. The researchers found a new tool that contains 16 levels; between 2 and 6 years old, in order to detect creative thinking of preschool children. As a benefit the researchers focused on test importance in distinguishing between individual problems, and those referring to social upbringing in early childhood.

Key Words: Cognitive scale, early diagnosis, creative thinking, differential and sequential analysis, intercultural comparison of children.

INTRODUCTION

The real wealth of any society is the human capital which lies strategically in a community of equal opportunities, particularly for children in preschool including talented creators. That explains the interest of many western countries; such as USA, Germany, Australia, Finland, Iceland to learn about this category and study stages of growth and welfare in various educational institutions (Balchin & et al, 2009) in (Gross, 2006, Nokelainen & et al., 2007, Trost & Sieglen, 1992, Feist, 2006, Freeman & Josepsson, 2002, Rahn, 1986).

In this context, the Arab Islamic States keen to discover gifted children from an early age by adopting measures to identify cognitive and non-cognitive excellence; particularly; those countries with good financial means such as Saudi Arabia, through of education, higher education, and other governmental and non-governmental associations; such as King Abdul-Aziz City for science and technology, which claimed participated in the National Committee for education which started talented detection-King Faisal University in 1990, depending on its strategic plan 2010-2016, as well as its first 2010-2011 Executive attention to pre-school children, so they could increase their presence probability in pre-school age by educational institutions as a strategic bet for a better future (ALECSO, 2000; Al-Rousan, 1996, 2006; Chakroun, 2008 a; Algughiman & Abdul Majid, 2008; Zuo & Tao, 2001; Vialle, Heaven & Ciarrochi, 2007; Sternberg & Davidson, 2005; Shih-Yu, 2008).

Recently, many tests, including more than 2000 French test for measuring talent and creativity, have been developed. Also, many tests have been used to measure intelligence and innovation as a means of identifying them, according to the characteristics of the Arab-Islamic environment, for example, Katel IQ test, sequential matrices, the formal IQ test, Stanford-Binet IQ test, Wechsler IQ measure for children, creativity interfaces art measurement, and Torrance test for creative thinking which can be used as Katel IQ test. This innovative test
has been standardized from the age of kindergarten to age of University (including the codifying of Ker� Amir Khan on the Saudi environment) and has been translated into thirty-four languages (including Arabic translation of Abdullah Sulaiman and Fuad Abu Hatab). There is also a certified guide refers to Ministry of education, and in King Abdul Aziz. In additional, Wechsler test for children has been codified (Wechsler, 1998) in Saudi Arabia, Kuwait, Bahrain and Jordan from age five to fifteen. Beside of these, there is McCarthy scale which has been modified in Jordan (PRID) for children from age 2, 5 to 8, 5.

You can add scale pride Preschool and Kindergarten Interest Descriptor by Silva Rim 1983 at the University of Wisconsin to detect talented, which has been parsed from some researchers, and adopted to identify gifted preschool in the absence of standard Arabic detection test (Al-Rousan, 1996, 2006). There is also a project in the Bureau of Education for the Gulf Arab countries to authoring and codifying Arabic scale, that target to detect and identify intelligence (Al Naфa, 2002), as well as Johnson talented list which was adapted to the Saud environment (Al Dumiaty, 2004). Searching in literature related to creative children shows that they show clear differences in growth patterns compared to their peers. In a study for Bryant (1989) on the characteristics of creative children (at an early age) found out that they characterized with learning passion, had tendency to work independently, excel their peers' information, excel thinking skills, deep questions, good memory, high focusing capacity, generating ideas, and a deep wealth of linguistic skills.

Despite above there is a lack of sufficiently directly applied translation results in the form of recommendations for the development of talented education in preschool due to the lack of available scientific tools to identify them in this age. That was considered by sixty-four experts from the most important challenges in the area of scientific research (Pfeiffer, 2003). And what had been raising this challenge in the Arab States such as Saudi Arabia is the existence of one study to assess scientific research on talent (Khalipha, 2005), compared to world attention through study (Heller & Schofield, 2000) to analyze the content of the research presented during scientific conferences organized by many boards and associations. In this International Conference on new Trends in education and their implications in the current search, we seek to formulate a new scale for the early identification of creative thinking of children in different cultures. At previous studies the theoretical and practical dilemmas posed the four hypotheses to search are:

I: Creative children in different cultures are sharing some thinking characteristics through graphic, language and motor expressions during the pre-school period.

II: Creative children are sharing some thinking characteristics by age through graphic, language and motor expressions during the pre-school period.

III: Creative children are sharing some thinking characteristics by sex through graphic, language and motor expressions during the pre-school period.

IV: Some creative children are featured some individual thinking characteristics through graphic, language and motor expressions during the pre-school period.

METHOD

Because of lack of methodology of psychological educational research interested in identifying early characteristics of creative thinking in different cultures, especially through children's drawings in the period which show every auto at home and in pre-school institutions (kindergarten and preparatory phase of primary school), the researchers will start to display methodology definition with a set of used concepts, some formulated software, and techniques. The researchers also will be limited in study of the three tables with a distribution of children according to age and sex variables, for different samples at Saudi Arabia, Egypt, Tunisia, and France.

Concepts

The two mentioned researchers suggested using the term of creative thinking in the current study with creative children, especially in several Arab Muslim communities (Saudi Arabia, Egypt and Tunisia) and Western societies such as (France), focusing on the cognitive tribal processes, which are necessary to start non-school creative learning through the organized, logical, space, and scheduled operations for the items set out in the pre-school stage, without ignoring other forms of motor and language expressions in free drawing activities.
Differential and Sequential analysis: The focus on the definition of creative thinking as the etho–cognitive approach shows that ethological component is the most important to current methodology of analysis; the first mentioned researcher analyzed continuously the behavior of French children from the beginning to the end sequential and entirely to the most important forms of speech, motor, language and graphic every thirty seconds. He describes what he sees in videos, and writes various units of personal forms of mentioned expression. For example, among motor units: Child takes a pen, raises his hand and changes color of pen, then alter the direction of paper drawing; among language units: the child asks a pen from his beer, or asks the teacher a question. These units are of great interest to the child’s relationship to his body and things, and those around him, whether young or old. Although graphic units can be linked to motor and linguistic units, it has been focused on sequential and differential analysis to draw general elements: (natural; Earth, sun, clouds, sea, wind, mountains, grass, flowers, trees..etc), and manufactured: (home, chimney, means of transportation… etc), and living organisms: (man, woman, bird, butterfly, dog…etc ), such as painting with dots, or lines and forms besides coloring.

Besides, analysis of the behavior of Tunisian children was more distinguishable, so results of Guezguez applied research have been used in the distinguishable linear analysis (Guezguez, 2000). Guezguez completed results rating from lowest to highest by the use of paper space according to content and organization of About 2500 - 3000 elements of free graphics for the children of Tunisian in (Sousse) and receives twelve levels: Those results enabled the first mentioned researcher to ensure levels, with about (20000) free drawings. For other samples in same Tunisian city (Sousse), Sfax and the capital (Tunis), as well as in France (Paris and Nanterre), Moving from pilot to applied dimension (Chakroun, 1996). Researchers explained those 12 stages of making free graphics in the two communities Tunisian and French. (Chakroun, Guezguez & Campan, 2000). Those results represent a reference to the current research, with the mentioned samples (Chakroun, Kasem & Hafiz, 2005).

Softwares
Alceste: Alceste is a French software can be used in English, mainly for analyzing text content (Reinert, 1998). After agreement with its author the first mentioned researcher applied it to analyze behavior (Chakroun, 2003). It enabled researcher to analyze factor of correspondence and Descending Hierarchical Classification (DHC) content of motor and linguistic behavior sequentially through ethologic read 52 the video of French children’s activity during free drawing in 4 maternity schools in Toulouse (table 1), and 50 Tunisian children during free drawing in 5 kindergartens in Sfax (table 2). Hierarchical classification has enabled researchers from dividing activity to contextual units’ initiatory (u.c.i) and units contextually of elements (u.c.e) by matrix (0 or 1) intersect contextual units horizontally with dictionary shortcut words contained in the program code. Factor Analysis of Correspondence (FAC) enabled to obtain linear representation of versus between categories as it’s’ most revealing words depending on $\chi^2$ (khi 2) and degree of freedom and endurance threshold.

Amado: Amado is a French software code can be translated to English (Risson, 1994). And its’ matrices enable sequential analysis of general and partial elements written for free various drawing of 52 French children.

SPSS: SPSS is E software, available in different languages including Arabic (Al-Najjar, 2010). SPSS enable comparing results of differential analysis according to final outcome of (205 male and 205 female), to 205 free drawings to Saudi children from kindergarten of Al Medina, (109 male and 102 female) for 211 Egyptian children, and to (255) free drawings of Tunisian children (male or female), and for (193) French children (Cf, table 3).

Samples
Researchers display various samples according to growth variables shared between different cultures; particularly age and sex. And display schedules by drawings (free or human) as approved analysis (differential and sequential for general and partial elements of graphic, motor and language expressions.
Researchers considered status of free drawing activity suitable for early identification of creative children. General and accurate analysis for different forms of expressions; motor, language and graphic (without placing it in testing position affect its' automatic behavior especially in preschool; that would make it possible to identify extent of contribution of the surrounding environments at home and educational institution, mosque, playgrounds, entertainment, and market, on the growth characteristics of creative thinking. (Bourassa, 1997), this focus on respecting Euclid topological relations and logical organization of determined elements. Also on technical creative side from drawing lines, shapes, and colors through respecting space regulation and projection relations between various determined elements. This analysis support differential diagnose for every creative child. Cultural aspect beside the growth factors (age, sex) interfere in differentiating between special forms children's present in a society without another, as the table 2 shows.

Table 1: Distribution of 52 French children by age & sex (differential and sequential during free drawing)

<table>
<thead>
<tr>
<th>Age/Sex</th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
<th>From 4.6 to 5 years</th>
<th>0</th>
<th>3</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3.6 years</td>
<td>12</td>
<td>11</td>
<td>23</td>
<td>From 5 to 5.6 years</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>From 3.6 to 4 years</td>
<td>7</td>
<td>5</td>
<td>12</td>
<td>Greater than 5.6 years</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>From 4 to 4.6 years</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>Total</td>
<td>27</td>
<td>25</td>
<td>52</td>
</tr>
</tbody>
</table>

Table 2: Distribution of 50 Tunisian children by age and sex of various behavior aspects during free drawing

<table>
<thead>
<tr>
<th>Age/Sex</th>
<th>Girls</th>
<th>Boys</th>
<th>Total</th>
<th>Of 4 - 5 years</th>
<th>12</th>
<th>6</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3 years</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>Of 5 - 6 years</td>
<td>8</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>Of 3 - 4 years</td>
<td>5</td>
<td>8</td>
<td>13</td>
<td>Total</td>
<td>22</td>
<td>28</td>
<td>50</td>
</tr>
</tbody>
</table>

Distribution of Tunisian preschoolers in (Sfax) is less accurate compared with French in (Toulouse). As the Presence of Tunisian children in kindergarten before 4 years is less dense than French children, & the Presence of Egypt and Saudi children by 4 years. Add to that low enrolment of children in pre-primary education in Saudi Arabia. To deal with privacy samples, limiting with age distribution to children between 4-6 years as table 3.

Table 3: Distribution of 205 Saudi children, 255 Tunisians, 193 French & 112 Egyptians by age and sex

<table>
<thead>
<tr>
<th>Country - Sex</th>
<th>Females</th>
<th>Males</th>
<th>Females</th>
<th>Males</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>61</td>
<td>62</td>
<td>41</td>
<td>41</td>
<td>205</td>
</tr>
<tr>
<td>Tunisia</td>
<td>152</td>
<td>89</td>
<td>10</td>
<td>4</td>
<td>255</td>
</tr>
<tr>
<td>France</td>
<td>92</td>
<td>57</td>
<td>28</td>
<td>16</td>
<td>193</td>
</tr>
<tr>
<td>Egypt</td>
<td>52</td>
<td>70</td>
<td>57</td>
<td>32</td>
<td>211</td>
</tr>
<tr>
<td>Total</td>
<td>357</td>
<td>278</td>
<td>136</td>
<td>93</td>
<td>864</td>
</tr>
</tbody>
</table>

The compared study of human body drawing; male and female for Egyptian, Saudi, Tunisian and French samples adopted differential analysis; to general elements (head, trunk and organs, etc.) and partial elements
(eyes, ears and nose from the head, etc.). It is graphic analysis of final drawing for children at request of educators in pre-school institutions. Researchers also focused on cultural characteristics of Saudi, Egyptian, and Tunisian communities as Islamic Arab societies have cultural characteristics compared with French society, which made them seeking to brief analysis of motor, language drawing expressions; such as how to use pencils coloring, and oral description of children on their drawings. As the combination of sequential expressions analysis of free human drawing, is considered a procedural representation of children's behavior.

FINDINGS & DISCUSSION

Researchers display results according to used software to study and gained results either sequential analysis or differential analysis or the two together to general and partial elements of free drawing and for motor forms and accompanying language during drawing activity to pre-school institutions. Results ensured existence of common properties to all children of different nationalities. At same time analysis; through used software (SPSS, AMADO, and ALCESTE) enabled from identifying differences among cultures, reconstruction, gender, and individuals. Results of prior analyses enabled to obtain cognitive scale of 16 levels, which is more accurate than prior of 12. New scale is for early identification of children's creative thinking properties compared with other groups of children normal, and late growth, between (2-6) years. It can be divided into 3 stages (Cf. Appendix 1). Partial obtained results will enable to identify the characteristics of creative thinking by each independent variable separately, received in hypotheses associated with differences among each society and its' culture, by age and gender, and between individuals ALCESTE software enabled from analyzing behavior of 52 French children, and compare their creative thinking with the rest; through graphic, language and motor expressions (dependent variable). According to ALCESTE; software which categorize 84% of the initial contextual units, and obtained 3 categories (Chakroun, 2008 a). Also researchers used more accurate report enabled to have 5 categories, refer to Hierarchical Classification Ascending (HCA), and Descending (HCD), as well as Factor Analysis of Correspondence (FAC). The first category 35%, classified by 3 categories, now been 2; natural and structured elements. Third category was 53% by 3 categories, now been divided 2; motor and language activities. Finally, living category 10% was split by 3, and remained unchanged in this search (Figure 1).

Figure 1: Sequential analysis of graphic for the general and partial elements of human body
Note: Horizontal numbers (1-8) refers to vertically arranged elements display (according to height of each bold graph above each light graph in the matrix), where head appears first, trunk, upper organs: left-right, & lower organs: left-right, left foot then right foot, then left hand and right hand and neck and finally fingers.

Researcher (Chakroun, 2008) benefits from those results and from similar previous results obtained by the same two softwares from Tunisian sample (5 categories through analysis 60% of primary contextual units) consisting of 50 children (see table 2.), and also with using SPSS software for ANOVA among age, sex and culture (see table3). The focus will be on results help in early identification of children's' creative thinking, which would achieve an important objective of this research, in particular, issue of proposing new methods to discover creative children. Results obtained will draw a new way to help parents and educators not just to discover creative technical capacities, but also to discover the level of creative thinking in its graphic, motor and language components, whatever society in which children live. Important results are:

- Emphasis on age effect; drawings of 5 years children distinct generally comparing with 3 years, almost with same properties to Tunisian and French samples in drawing stages; beginning with rectangle and change paper orientation to a longitude while drawing a house, a window lines, roof, door, and chimney.

- Girls superior to boys in drawing, in particular drawing natural and living elements, while boys tended to motor activities, especially before 4 years. This can be seen in results of FAC according to the 5 categories. So can combine activism category and first 4 levels of geometric shapes; previously displayed, with language activities category and 3 levels of narration which characterize 4 years. As independent variables for these 2 categories through FAC, this category contains large number of children compared with the rest of categories of natural, structured, and live elements, which were found; many girls in samples of Tunisia and French (Maccoby, 2002, Kraft & Nickel, 1995).

- Despite children involvement of different nationalities in drawing human body with the same oval or circular shape of male and female before 5 years (level 7 in scale among the 16 levels), French had maintained this property after this age, and didn't differentiate between sexes, Children in preschool usually- in Arab and Islamic communities- subject to stylized models in drawing human and bird, what been denied from creators because they produce different drawings full of fantasy and details although their societies determinations.

This conclusion has been confirmed by results of motor and language analysis for children during free drawing and human drawing activities. Besides, there is a difference between French children and the rest of children in their treatment with drawing tools such as pencils. Despite the behavior of some French creators sometimes marked with isolation in 3 years old, the non French children interested in pens more than their peers and educators. Which might be due to the different possibilities French public and maternity schools spending, and to free possibilities provided by State and local groups, compared to Tunisian kindergartens which are mostly civil so tend to economize in expenses? For example, it does not provide liquid ink coloring pens even pencils and colored pens without liquid ink. This difference in use of pens explains that French culture gives more freedom to children in coloring pens using. This analysis fit with reality of Egyptian, Tunisian State limited economic capabilities, which does not match with the reality of Saudi Arabia with high economic possibilities, in particular by the provision of free equipments and textbooks. Thus matter is more prevalent with common mentality that enable children from free and secure feelings, ideas and dreams expressing, without adherence to stylized models usually children respected when drawing. Although there are some cultural differences in forms of expression, it is not more than individual differences among children. Despite some universal properties as well as common cultural characteristics within every society.

There is respect for line by land or sky or mountains line (level 11) and trend, especially in animals and humans through legs direction towards right or left without coordination with face direction forward, also, drawing hair with some details, as a reference to the middle segment or two sided, as well as drawing neck (level 12), and going toward coordination between the direction of face, direction of legs, and sometimes the direction of hands; as some talented drawn biotically in the form of a rose (level 13), and respect for 3 dimension. Taking
into consideration the depth of paper space as shown in figure psychology school (level 14) and proportionality between built and natural elements, especially for drawing body, or between body parts (level 15), also drawing by multiple, by human movement, and matching colors, particularly in human face and natural visual realism elements according to Luquet terminology (Luquet, 1913). Or moving from respecting Euclid relations to respect projective relations (level 16) according to Piaget and Inhelder (1949) terminology.

This is what indicated by some interested studies with technical growth that reached; the talented color use compared to normal children at ages 4, 6, 8 and 10 years, wasn't different in the aforementioned general characteristics but in partial characteristics and details of elements (Porath, 1997). Researchers added fiction and biological properties as previously described; so these levels mentioned for free drawing with level 10 on transparent, found frequently among creators; There is precise in drawing what inside house or fetus in the belly of mother, or favorite means of transportation, which is a respecting to realistic mind, represents add of current research for creative thinking scale consisting of 16 levels, compared with linear scale consisting of 12 mentioned levels. There is an agreement between two scales in the first 9 levels, despite differences in adoption distinguish analysis only, or that analysis beside the sequential analysis that characterize current study, that not only study the graphic activity as the final result of the drawing.

CONCLUSION & SUGGESTIONS

Accepting research 4 hypotheses emphasized contribution of life factors enabled formulation of ways and means of suitable, easy to use, to identify, and choose appropriate creative psycho pedagogic model for preservation and development. Many studies confirmed functional interaction between the various factors and their influence on written expression among children (Lurçat, 1974, Golomb, 1993: 1994, Wilson, 1997). In General, factors of sex and age (associated more with extensive developmental aspect) interact with cultural factor (associated more with the psychological, social and economic aspects) to influence levels of creative thinking growth at pre-school, as confirmed by a field study with a Tunisian sample (Ben Rejeb, 2001) and as evidence by this research with samples of different nationalities.

Hence, Educators at kindergartens can also adopt differential and sequential analysis to forms of expressions; especially graphic expression as a means of constitutive evaluation, and to propose different, qualitatively activities special for creators. Educational psychological model for creators must be depending on self-learning model, versus conditional school learning model: conditional-learning (Guezguez, 2001), which would raise their artistic creations as well as their cognitive and behavioral abilities. Principal suggestions are:

- The need to not only one measure, particular measures and metrics of traditional creativity tests in identifying creative children, as indicated to limitations of these criteria to identify students (Al-Meliguy, 1972).
- The importance of identifying creative children in pre-school through their actual performance in their activity at home, kindergarten, mosque, Family parks, public libraries, exhibition spaces, recreational, and cultural festivals, ...etc. Where a child feels safe, that does not alter his or her real behavior (Al-Qoraity, 1981).
- Training educators in pre-school to avoid adoption of conditional school learning program, especially with creative children; to help them grow creative abilities in a secure environment. So they must adopt appropriate programs as supposed by Clark (1983), or as the self learning model program proposed by researcher (Chakroun, 2008), children with disabilities (Chakroun, 2008 b), talented children (Chakroun, 2008 a).
- Call to focusing on evaluation and criterion means to identify, to develop their artistic and creative talents and prepare them to engage in learning, according to nature and rapid of growth of children; especially creators, with the general problem (Palaza, 1979; Feldhusen, 1981; Winebrenner, 1992) particularly in Arab and countries (Abu Allam & Al Omar, 1986), of putting creative, talented and gifted in advanced groups (Acceleration) or in separate schools (Grouping) or in regular classes with (Enrichment) or combined as suggested by Goodenough (1956) who considered general trend in many countries of the world (Al Shakhs, 1990; Al Shakhs & Al Sartawy, 1999).
Thus, for Privacy and Social Commission of pre-school, is best to keep the creative and talented in regular classes in kindergartens, because importance of social, emotional and moral interaction. The solution is to choose appropriate form of education responsive to private requests for gifted at early age, depending on speed and pace of development and innovation as the quantity and quality. Same challenge is presented for normal and late growth children; since many of the strategies emphasize the need for universal generalizing of pre-school (ALECSO & World Islamic Advocacy Society, 2006). This can be seen through operational plan for education reform project in Tunisia for the year 2002, which sought to circulate preliminary year at the beginning of 2009, as well as Saudi strategic plan for 2020, despite of the delayed dates compared with educational reform projects in Western countries, which is an initiative to provide opportunities for parity, as noted in French Ministry of Education 1997 statistics; circulation 100% for presence of children in kindergarten at 3 years, with a proportion of children 2 years ago (Chakroun, 2010). Which would explain that creativity, study and care not a matter of only academic competence but also a matter of political, economic, cultural and security choices, not only according to a military sense but rather intellectual concept in particular.

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APPENDIX 1: Levels of free drawing

I - Phase of the additive geometrism (from 3 to 4 years)
   1 - Doodling (Gribouillage) and some features on the space of the sheet **with only one color**
   2 - Many **features** on all the space of the sheet **with several colors**
   3 - Features in vicinity forming of the surfaces **filled without angles**
   4 - Angular **forms** reflecting a total representation of the elements **with identifiable outlines**

II - Phase of the additive enumeration (from 4 to 5 years)
   5 - **Simple Form repeated in series** without logical correspondence. Catch is represented by a round (head and trunk), long features (lower limbs and superiors), and short features (hair).
   6 - Complex forms of drawn elements without logical correspondence, **juxtaposition of complex elements**.
   7 - **Scene without logical correspondence**, with the portrait of the Catch appears the trunk in the form of a round or of an oval in the same way among the French children and Tunisians.

III - Phase of the logical-spatial-temporal structuring (from 5 to 6 years)
One distinguishes (III A) firstly characterized by logical correspondence between, whole and secondly (III B) characterized by space-time structuring in a space, Thus the progression of the under-levels as follows:

   8 – **Simple logical scene** of landscape, a portrait, or a house. The principal components of the object represented appear in it without a great sexual differentiation of the Fellows among the French and Tunisian.
   9 - **Logical scene complexes** without space structuring. Sexual differentiation distinguished by clothing, with symbolization from the trunk from the man by a square or a rectangle and that from the woman by a triangle.
   10 – **Transparency** of some elements.
   11 - **Alignment** of elements in space. Alignment is characterized either by the use of bottom of the sheet, or by the tracing of the line of the ground, the sky and sometimes of the clouds or the mountains.
   12 - **Directionality** and **orientation**; appears according to orientation of animals, smoke or of feet of catch.
   13 - **Profile** of human body; Space-time organization appears have profile of Catch according to more **points**.
   14 - **Perspective** of house, child not to be limited to perceptive of elements but so operational aspects.
   15 - **Spatial organization** and **proportionality**.
   16 - At end of level, child worry about conformity of drawing with a real model; such **conformity of colors**. It is a criterion of the passage of intellectual realism to visual and topological reports with Euclidean and projective.
WHAT DO PRIMARY PRE-SERVICE TEACHERS THINK ABOUT TECHNOLOGY USE IN CLASSROOMS: A CASE STUDY OF TWO PRIMARY EDUCATION PRE-SERVICE TEACHERS

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Abstract
This study was designed to examine what primary pre-service teachers think about technology use in classrooms. Participants included one science education and one mathematics education pre-service teachers who are senior students at Boğaziçi University. Participants were interviewed in depth about their opinions on technology use in classrooms. Interview transcripts were analyzed, and the results revealed seven main themes: general teaching pedagogy, general technology perception, technology education, expectations from undergraduate education for professional development in technology, expectations from technology in classroom, values of technology use in classroom, cost of technology use in classroom. The findings are discussed in relation to recommendations for helping pre-service teachers develop appropriate skills to use technology in their classrooms.

Key Words: Technology use, primary pre-service teachers, case study.

INTRODUCTION

Although, technology can be an effective tool when used properly in teaching and learning, intended technology use is still surprisingly low in classrooms. This suggests that technology use is affected by certain barriers, including availability of facilities and resources, teacher knowledge, skills and beliefs about technology integration and institutional support. According to Becker (2000), computers are appropriate instructional tools in schools where teachers have convenient access to computers, feel less pressured for content coverage, and do not believe in a ‘traditional transmission-oriented approach’ (p.11). On the other hand, expecting that all schools have these three conditions is not a realistic idea. Thus, computer based technology tools which are appropriate to foster learning have not been widely used by either students or teachers. (Cuban, 1986, 2001; Fishman, Marx, Blumenfeld & Krajcik, 2004; Kent & McNerney, 1999). This means technology innovations are not adopted because of some reasons. In their study, Hew and Brush (2007) defines “a total of 123 barriers affecting the use of computers in schools from the review of past empirical studies and they classify them into six main categories: (a) resources, (b) knowledge and skills, (c) institution, (d) attitudes and beliefs, (e) assessment, and (f) subject culture” (p.226).

One of these barriers may be considered as the major cause of technology innovations failure; “teachers’ beliefs”. Conditions for the innovation integrations such as access to technology, increased training for teachers, and an encouraging policy environment would be met but still owners of the innovations need to take some additional issues into consideration. Ertmer (2005) argues that teachers’ beliefs and their beliefs about technology specify the type of technology use for instruction. Another research also highlights the centrality of teachers’ and students’ beliefs about teaching and learning in determining the use of the technology (McRobbie & Thomas, 2000, as cited in Thomas 2001). Thus, aim of this paper is to investigate one of most important barriers of technology integration into classrooms and understand what primary pre-service teachers think about technology use in classrooms.
METHOD

Participants

Law, Stewart, Letts, Pollock, Bosch & Westmoreland (1998) states that “Sampling in qualitative research is purposeful and the process used to select participants should be clearly described. Purposeful sampling selects participants for a specific reason (e.g., age, culture, experience), not randomly” (p.5).

Thus, two senior students from primary education department were chosen for that purposes; the participants were graduated from same high school, they both want to be a teacher and interested in education and technology, they are successful students in their departments (average 2.50 GPA), and the researcher knows them since one year so developing rapport for the study would not be a problem.

Procedure

The participants were informed that the researcher wants to learn their opinions about technology use in classrooms so she wants to make interviews with them. No one refused to participate and none of the participants withdrew their participation from this study.

A semi-structured interview schedule was designed and used to obtain information about participants’ opinions on technology use in classrooms. In both interviews, questions were asked about general teaching pedagogy, personal experiences related with technology, general technology perception, undergraduate education about technology, and expectations from technology (see in Appendix A).

Interview questions were unstructured and designed to promote open-ended responses. The first interview with the participant from science education department was approximately 27 minutes and the second interview last 28 minutes. Interviews were video-recorded with the consent of participants and transcribed. First interview transcription included ten pages and 3699 words and the second interview transcription included ten pages and 2736 words.

Data Analysis

After the first transcription, all narratives were read by the researcher for several times and coded in detail with long expressions. 53 codes developed during this phase. After this work, the researcher located some initial themes. Then, the second transcription was scanned; words and phrases used by participants were coded in detail in relation with first codes and themes. Researcher focused on connecting themes and finding links in the data after open coding and finding initial themes stage completed (see in Appendix D). In the final work, the researcher reread the data and assigned quotations that illustrate the final themes. All coding was checked by another researcher to guarantee it was coded accurately.

RESULTS

The analysis of interviews with two pre-service teachers revealed seven main themes: general teaching pedagogy, general technology perception, technology education, expectations from undergraduate education for professional development in technology, expectations from technology in classroom, values of technology use in classroom, cost of technology use in classroom.

General teaching pedagogy

Both of the participants mentioned that they developed constructivist pedagogy during their undergraduate education and difficulty of practice what they have learnt in public schools’ environment. The participant from science education is labeled as A.B and the participant from mathematics education is labeled as D.E.

“Our undergraduate education provides us some skills which we can use in private schools but in a public school it is too difficult.” (A.B)
After the researcher asked a question like “do you mean we learnt that science should teach with a constructivist approach, there should be collaborative learning but it is difficult to teach so?”, the participant explained her standpoint with these sentences:

“I do not feel that I should have a constructivist lenses to employ collaborative learning, as a teacher I am able to understand that I should make my students participate to lesson, I do not need to walk around and say ‘Hey I am a constructivist.’” (A.B)

Then she added that

“I think the most important thing is the student’s interaction with the lesson, I may have all facilities but the student may not participate. Even if she do not have much facilities a teacher can make her students feel that the lesson is important. If the students do not care about the lesson what I might do with facilities?” (A.B)

The other participant also answered the question about her general teaching pedagogy as follows:

“I will start as ‘constructivist’ owing to our undergraduate education… Students should see mathematics in their lives by the way I believe that teaching will be more effective, aspirational but do there need to be just constructivist education?, I think no, because I say pursuant to my internship experiences, something may go off half-cocked.” (D.E)

General Technology Perception

The participants’ expressions about technology use were generally positive and they both see technology as an important tool for teaching in today’s world. They see the technology as a progressing issue and they feel themselves obligatory to follow this progress.

“Technology support is sine qua non. In today, everything has been changing so rapidly, you should not fall behind it. If you fell behind, you really would fall behind. I mean, you should follow these changes.” (A.B)

The other participant also adds that

“I think there is an absolute need for technology because, for example some schools do not have necessary materials, but how will students learn? Teacher may use technology to show something that he/she cannot show in the classroom.” (D.E)

In addition, the participant from science education department mentioned about how her technology perception changed after a course she attended with these sentences.

“Before our teacher said us ‘use technology based tools’ we had thought technology use as making presentations, showing pictures and videos. However, when the teacher talked about ‘using technology based tools’ we thought that “Hmm we need to use something which students engage in actively.” (A.B)

This evidence shows us that undergraduate courses have a major effect on students’ perception of technology and it is important to guide them to develop understanding for high level technology use in their classes.

Technology Education

Both of the participants stated that they have attended the course ENG101 which is a course aims to provide students general computer use abilities such as using Microsoft Office and using Access to enter students’ notes to the system. The participant from mathematics education department stated that she took many courses related with technology including ENG 101, computer based mathematics education, CET 488 (Special Topics in Computer & Instructional Technologies ), and PRED581 (Microworlds in Math Education).
Expectations from Undergraduate Education for Professional Development in Technology

The participants stated that they wish to take more courses related with technology during their undergraduate education and want to learn more educational programs which they can integrate their teaching practices to enhance learning.

“I took ENG101 course, it was a general course about Microsoft Office, this is something we already knew, we need to know these kind of things to prepare homework, I did not take a course by which I could learn new programs to integrate my teaching techniques.” (A.B)

“I think new contexts for technology related courses should be developed because preparing something in PowerPoint or excel are general skills, we learnt preparing materials for mathematics lessons but there are many programs, I wish to learn all of them, I wish to do something related with mathematics by using programs which I do not know.” (D.E)

The participants also mentioned about a kind of insufficiency because of thinking they do not have appropriate knowledge about technology supported tools.

“While I was preparing a lesson plan which includes technology based tools, I found a tool by which students prepare their own Flash animations related with chemical bonds, they prepare this on their own, as a teacher I could not prepare something like this... I wish I could.” (A.B)

Expectations from Technology in Classroom

The participants have several expectations from technology as teacher candidates who want to have active students in their classes and to support complex learning practices in their future classrooms. These are some of the expectations from technology in classroom interpreted by the researcher; being appropriate for the educational objectives, not being too complex, providing a context for practices which cannot be proceeded in classroom environment, helping teachers improve students’ engagement, not making teachers’ practices more difficult, being adaptable to many subjects, supporting teachers’ other activities such as providing a work-sheet for the activity. The participants’ expressions about these expectations are as follows.

“I found a web-site that have programs about different contexts, there are headings about physical science, chemical, earth etc. and there is a activity for each subject. There is again a work-sheet in the program, – I think this kind of programs should be developed. - key points are given to the students so they do not break loose from lesson. It provides an opportunity to investigate program at the beginning and then it guides the students like do this in this step, do that... so the program helps students to develop scientific thinking abilities.” (A.B)

“Another example one of my friends used is about mass, center of gravity, he compare these concepts by the help of program. Then again in the same tool there are planets, for example when you click Saturn, the environment shows the characteristics of Saturn. I mean I mention about these kinds of programs by which you can make your lesson more effective.” (A.B)

“I believe that the program should serve teachers’ purposes, should not keep the student apart from the program, actively I mean it must serve the purposes, and should not suspend students from the subject.” (A.B)

“Suppose that I want my students practice the subject after I taught. If I chose a game which is not appropriate for my practice aim, it would be unnecessary; it would not serve my purposes. The students would play game and nothing. This is not advantageous, it must serve the purposes.” (D.E)

“I believe that it must not make something too complex, it must be related with what we want to gain, it would be too structured to say do this, do that, but it must be at an equal point, it should prevent students to lose attention.” (A.B)

“I also should not think over mechanism of program, it should not make something hard for me. It should not make students off-task.” (A.B)
Values of Technology Use in Classroom

The participants’ expectations from technology show what they assign to technology use. When they asked about what does technology add to learning? They mentioned about two values; facilitating students’ learning and providing a visual context.

“We say that we need to integrate technology but it is so limited, I mean there would be a program but it must not mean that ‘Okay I used it and I am done.’ The most important thing is if it helps students learn, how it would be more effective... There are really good examples also which I mentioned, it really helps students learn. This is the most important thing I think.” (A.B)

“Some schools do not have necessary materials to teach mathematics. You may use internet to show something at this point, you may access these materials on internet or you may use some kind of tools to draw something or there are theories in mathematics and proofs students have to believe and memorize them but they need to be convinced. I may use technology to help my students be convinced and to dream.” (D.E)

Cost of Technology Use in Classroom

Both of the participants stated that they want to use technology in their classrooms but there are some barriers to use of technology in classrooms. They mentioned about; limited facilities and time, need for more time and computers for good tools, being too complex, causing loss of time when not using effectively, need for infrastructure and support from school administration. The participants’ expressions about these costs are as follows:

Limited facilities and time.

“I wish to use technology supported tools but it depends on facilities and time.” (D.E)
Researcher: “Do you mean infrastructure with the word facilities?”
“Yeah. The schools’ infrastructure because there are still schools which do not have computers. If I am a teacher such a school, I will try to do something but the school should support” (D.E)

More time and computers for good tools.

“(Mentioning about a good technology supported tool according to her...) but to be able to use this tool in my classroom I need to have computers for myself and for other students or we need to be in a computer lab. Will I have these conditions in my future school?” (A.B)

Being too complex.

“That is, for example, you need to use a program, understanding that program’s mechanism is a job, I mean as a teacher I need to struggle to understand ‘Hmm that is so’. Thus, you give effort more than context to mechanism.” (A.B)

Causing loss of time when not using effectively.

“Technology use may cause loss of time. If the teacher does not use tool effectively, it causes loss of time only. Students do not learn anything.” (D.E)

DISCUSSION & CONCLUSION

Research shows that there are many barriers to integrate technology in classrooms and teachers’ beliefs and perceptions are one of the most important barriers. (Ertmer, 2005; Hew & Brush, 2007; Thomas, 2001) Little research has been conducted to examine primary pre-service teachers’ opinions about technology use. The aim of this study was to interview primary pre-service teachers about their technology education and experiences, and their general opinions to examine the factors that facilitate technology use or cause negative feelings about technology use. Thus, one science education and one mathematics education teacher were interviewed in depth.

Seven main themes were identified as important for primary pre-service teachers’ opinions about technology use; general teaching pedagogy, general technology perception, technology education, expectations from undergraduate education for professional development in technology, expectations from technology in classroom, values of technology use in classroom, cost of technology use in classroom. According to Becker
(2005) computers are appropriate instructional tools when teachers do not believe in a ‘traditional transmission-oriented approach. In this case, both of the participants stated that they believe students should be active and computers may help them make their students more engaged. The participants’ expressions about technology use were also positive; they stated that they want to use technology in their classrooms to have more participated students and interesting activities.

However, participants see their technology education as inadequate, actually the participant from mathematics education department had more technology related courses and see more adequate her technology education in comparison to the participant from science education department but both of the participants stated that they wish to take more courses and learn more technology supported tools. Thus, the participants have expectations from undergraduate education for professional development in technology. One of the participants also stated that her technology perception had changed after a course she took, she gave a new meaning to technology use rather than just preparing presentation or showing a video. This evidence shows us that undergraduate courses have a major effect on students’ perception of technology and it is important to guide them to develop understanding for high level technology use in their classes. Due to the fact that, primary education department should provide more opportunities to their students to develop themselves in technology field and may provide more selective courses related with technology.

In addition, the participants have some expectations from technology; they expect technology to support their activities as a teacher, and help them increase students’ participation in the classroom. They also think that tools should be appropriate for their educational objectives and support them by providing a work sheet, for example.

The participants also mentioned about two values they assigned to technology; facilitating students’ learning and providing a visual context. They stated that technology can help them perform activities which they cannot set in a classroom environment. Both of the participants were aware of some infrastructure problems in public schools and mentioned about costs of technology use. They mentioned about need for more time and computers for good tools, causing loss of time when not using effectively, need for infrastructure and support from school administration. However, both of the participants were positive about the idea of overcoming these costs.

LIMITATIONS

This study is conducted as a novice qualitative research to understand pre-service teachers’ opinions about technology use in classrooms. The researcher aims to do a preliminary study which would be helpful to develop better studies further to understand teachers’ knowledge, beliefs and attitudes about technology. As a beginner researcher, there may be many issues which the researcher could not take into consideration. These are related with four techniques of Kuzel and Like (1991) that the researcher may use to increase the validity of findings.

Member checking. During the interview the researcher asked many “Do you mean?” questions and tried to be sure about what the participant mention about. Thus, the researcher tried to paraphrase and summarize participants’ sentences. Unfortunately because of limited time, transcriptions could not reported back to participants to ask for their comments.

Disconfirming evidence. According to writers this technique includes looking for different ideas from different participants. If the researcher would make interviews with different participants for example with people who do not want to be a teacher or with people who has lower GPA’s than average, there would be conflicting data.

Triangulation. The researcher asked their participants to give one of their lesson plans which include technology in it. The aim of the researcher was to have different data sources and to see if the participants could include their opinions in lesson plans. Unfortunately, one of the participants stated that she have never prepared a lesson plan including technology because her internship school do not have appropriate facilities for technology use. The other participant sent the lesson plan which includes the technology supported tool she
mentioned during interview. This helps the researcher to gain a deeper understanding about her expectations from technology and showed that she does really use technological tools which she assigns as appropriate.

**Thick description.** The researcher tried to give detailed descriptions of her own interpretations before explaining main themes and to include detailed explanations of the method and procedures followed during research.

There are some other limitations of this study. There was limited time in which conducting a qualitative study is too hard, so reviewing interview questions, sending transcriptions to participants to ask for their additional comments could not be possible. If there was appropriate time, additional interviews would make with different participants.

The strength of this study was that the use of un-structured interviewing allowed for new themes to arise in order to provide a more thorough understanding of the participants’ opinions about technology use. In addition, ethical considerations were taken into account, participants were informed about the study, and they were convinced that nobody will learn who they are.

Overall, it is recommended that primary pre-service teachers’ opinions about technology use should take into consideration to develop teachers who support technology use instead of being a barrier to technology integration. This study also suggest that undergraduate education should provide students more selective courses related with technology for professional development in technology use in classrooms.

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**REFERENCES**


APPENDICES

Appendix A

Interview Questions for the Participant from Science Education Department

1. Kısaca kendini tanıtabilir misin? Eğitimin, mezun oluncaya ne yapmak istediğin...  
2. Fen öğretimine bakış açısından genel olarak bahsedeabilir misin? Inquiry gibi zor beceriler nasıl öğretilmeli?  
   (Teknoloji desteği?..)  
3. Daha önce teknoloji ile ilgili herhangi bir ders aldın mı? Kişisel olarak teknolojik yeniliklerle ilgili misin?  
4. Lisans derslerinde Fen öğretiminde teknoloji kullanımla ilgili yetenekte bilişken kazandırıldığı düşünüyör musun? Nasıl? Örnek verebilir misin?  
5. Daha önce hiç Fen alanında kullanılan teknoloji destekli bir araçla çalıştım mı? (Galapagos Finches, WISE, WorldWatcher gibi...) Ne amaçla çalıştım? Nasıl bir deneyimdi, görüşlerin neler?  
6. Öğretmen olduğunda bu araçları kendi derslerin için kullanmayı düşünür misiniz? Neden? Nasıl?  
7. Fen öğretiminde teknoloji desteği neden önemlidir?  
8. Teknoloji kullanımının zorlukları neler olabilir? Öğretmen olduğunda bu zorlukları karşılaştığınız düşünüyör musun? Bunları aşmak için neler yapılabilir?  
10. Ders ortamında teknoloji kullanımının olumsuz etkileri olabilir mi? Neler olabilir? Nasıl aşılabilir?  

Interview Questions for the Participant from Mathematics Education Department

1. Kısaca kendini tanıtabilir misin? Eğitimin, mezun oluncaya ne yapmak istediğin...  
2. Matematik öğretimine bakış açısından genel olarak bahsedeabilir misin? Zor beceriler nasıl öğretilmeli?  
3. Daha önce teknoloji ile ilgili herhangi bir ders aldın mı? Kişisel olarak teknolojik yeniliklerle ilgili misin?  
4. Lisans derslerinde Matematik öğretiminde teknoloji kullanımla ilgili yetenekte bilişken kazandırıldığı düşünüyör musun? Nasıl? Örnek verebilir misin?  
5. Daha önce hiç Matematik alanında kullanılan teknoloji destekli bir araçla çalıştım mı? (Logo, GSP, Scratch gibi...) Ne amaçla çalıştım? Nasıl bir deneyimdi, görüşlerin neler?  
6. Öğretmen olduğunda bu araçları kendi derslerin için kullanmayı düşünür misiniz? Neden? Nasıl?  
7. Matematik öğretiminde teknoloji desteği neden önemlidir?  
8. Teknoloji kullanımının zorlukları neler olabilir? Öğretmen olduğunda bu zorlukları karşılaştığınız düşünüyör musun? Bunları aşmak için neler yapılabilir?  
10. Ders ortamında teknoloji kullanımının olumsuz etkileri olabilir mi? Neler olabilir? Nasıl aşılabilir?
THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE, LANGUAGE LEARNING STRATEGIES AND ENGLISH PROFICIENCY AMONG IRANIAN EFL UNIVERSITY STUDENTS

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Abstract
The primary objective of this study was to explore the effects of emotional intelligence and use of language learning strategies on English proficiency among Iranian EFL university students. The participants were 135 undergraduate students in Hormozgan province in Iran majoring in English Teaching and English Translation from Islamic Azad University. This study employed correlation and regression methods for data analysis. A series of instruments were used to obtain the related data including Nelson Proficiency Test, Bar-On Emotional Intelligence Questionnaire and Strategy Inventory for Language Learning (SILL). The results revealed that there was a negative relationship between emotional intelligence and English proficiency but a positive relationship was found between English proficiency and use of language learning strategies. Metacognitive and affective strategies tended to affect English proficiency more. Social strategies were the least effective.

Key Words: Emotional Intelligence; Language Learning Strategies; English Proficiency

INTRODUCTION
Since late 1970s, there has been a bulk of research indicating that the focus of present educational systems is on rational and cognitive aspects such as memory and problem solving and that emotional mind has received little attention and its important contributions have been neglected (Epstein, 1998; and Nelson and Low, 2003). Students who receive higher intelligence quotient (IQ) scores are usually considered more intelligent. Recently, however, several researchers like Thorndike, Goleman, Mayer, Salovey, Caruso, Stern, Bar-On, to mention a few, have focused on a different dimension of intelligence called emotional intelligence (EI). Emotional intelligence refers to the capacities to recognize and regulate emotions in ourselves and in others. EI can be as much powerful, and at times, more powerful than IQ in predicting success in various life challenges (Goleman, 1995). “In distinguishing successful people within a job category or profession, EI emerges as a stronger predictor than IQ of who, for instance, will become a star, salesperson, team head, or a top-rank leader,” (Goleman, 1995, p. 34). Goleman states IQ can sort people before they start a career; it determines which fields or professions they can hold. To learn which individuals rise to the top or which individuals fail, however, IQ ‘short circuit’ and EI proves to be stronger predictor of success (Goleman, 1998, 2001).

Emotional intelligence is a set of acquired skills and competencies that predict positive outcomes at home with one’s family, in school, and at work. People who possess these are healthier, less depressed, more productive at work, and have better relationships, Goleman (1995) contends. He defines emotional intelligence in terms of the ability to love and be loved by friends, partner and family members. Emotional intelligence is increasingly relevant to the organizational development of people, because the principles of emotional intelligence provide a new way to understand and assess people’s behaviors, management styles, attitudes, interpersonal skills, and potentials. Serrat (2009) sees the emotional intelligence as an important factor in human resources in terms of “planning, job profiling, recruitment interviewing and selection, management development, customer relations...
and customer service, and even more” (p. 50). He concludes that emotional intelligence represents an ability to validly reason with emotions and to use emotions to improve thinking. EQ/EI, as a relatively recent behavioral model, enables us to perceive, use, understand, and manage our emotions (Salovey & Mayer, 1990). Although different competing and sometimes conflicting components have been integrated into emotional intelligence, this construct has offered the potential to integrate the reasoning of a person’s cognition and emotion.

Recently more attention has been paid to the effect of emotional intelligence on academic success in education (Elias, Arnold, & Hussey 2003). Nevertheless, as Brackett and Katulak (2007) state, only few studies have been conducted to explore this concept in contexts where English is spoken as a second or foreign Language (ESL/EFL), given the idea that the emotional intelligence serves both internal mechanisms and external environment in the process of language learning (Goleman 2001). Earlier, Goleman (1995) held that roughly 80 percent of the variance among people in various forms of success that is unaccounted for by IQ tests and similar tests can be explained by other characteristics that constitute emotional intelligence. He has defined emotional intelligence as including “abilities such as being able to motivate oneself and persist in the face of frustration, to control impulses and delay gratification; to regulate one’s moods and keep distress from swapping the ability to think; to emphasize and to hope” (p. 34). Later, he reformulated his first definition of emotional intelligence and broke down emotional intelligence into twenty-five different emotional competencies, among them political awareness, service orientation, self-confidence, consciousness, and achievement drive (Goleman, 1998).

What is Emotional Intelligence?

The early Emotional Intelligence (EI) theory, sometimes referred to as emotional quotient, was originally developed during the 1970’s and 80’s by the work and writings of psychologists Howard Gardner, Peter Salovey, and John Mayer (Lall, 2009). Later this notion formally became the center of interest with growing emphasis on research over the interaction of emotion and thought in the field of psychology in 1990’s (Grewal & Salovey, 2005). The history of EI originated from the concept of social intelligence. Thorndike in 1920’s viewed EI through the lens of social intelligence and mentioned that social intelligence is the ability to empathize with others and act wisely in human relationships (cited in Goleman,1998), but his views were not taken seriously until years later. In 1948, emotional thought was considered to be in the realm of intelligence.

No serious attempt was taken in this field until the mid years of the 1980’s, when Thorndike’s view was born again in the works of Howard Gardner (Goleman, 1998). Gardner (1983) introduced eight different types of intelligence, one of which, the personal intelligence, made way for the extensive development of EI. Finally, in 1990, Mayer and Salovey, based on Gardner’s view and emphasis on individual differences, introduced their complete model of EI and defined it thoroughly (Bar-On, 1997). In fact, EI is largely accepted as the ability to understand and apply the knowledge created from our emotions to aid effective functioning, reduce the impact of stress, and enhance relationships.

Emotional Quotient as a Measure of EI

According to Bar-On (2004), emotional intelligence is "an array of noncognitive capabilities, competencies, and skills that influence one’s ability to succeed in the coping with environmental demands and pressures” (p. 111). For the first time, Bar-On (1988) coined the term emotional quotient (EQ) as a counterpart to IQ, that is, to cognitive ability. Bar-On thought of EQ as representing a set of social and emotional abilities that help individuals cope with the demands of daily life. As he believes, EI addresses the emotional, personal, social, and survival dimensions of intelligence. EI and emotional skills develop over time, change throughout life, relate to one's potential for performance, are process-oriented, and can be improved through training (Bar-On 2004).

Bar-On (1997) suggested that since EI is an important element in one’s life showing and predicting success, there is a dire need to measure, operationalize, and quantify this construct. In fact, finding a way to measure and enhance EI seemed to be inevitable. In the year 1997, Bar-On, using his psychological experiences, made his EQ questionnaire which is an appropriate test to measure EI. In his definition, EI is a collection of capabilities, competencies, and non-cognitive skills that have an effect on a person’s abilities to gain success in the face of environmental pressures. In other words, he believed that EI is the ability to understand emotions and how such emotions influence interpersonal relationships (Bar-On, 2000).
Salovey and Mayer (1990) defined EQ as a scientifically testable intelligence. Their definition of EQ has led to the idea that EI is the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth. In other words, as this definition entails there seem to be four functions in EQ:

- Perceive or sense emotions
- Use emotions to assist thought
- Understand emotions
- Manage emotions

According to Hein (2003), the concept of EQ connotes that IQ, or conventional intelligence, is too narrow and that there are wider areas of emotional intelligence that determine how successful we are. He maintains that success requires more than IQ, which has tended to be the traditional measure of intelligence, ignoring essential behavioral and character elements; in fact “we have all met people who are academically brilliant and yet are socially and inter-personally inept; and we know that despite possessing a high IQ rating, success does not automatically follow” (p. 154).

In recent years, a number of competency models for EI have been developed (Salovey & Mayer 1998); the most well known is the model developed by Goleman (1995). In this model, Goleman describes individual competencies and motivation as a general factor that applies to all four emotional intelligence styles as following:

- Self-awareness (Reflective Style)
- Social skills (Conceptual Style)
- Self-regulation (Organized Style)
- Empathy (Empathetic Style)

Emotional Intelligence in ELT
A number of studies (Boyatzis, 2006; Carmeli, 2003) have reported a positive relationship between different affective traits, in particular, EI, and job attitudes such as affective commitment. Affective commitment, one of the core constructs of carrier and organizational commitment, is defined as “positive feelings of identification with, attachment to and involvement in the work of the organization” (Mayer & Allen, 1984, p. 292). As Carmeli (2003) noted, emotionally intelligent individuals are expected to recognize, manage, and use their emotions to manipulate the ensuing obstacles and prevent their negative effects on attitudes towards their profession (cited in Salami, 2007). This is particularly true when it comes to professions such as teaching, with its high levels of complexity and constant interaction.

Study of EI in the educational setting is a relatively new endeavor and, as such, few studies have focused on the overall effects of EI on second or foreign language learning. These few studies have been limited to certain dimensions as management, self-esteem, anxiety, strategy use, or motivation only. In ESL/EFL context, different studies examined the relationship between EQ and second language success (Chao, 2003; Clement, Dornyei, & Noels, 1994; Nelson & Low, 1999). For instance, Aghasafari (2006) found a positive relationship between overall EQ and language learning strategies. Furthermore, Riemer (2003) argues that EQ skills contribute to the learning potential of foreign language acquisition, particularly as it relates to acknowledging the legitimacy of other cultures as being equally valid.

Language Learning Strategies
In the area of teaching and learning a second/foreign language, there has been an increasing interest in changing the focus from the teacher-centered classroom to the learner-centered classroom by shifting the focus from the product-orientedness to the process-orientedness of language learning. In this view, the learners are considered as active participants that the effects of teaching will be partly dependant on what they know such as their prior knowledge, what they think about during learning, and their active cognitive processes (Dansereau, 1985; Weinstein & Underwood, 1985). Also, this has brought attention to learning strategies which an individual learner applies during the learning process to facilitate second language learning (Oxford, 1990;
Wenden, 1991). That is, how learners’ process new information and the kinds of strategies they use to learn, understand, or remember has been the major concern of the second or foreign language researchers.

Language learning strategies (LLS) have been defined as operations employed by the learner to assist in the acquisition, storage, retrieval, and the use of information (Dansereau, 1985; Rigney, 1978) or as steps taken by learners to enhance their own learning (Oxford, 1990). A summary of the various definitions of learning strategies given by some researchers are provided in the following.

Learning strategies are important and should be paid attention to because they are one of the major applications of cognitive theory. Oxford (1990) claims that “learning strategies are behaviors or actions which learners use to make language learning more successful, self-directed and enjoyable”. Learning strategies are procedures undertaken by the learner, in order to make their own language learning as effective as possible. In O’Malley and Chamot’s (1990, p. 52) view, learning strategies are complex procedures that individuals apply to tasks; consequently, they may be represented as procedural knowledge which may be acquired.

Some ESL researchers (e.g., O’Malley, Chamot, Stewner-Manzares, Kupper, & Russo, 1985; Oxford, 1990; Stern, 1992) have classified learning strategies into different categories. For instance, O’Malley et al. (1985, pp. 582-584) divided LLS into three major subcategories, i.e., socio-affective, cognitive, and metacognitive strategies. LLS are also classified by Stern (1992, pp. 262-266) into five main categories that are: a) interpersonal strategies, b) communicative-experiential strategies c) cognitive strategies, d) affective strategies, and e) management and planning strategies. Oxford (1990) has also classified LLS into two major classes i.e., direct and indirect strategies which are further divided into six strategy groups: cognitive, meta-cognitive, memory-related, compensatory, affective, and social strategies that are considered as the most comprehensive classification of learning strategies to date (Ellis, 1994, p. 539).

Currently, the growing interest toward language learning, particularly English, has made the factors that could affect the learning effectiveness more important. As we all know, many factors influence the second/foreign language learning process. However, one of the most important elements for SLA research to explain is the specific strengths and weaknesses that individuals carry out with them in their second/foreign languages respectively. Thus, knowing more about the influence of emotional intelligences on ESL/EFL learners is getting more important.

As the present study is intended to focus on the use of learning strategies and emotional intelligences in Iranian context, this section provides a review of the pertinent literature in Iran. Investigating whether or not there is any relationship between the use of LLS, foreign language proficiency and EQ scores of Iranian EFL learners, Akbari and Talebinezhad (2003) conducted a study in which they collected data from 128 (45 males, 83 females) English B.A. and M.A. students majoring in English translation and TEFL. The researchers reported that there is a positive relationship between the use of LLS and students’ proficiency scores. Compensatory strategies were also found as the best predictor of language proficiency. No significant relationship was found between the participants’ strategy use and their EQ scores. Additionally, they reported that Iranian mostly use metacognitive strategy while affective strategy was used the least.

A study carried out by Razmjoo, Sahragard, and Sadri (2009) was aimed at identifying the relationship between EI, vocabulary learning knowledge and vocabulary learning strategies among Iranian EFL learners. The subjects of the study were 100 senior students who were English language teacher trainees at Shiraz Azad University between 2006 and 2007. Data analysis of the findings (descriptive and inferential) revealed that there is a relationship between EI and vocabulary learning knowledge. It was also found that among different domains of intelligence, verbal-linguistic and naturalist intelligences made statistically significant contribution to the prediction of vocabulary learning knowledge.

To determine the relationship between EI and language proficiency, Razmjoo (2008) did a study in which the researcher aimed to investigate the relationship between EI and language proficiency of Iranian EFL PhD candidates, to explore whether one of the emotional intelligence type is predictor of language proficiency, and to examine the effect of gender on language proficiency and types of intelligences. The subjects of the study
were 278 (179 males, 99 females) PhD candidates at Shiraz University. An EI questionnaire and a 100-item language proficiency test were distributed among the candidates. The data revealed that there was no significant relationship between language proficiency and the combination of intelligences in general and the types of intelligence in particular. Likewise, no significant difference was found between male and female students and between their EI and language proficiency.

Pish Ghadam and Moafian (2008) looked into the role of Iranian EFL teachers’ EI in their success in language teaching at high school level. They selected a population of 93 English language teachers from different high schools in Mashhad, a city in the north-east of Iran. At the end of the schooling year, the teachers were asked to fill out the Persian version of MIDAS. Simultaneously, another questionnaire, entitled the Students’ View of an Ideal Teacher (in Pish Ghadam & Moafian, 2008) was distributed among the students (N=2287) of the above-mentioned teachers. In using the questionnaire, the researchers aimed at evaluating the performance of teachers regarding their teaching skills, personality, supplementary programs, activities, and social-educational life by their students. No significant relationship was found between their success and other types of intelligences. Furthermore, it was found that there was no significant difference between gender and EI regarding the teaching success.

As noted earlier, the aim of this study was to investigate the effects of EI profiles of the Iranian EFL university students and their use of LLS on their English proficiency score. More specifically, the study addressed the following research questions:

1. What are the most and least frequently-used language learning strategies by Iranian EFL undergraduate students?

2. Is there any relationship between language learning strategies used by Iranian EFL learners and their English proficiency score?

3. Is there any relationship between Emotional Intelligence profile of Iranian EFL learners and their English proficiency score?

**METHOD**

A total of one hundred and thirty five Iranian EFL undergraduate students (42 males, 93 females), studying in Islamic Azad University branches in Hormozgan province, were randomly selected as the sample of this study. The participants were majoring in English Language Teaching and English Language Translation.

The needed data was collected using three instruments. The first instrument employed in this study was, the ‘Bar-On EI test, also called as the emotional quotient inventory (EQ-I). Designed by Bar-On in 1980, the Bar-On EI test is a self report measure of emotionally and socially intelligent behavior that provides an estimate of emotional-social intelligence (Bar-On, 1997). It includes 133 items in the form of short sentences which measure five broad areas of skills and 15 factorial components (already explained in Bar-On’s Model). The questionnaire takes nearly 40 minutes to complete and employs a five-point response scale with a textual response format ranging from ‘very seldom’ or ‘not true of me’ to ‘very often’ or ‘true of me’. Each item has the value of five ranging to one. In this study, to avoid cross-cultural differences and probable misunderstanding regarding the content of the questionnaire, the translated Persian version of this questionnaire was employed. This adapted final form was reduced into 90 items and the Cronbach’s Alpha reliability index was reported as .80 (Samouei, 2002). In another study, Dehshiri (2003) reported that the Persian version has generally good internal consistency, test-retest reliability, and construct validity. As he states, Cronbach’s Alpha coefficient was found to be .76 and the results of the factor analysis provided convincing support for the inventory hypothesized structure. Bar-On questionnaire is based on the most comprehensive theory of EI to date and renders an overall EQ score as well as scores for the 15 major categories. These important areas of emotional intelligence are measured accurately with a sophisticated correction factor. Students’ scores have to range from minimum 270 to maximum 450. SILL was also distributed among the students in order to determine their strategy use. The Inventory that includes 50 Likert-type items was developed by Oxford (1990) and covers six subscales of LLS that are memory, cognitive, compensation,
meta-cognitive, affective, and social strategies. In this study, the researchers used the Persian version of SILL which was normed by Tahmasebi (1999) for Iranian learners with cronbach alpha of 0.77. Nelson Proficiency test was also utilized to determine the level of language proficiency of the participants of the present study. Descriptive statistics including minimum, maximum, mean, and standard deviation as well as correlation coefficient and multiple regression analysis were used for data analysis of the gathered data.

RESULTS AND DISCUSSION

Analysis of the obtained data revealed a series of descriptive statistics regarding the proficiency score, Emotional Intelligence profile and language learning strategy use of the participants of the present study. The related descriptive statistics is presented in Tables 1 to 3.

Table 1: Descriptive statistics of participants’ EQ profile

<table>
<thead>
<tr>
<th>EQ</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ</td>
<td>135</td>
<td>285</td>
<td>362</td>
<td>312.43</td>
<td>376.88</td>
</tr>
</tbody>
</table>

Table 2: Descriptive statistics of participants English proficiency score

<table>
<thead>
<tr>
<th>English Proficiency</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Proficiency</td>
<td>135</td>
<td>8</td>
<td>39</td>
<td>26.31</td>
<td>35.96</td>
</tr>
</tbody>
</table>

The first research question of the present study was to investigate the LLS used by Iranian EFL students. As shown in Table 3, the descriptive statistics of the results indicates that Iranian EFL learners are more willing to use meta-cognitive strategies, followed by affective strategies. Social strategies are shown to be used least frequently by Iranian undergraduate students.

Table 3: Descriptive statistics of participants’ use of LLSs

<table>
<thead>
<tr>
<th>SILL Categories</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metacognitive</td>
<td>135</td>
<td>2</td>
<td>5</td>
<td>4.23</td>
<td>0.74</td>
</tr>
<tr>
<td>Social</td>
<td>135</td>
<td>2</td>
<td>3</td>
<td>2.87</td>
<td>0.52</td>
</tr>
<tr>
<td>Memory</td>
<td>135</td>
<td>2</td>
<td>4</td>
<td>3.49</td>
<td>0.70</td>
</tr>
<tr>
<td>Affective</td>
<td>135</td>
<td>2</td>
<td>5</td>
<td>3.82</td>
<td>0.88</td>
</tr>
<tr>
<td>Cognitive</td>
<td>135</td>
<td>2</td>
<td>5</td>
<td>3.43</td>
<td>0.66</td>
</tr>
<tr>
<td>Compensation</td>
<td>135</td>
<td>2</td>
<td>5</td>
<td>3.21</td>
<td>0.79</td>
</tr>
</tbody>
</table>

The next research question in this study attempts to find out the relationship between LLS and English proficiency of Iranian EFL learners. In an attempt to answer this research question, a Pearson correlation was conducted between the proficiency score and learning strategies scores to find out the strength and direction of the linear relationship between the two variables. The correlation between the proficiency and SILL was calculated, using SPSS version 17. The results are shown in Table 4.

Table 4: Correlation between EQ and Proficiency

<table>
<thead>
<tr>
<th>Proficiency</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EI</td>
<td>-0.16*</td>
</tr>
</tbody>
</table>

Based on the finding in Table 4, it was revealed that the correlation between the EI and proficiency is \( r = -0.16 \). The correlation coefficient shows a significant negative relationship between the variables of EI and...
proficiency. Based on Guilford’s rule of the thumb, the relationship of EI and proficiency in the present study is low.

To see the relationship between language learning strategy use and proficiency, the correlation between these two variables was calculated. The result is tabulated in Table 5.

Table 5: Correlation between LLS and Proficiency

<table>
<thead>
<tr>
<th>LLS</th>
<th>Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.24**</td>
</tr>
</tbody>
</table>

As shown in Table 5, the results of Pearson coefficient determination analysis are indicative of a low, positive correlation ($r = 0.24$) between proficiency and use of language learning strategies.

Regression analysis revealed that metacognitive, affective, and social strategies as well as EI contributed to English proficiency score. The highest contribution belonged to metacognitive strategies followed by social strategies and affective strategies. EI showed the least contribution. Table 6 shows the regression analysis.

Table 6: Regression analysis for the factors contributing to English proficiency

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Beta (ß)</th>
<th>T</th>
<th>Sig. T</th>
<th>R²</th>
<th>Contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metacognitive</td>
<td>2.896</td>
<td>0.454</td>
<td>5.064</td>
<td>0.000</td>
<td>0.206</td>
<td>20.6</td>
</tr>
<tr>
<td>Affective</td>
<td>1.430</td>
<td>0.260</td>
<td>3.014</td>
<td>0.003</td>
<td>0.273</td>
<td>6.7</td>
</tr>
<tr>
<td>Social</td>
<td>1.532</td>
<td>0.311</td>
<td>3.499</td>
<td>0.001</td>
<td>0.355</td>
<td>8.2</td>
</tr>
<tr>
<td>EI</td>
<td>1.948</td>
<td>0.237</td>
<td>2.989</td>
<td>0.004</td>
<td>0.410</td>
<td>5.5</td>
</tr>
<tr>
<td>Constant</td>
<td>33.514</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td>40.00</td>
</tr>
</tbody>
</table>

CONCLUSION

The purpose of this paper was to investigate the relationship between EI profiles, LLS and English language proficiency of Iranian EFL undergraduate university students. The findings revealed that there is a low, negative correlation between EI and English proficiency score, $r = -0.16$. A low, positive correlation between language learning strategies and proficiency score was another finding of the present study ($r = 0.24$). As for the frequency of use of learning strategies, the study shed light on the fact that Iranian students have a stronger tendency to use meta-cognitive strategies, followed by affective strategies while social strategies were the least used.

The findings of the present study may serve as recommendations to educators to modify instruction and offer a variety of opportunities for learners in the classroom. They might help educators select a variety of appropriate teaching materials to meet the needs of learners with different abilities. Therefore, prior to choosing any teaching materials, educators should conduct a needs analysis and a test in order to find out the EI profile of the students and to avoid having any mismatch between selected topics and the students’ needs.

Finally, the teachers who have the greatest impact on the learning of the students in Iran may find the findings of the present study fruitful in their EFL classes and/or in designing their own syllabuses. Actually, the findings of this study can help teachers improve their literacy instruction, as they require feedback on their job in order to adjust their instruction to better meet the needs of the students. Thus, one of the implications of the new understanding is that once a teacher has a picture of the students’ strengths and weaknesses in different intelligence areas, s/he can help them realize and develop their intellectual capabilities accordingly. Therefore, the findings can provide teachers with further insights into factors involved in determining an EI profile of the Iranian EFL university students. As far as the EI and learning strategies are concerned, both teachers and learners can use the findings of this study as a guide to improve their EFL classes. Having access to EI profiles
and learning strategies of learners will help the teachers in planning activities to connect both strategies and students' talents and provide students with the best possible instruction.

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A COLLABORATIVE SCIENTIFIC REASONING MODEL FOR TEACHING GEOGRAPHY IN THE MALAYSIAN SECONDARY SCHOOLS

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Abstract
Malaysian educational programme has seen many alterations to address the need to keep pace with the transformation that is taking place nationally and globally. Like many countries in the world, we believe that in order to progress, we have to use science and technology. This paper aims to review the current challenges face the secondary school students in Malaysia, especially in teaching geography. The teaching issues were mostly formulated towards the use of the suitable scientific reasoning model and other learning strategies for teaching scientific subjects. This paper also reviewed a number of studies conducted to provide alternative solutions for enhancing the learning curriculum in different schools. After that, we proposed a new model for teaching geography in the Malaysian secondary schools call collaborative scientific reasoning model based on the principles of reasoning.

Key Words: Scientific reasoning, learning strategies, collaboration learning, Malaysia secondary school.

INTRODUCTION

Scientific Reasoning (SR) has been defined as the way of involving the thinking skills that usually found in inquiry, experimentation, evidence evaluation, inference and argumentation that are done in the service of conceptual change or scientific understanding (Zimmerman, 2005). Traditionally, teaching strategies of Geography especially in the classroom are primarily teacher directed such as in the case of lectures (Lee, 1993; Ten Dam & Volman, 2004). While this is still undoubtedly the most effective approach in disseminating a large amount of information (Kemp, Goodchild, & Dodson, 1992), it also requires the students to be passive learners, which involves primarily listening to lectures (Brazen & Clark, 2005). A passive learning environment presents a great challenge in capturing and maintaining interest from elementary students who characteristically possess a short attention span.

Another major challenge in passive learning is in securing the students’ understanding and retention of lessons learned in school (Gersten, Fuchs, Williams, & Baker, 2001). The mind’s ability to use knowledge gained from school lessons is effectively enhanced by the desire to learn, readiness, active involvement, relevance, feedback, complexity, repetition, emotions, physiologic events and psychomotor ability (Kozier & Erb, 2004). Clearly, expecting the students to be mere passive participants when teaching, fails to incorporate the other factors that enhance learning. A challenging and meaningful learning experience ensures engagement and participation of the students in the learning process by actively participating in learning activities (Spitzer & Roddick, 2007). Many new visualization techniques, technologies and practices in mapping have emerged that extend far beyond conventional cartography (Andrienko, Andrienko, Dykes, Fabrikant, & Wachowicz, 2008). This field has come to be known as geovisualization. Geovisualization includes cartography, but has developed to include other geographic visualization techniques and tools. Examples of these tools include 2D maps, GPS, 3D GIS, mobile GIS, Google Earth, VR and AR (Dodge, McDerby, & Turner, 2008; Peuquet & Kraak, 2002).
ISSUES IN TEACHING GEOGRAPHY

Most students find learning new things to be a difficult and tedious task. Some students may depend on their visual ability to absorb information others may find vocal tutoring more suitable some will need both (Zaman, Sembok, Yusoff, & Abu Bakar, 2000). Earth science teachers have a multitude of teaching methods, curricular tools and learning modalities to choose from when designing curriculum. These include verbal, oral, and visual presentations, involving static, dynamic or interactive modalities. Examples of verbal message delivery include lectures, reading assignments, equations, and PowerPoint slides narrated by the instructor. Meanwhile, The oral presentations usually accompany and complement verbal or visual aids, the most common being a lecture style delivery of information or verbal dissemination of instructions.

In Malaysian schools, teaching Geography is determined as a different task which needs to provide the appropriate materials such as visual presentations include models, photographs, aerial images, remotely sensed images, drawings, videos, maps, data-based visualizations, graphs, computer animations and computer models. For these schools, it’s important to identify the effectiveness of these tools and method on the students learning performance. However, the secondary school students still facing some issues towards the way of planning and presenting the educational curriculum especially for the Geography subject, which mostly consists on the lack of using technology, learning strategies, motivational tools, etc... that would help to increase the students’ performance then their achievement to learn Geography.

Such issues were highlighted by Osman, Halim and Meera (2006), they introduced the current teaching situation in the Malaysian secondary school, which found to be does not only call for the need to equip teachers with the essential knowledge and skills, but includes other communication issues pertaining to the quality of teaching and learning science.

While Akinnuoye and Abd (2011) described the difficulties of teaching the geography subject for the secondary school students due to the lack of or insufficient facilities and encouraging environment, in the way impacting its performance unconstructively.

RELATED RESEARCHES

Study was conducted by Buang and Halim (2007) to indicate the effectiveness of the current learning curriculum in the Malaysian schools and how technological development is involved. They identified the needs of developing a science and technology curriculum based on entrepreneurial science thinking skills based on reviewing of literature and interview study with various groups. They found that the teachers from different schools in Malaysia has agreed on the need of inculcating such thinking skills and provide insights on ways of developing and implementing the curriculum. Based on that, they concluded that such result gives a strong basis for developing an alternative science and technology curriculum that deals with technology, entrepreneurial and science process skills.

Another study by Jeeraporn, Adisak and Penkae (2012) addressed the needs of adapting a new teaching model to enhance the student learning skills based on the utilization of new technology. However, they also aimed to develop science curriculum on environmental conservation, with an emphasis on the promotion of critical thinking skills for Mathayomsuksa 1 students. As well, they intends to evaluate the students’ learning achievement outcomes, basic science process skills, environmental conservation attitude and critical thinking skills before and after the application of this developed curriculum. And finally, they measure the differences from the obtained scores in the areas of students’ learning achievement outcomes, basic science process skills, environmental conservation attitude and critical thinking skills. They administrated a questionnaire among 30 Mathayomsuksa 1 students, from Mathayomsuksa 1/3, Ban Wang Pikul school, Sam Pan district, Petchaboon province. The finding revealed that the developed science curriculum on environmental conservation, with an emphasis on the promotion of critical thinking skills for Mathayomsuksa 1 students had the effectiveness index level.
Meanwhile, Reading and Reid (2004) described the importance of addressing the curriculum needs for reflecting the educational trends among students. They developed a new model for an integrated approach to curriculum development where consideration of variation is used as the linking thread. They introduced the process of the proposed model to a tertiary introductory service statistics courses, which developed from students’ responses to “minute papers” and typical responses in the various levels of the hierarchy are discussed. They found that the model has implications for teachers of statistics, in the development of curriculum, and for researchers in the growing field of students’ understanding of statistics.

Finally, Zimmerman (2005) provide an integrative review of research that has been conducted on the development of children’s scientific reasoning. He conduce his study on the thinking and reasoning skills that support the formation and modification of concepts and theories about the natural and social world. Furthermore, he discussed several empirical findings using the SDDS model as an organizing framework. He also estimated that current researchers must put in consideration the reasoning principles while developing a definite thinking model for the dual purposes of understanding cognitive development and the subsequent application of findings to formal and informal educational settings.

PROPOSED MODEL

To be termed scientific, a method of inquiry must be based on gathering observable, empirical and measurable evidence subject to specific principles of reasoning (Bauer, 1992). Based Bauer recommendations, we propose a scientific reasoning model that offers collaboration for the teaching geography subject among the secondary students in Malaysia as shown in Figure 1. The model consists on the following:

i) Instructional Resources: this part includes the learning materials, analysis, curriculum selection, ICT resources, and other training activities. Usually, teachers use lesson plans to guide daily instruction; multiple lesson plans can make up a chapter or unit of instruction if those lesson plans are designed to be used in sequence.

ii) Engage students into small groups: this part consists on obtaining a better engagement, motivation, and learning manner among the secondary students while teaching Geography.

iii) Offer additional resources: This category includes materials the textbooks, units, other learning modules, collaborative lesson plans, and corporate image for teaching geography. Curriculum can be in the form of textbooks, stand-alone units or modules, or other packaged materials designed for use in formal or informal educational settings.

iv) Competitive advantages: performance and achievement along with the students’ attitude will be gained as an outcome.
Figure 1: A Collaborative Scientific Reasoning model for Teaching Geography in the Malaysian Secondary Schools
EXPECTED BENEFITS

The enhanced versions of learning material provide the students with a more friendly, interactive and motivating tools for that purpose. Thus, secondary school students in Malaysia will have no problems with their learning process and the process will be more efficient, effectiveness, cost-effectiveness and user friendly. In addition, the propose model will offer an interactive and motivating teaching flow of Geography in the way that offers:
- Suitability to the secondary school teachers;
- Enhance student learning performance;
- Adapt additional learning resources;
- Enable teachers to control learner achievement while learning geography.

CONCLUSION

This paper demonstrated the current issues and challenges faces by the Malaysian secondary school students in the term of teaching geography and adapt technology into the learning process. Several studies were addressed in terms of the current curriculum used by these schools in teaching students. Finally, a collaborative reasoning model has proposed based on the recommendations summarized from the previous researches, as well, an expected benefits has been reported as the outcome of the proposed model.

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CURRENT TRENDS AND EXPERIENCES IN MACEDONIA’S UNIVERSITY EDUCATION

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Abstract
University education in Macedonia faces fast developments, achievements, difficulties and challenges as well, over the last few years. The share of this education in GDP increases considerably, the network of institutions is visibly expanding, while the market and offer of educational services, including those of private institutions-are well rising. Modernization of university education and the introduction of the Bologna process are an ongoing trend. Nevertheless, this dynamics is followed by some unfavorable consequences or limiting factors: funding difficulties, deficit of qualified staff, inefficiency and particularly- maintenance of traditional styles of management, organization, administration and planning.

The authors examine the main streams in the developments of country’s university education, particularly from the viewpoint of performance of new styles of management and planning, as well as from comparative aspect, summarizing some research in Balkan and other countries.

Key Words: Education, management, planning, transformation, Macedonia.

BACKGROUND

As a matter of background information and despite the fact that most of the evidence is well known and available to the Turkish and international public and scholars, some evidence of the developments and position of (and- in) the Republic of Macedonia, would be necessary. Macedonia is a country belonging to the so called Western Balkan region, acquiring its independence and sovereignty in the course of the dispersion of the former Yugoslav federation in 1991. Earlier, for the first time Macedonia declared its independence as a state, in the year 1944 as a result of its victorious involvement in the Antifascist liberation war. But in the same time, it joined the establishment of the Yugoslav federation sharing all the developments, features and policies of that federation. The breakup of former Yugoslavia, as a result of the collapse of the mono-party system, lack of human rights and freedoms, unequal position of nations and republics within, and lack of the advantages of the private and market economy, has offered to Macedonia an alternative system, which was fully utilized, although with many technicalities, deficits and difficulties.

Since the proclamation of the independence, in the year 1991, Macedonia did its best to modernize its internal systems and aggregates, harmonizing them with the European Union standards, with NATO collective security standards as well as with the demands of the population for higher standards of living, higher rates of employment, education, public health protection etc. This was based on the transformation of the earlier “socialist” system of state ownership, one-party political system and- the federal “commanding” system for most of the essential decisions and systemic arrangements. Nowadays, Macedonia is an UN member, a candidate for NATO and EU membership, a respected member of the CE, OSCE etc. but having a lot of troubles and difficulties in her international recognition, because of the dispute over her name with her southern neighbor- Greece.
Macedonia is a relatively small country in the Balkans region. Its territory is only 25,560 sq.km. The population-2,030,000 (the capital- Skopje- – 650,000 inhabitants). Basic statics indicates:

- % of non-majoritarian ethnic groups- 35.5% (Albanians-25%, Turkish-4%, Serbs, Romas, Vlachs, Bosniaks, etc)
- % of non-majoritarian religious groups- 30%
- Ratio of agricultural-nonagricultural population: 35%-65%
- Average net-income per an employee- 330 Euros/ mid 2011
- University students population 2010/2011- around 75,950
- Educational structure of the adult population: around 6.5% university accomplished degrees, 33%-secondary school degrees, 56% primary school degrees, partly unfinished, 3.5% illiterate.


- Foreign trade: 120% of the GDP (Trade deficit -23.5% of GDP); Coverage of imports by exports- 61%, foreign transfers inflows enable the deficit in the current payment balance to be -5% in the last 5 years; Inflation rate: 1997-2007: 2-3%; 2008- 8.3%; 2009- deflation Of 0.9%; Assessment for 2010/11- 3.5% ; General Government gross debt- 24.8% of GDP.


DEVELOPMENT OF EDUCATION 1945-1990

What Macedonia inherited from the earlier regime in the sphere of education and schooling was recapitulated after the proclamation of the independence and transformation of the regime into a pluralist, democratic, market-oriented and human rights protecting system. The education earlier was, in accordance with the socialist ideology- free, decentralized in decision-making and administration, “autonomic” and “self-managed”, with even a share of students, pupils, parents, e.g. “customers” in managing the institutions. However, it was controlled by communist party bodies, strictly monitored, programmed, and directed by state organs, inspections etc. The personnel policies, curricula, publications and literature have also been rigidly directed, while altogether the composition and structure of institutions and their funding was within state competences. It was not adapted to the needs of the business and economy; general program schools have been favored, producing as a rule – elite groups of population.

The overall feature of the system was that it was relatively closed, exclusive, controlled from above and elite oriented. The results have been shown in an inadequate educational structure of the population, with only a few percents of university graduates, large portion of secondary school accomplished students and largest group of population with primary school degrees, even with unfinished primary school. Primary schooling was obligatory and free, secondary schooling not obligatory but free; nevertheless, because of the low living standard many families preferred their children to get employment or job as soon as possible and not to continue education at higher levels. This particularly related to larger families, which could not have afforded long periods of funding their children’s education. There have been different patterns of education of farmers’ and working class participants and middle class or elite families participants. (Kamberski, 2002). That period ended in 1990, with two state universities in Skopje and Bitola, having around 25 faculties and 5-6 research institutes.

An advantage for that system was the education of students in their ethnic language, at primary and partly secondary school level, however such institutions in ethnic languages were lacking text-books in ethnic languages, qualified teaching staff, equipment etc. In the year 1991, less than three percent of the university students’ population belonged to non-majoritarian ethnic communities, while at the Faculty of Philology in Skopje only cathedras existed for Turkish and Albanian languages and literatures. Nevertheless, there have been a much larger number of students Albanians, studying in Tirana or Pristina. Some evidence on that issue is provided in annual Statistical books of Macedonia and partly in professional sources (Pajaziti, 2011).
UNIVERSITY EDUCATION IN RM OVER THE PAST DECADE AND YEARS

There was a consensus and awareness of the main social circles and political groups, no matter of their position in the government, parliament and the public opinion, that the education should have become an essential factor of the overall advancement of the country under the transformed social order. However, there were disputes over the ways how to materialize this determination. Because of many constraints and foreign circumstances (unrecognition etc.), the first governments have strengthened the role of the state in the economic and social life, have centralized most of the decision making, abolished the earlier developed municipal governance and self-management in the public sector, including the sector of education. The ownership was entirely transferred into the hands of the state- to be later on privatized. The education, science, health protection etc. so became part of the state administration, strictly controlled by government bodies.

It was thought that such a system would have easier made the transformation processes and the overall transition. But it appeared that the state simply did not have enough capacities for such functions. The private sector in education, science, health protection was not allowed, since these were treated as non-profit activities, not as market and profit-making services. Most of the university education was still concentrated in two largest cities. The autonomy of the universities has been fairly limited, while university and faculty management had to a large measure been politicized and party- influenced. It was not earlier than in the second decade after the independence that this unfavorable position has begun to considerably change. Several governments have reached awareness that if education is a production factor it should be modernized, advanced, adjusted to market and economy needs in addition to exposure to the principles of the market.

In the early 2000s, primary education, by the Strategy of the Government, was declared obligatory and free as earlier but- enlarged to 9-years period of education; a couple of years later, secondary level education was also decided to be compulsory and free. Since then, secondary school population considerably increased embracing more than 92% of the appropriate generations. In the year 2010/11, it reached a size of 94,000 students and 110 schools/institutions. The number of school leavers was approximated to 22,000-25,000.

The next step was the introduction of private educational institutions. Since 2002, several private secondary schools and universities or faculties have been established. Tuitions or scholarships for enrollment in these institutions are relatively high, but the market of educational services was open and began to function. This was a good strategic decision as part of the students, unsatisfied with the offer or standards in the state institutions have begun to migrate to other, particularly neighboring countries having more flexible, innovative, modern institutions and providing internationally recognized degrees. The introduction of private university education was followed by many difficulties: dependence on the teaching staff employed in state institutions, rigorous accreditation procedures, insufficient investments in equipment, lack of research work, libraries etc. It took several years that first private institutions have consolidated and began to produce high quality and fully recognized diplomas, even post-graduate diplomas.

Some of these institutions do not satisfy Macedonian legal provisions and university standards. They usually are registered as branches of foreign private institutions, but their diplomas are not recognized and are a subject of nostrification as foreign certificates.

The last reform step of the government was made 5-6 years ago, when it was decided to considerably enlarge the network of state university institutions and to disperse that network, particularly- faculties and research institutions to smaller places. In the same time, the participation of students in tuitions and fees was either abolished or decreased to approximately- 100-200 Euros per year. Several reasons had impact to these reforms: the real demands of the public administration and economy, particularly foreign investors, for highly qualified working force; standardization of the share of education in GDP with the levels achieved in EU countries; development demands and projects of regions and small cities; the need to enlarge the education in foreign languages and Albanian language etc. Altogether, this made it possible the entire generations of
secondary school leavers to enroll at university. In the past years the offer of vacancies for freshers at all universities was even larger than the number of applicants.

However, the introduction of a wave of new universities and faculties was again faced with a variety of difficulties and deficits: lack of appropriate teaching staff, equipment, space, literature, organization, absence of research institutions, academic exchange, conferences, publications, etc. In the same time, the Bologna system and standards have been in a process of implementation, requiring a stronger control and inspection from the side of the government. The law on University education was several times amended during the past few years, imposing stronger conditions and criteria for teaching staff appointments. Funding of these new universities and schools really increased considerably the share of education in GDP as well as in the government’s budget. But the sudden and rapid growth of the university education (almost free and almost on a local basis) had two negative consequences: first, quantity has not produced quality except in a very long terms and periods; second, the competition at the market of educational services, particularly between the state and the private sector was disturbed and disregarded. In addition, the share of research (RD) in the GDP in the last few years decreased to a critical percentage of 0.20%.

Altogether, available data (www.mon.gov.mk; www.Stat.gov.mk, visited March 2012), indicates that in the year 2010/11, the number of students attending secondary level of education was around 94,000, the number of schools being around 110.

The number of university students- was in the same year-around 75,500, out of which 83.2% studied at state universities, 16.7% at private ones. In that year 10,000 students have graduated and got their diplomas. In the same year, the number of new enrollments was around 25,000 at state universities and 3,100 at private universities; in the current academic year (2011/2012), the number of students enrolled at state universities decreased to 21,700, but enrollments at private universities was only 2,650. This means that the private sector in university education is slowly loosing the competition at the market. Although, a few private universities, known by their excellence and quality- remain equal partners in the race. Several factors of economic and social nature have influence on these relations. The next set of indicative data relates to the network of university education institutions:

- State universities-5
- Number of faculties -51
- Number of research institutions- 51+2
- Private universities -7
- Number of institutions, academies, higher schools- 11
- Total number of faculties- 72

This mainly shows the number of institutions accredited, not of active institutions. In both sectors, the state and the private, if only a marginal number of students apply, they do not activate their accredited capacity. The last remark in this sense is that most of the offer of private universities or schools is in the field of social sciences. There is a marginal number of private university programs in the field of natural, medical or technical sciences, mainly because of expensive demands and high investments for equipments, laboratories, experts etc. In addition, the practices of public-private partnership in university education in Macedonia, does not exist. There are inter-university agreements on cooperation between private and state universities but generally they are not stimulated by the government policies and are mainly reduced to exchange and employment of teaching staff when necessarily needed.

Nevertheless, it is indicative, that the offer (over 120 faculties) is currently larger than the possible inflow from secondary schools (110). Certainly, most of the secondary schools in Macedonia are mega-schools while mega-faculties are rare, but still some dysfunction exists.

Apart of this, not exact data are available on the size of students from the republic studying abroad as well as of foreign students studying in Macedonia. Nevertheless, the main assumption remains relevant, that of the contrast of the offer and the demands for university education in the state. The other assumption which is not
possible to prove directly is that the production of university graduates by profile does not correspond with the 
real demands of the market, e.g. the employers, let it be the public, state or private sector. This assumption or 
hypothesis is that the university institutions educate too many candidates for social services jobs (lawyers, 
economists, managers, etc.), too many for the state administration and the public sector and much less for 
production, informatics, crafts, small businesses etc.). The economy and business community is aware of this 
fact and suffers of its reality, but is not strong and influential enough to redirect it.

GOVERNANCE, MANAGEMENT AND PLANNING

Most of the evidence available indicates that the governance of the system of university education in 
Macedonia is pretty centralized and under strict political-executive control. There is ongoing process of 
decentralizing the governance of primary and secondary education in the direction of more competencies for 
cities and municipalities. Constitutionally, universities are autonomous but under large governmental 
surveillance and funding (state institutions). Nevertheless, both private and state institutions operate under the 
same legal provisions. Governing and decision making structure is the following:

- The Government> The Ministry of Education and Science> The Board of Accreditation> National 
  Committee for Science Research and Technological Development> Inspection Department ;
- University rectors standing conferences of state and private universities and an ad-hoc joint conference;
- Senates of all individual universities composed of representatives of their members’ representatives 
  (faculties and research institutes, students’ representation etc.);
- Rectorate management and administration, experts’ commissions, professional standards commissions 
  etc. in three main fields: Teaching- science; International cooperation; Administration-financing and 
  Students Affairs;
- Faculties’ Dekanates and Deans’ offices as well as Scientific- Teaching councils, consisting of all full 
  teachers, representatives of assistants and students; in addition, departments, institutes and functional 
  units have their own councils, with less competences.

This scheme is a generalized scheme; despite the fact that the decision making and managerial competencies 
are, in principle the same, in the case of state universities, the governing body is the ministry of education 
together with the rector of the university, while in the case of private institutions the governing body is the 
owner (or co-owners) establishing- a Management board. Decision-making procedures in private institutions 
are somewhat less rigid and more flexible under the condition they respect the legal provisions. (The Law on 
University Education of the Republic of Macedonia, 2008; the Rulebook on Registration of ... 2009). However, 
it should be stated that the supervising and screening procedures are more rigid if private institutions are a 
target.

Under the condition they respect the legal procedures of organization and conduct their activities, both state 
and private institutions are autonomous and self-regulated. At this point, the state bodies are a bit limited as a 
variety of situations take place: some universities are supported or sponsored by foreign funds and foundations 
(EU for instance, USAID, UN etc.); some of them utilize foreign assistance for projects, specific programs, staff 
and personnel etc. Business companies often require specific education programs, not listed in accredited 
programs and similar. Universities themselves offer frequently carrier programs that are not adjusted to official 
professional listings. Students themselves suggest or demand specific projects or programs according to their 
interest, which do not correspond to the accredited programs. It happens frequently that some suggested 
programs are on the edge of non-profit/profit activities. There are cases when foreign investors object for the 
inflexible profiles produced at the universities. Etc. This all speaks of the necessity for reconsideration of 
several aspects of the governance and management of the university education in Macedonia.

First is the aspect of the distinction between autonomy and state control over the universities. It relates very 
much to the rights of the “owner and funder” of the institution. The autonomy probably should be better 
protected and provided, if universities are treated to e greater extent as public services than as state or private 
services. Which would to a greater measure involve the share of all stockholders in management of the 
education process as well as in decision making process? For instance- to strengthen the role of consumers and
subjects in the process like – the teaching community, students and parents community, the business and administrative community, the local community, donators, investors etc.

The second aspect is the managerial aspect: there can be no efficient, creative, innovative, attractive education without modern management structures, promising program directions, good governance etc. Including rational, flexible, community directed, market, individual career and professional orientation.

The experiences of modern universities in some developed countries that we studied from the viewpoint of the relevance to appropriate Macedonian structures (Canoski, S., 2011), throw a light into some dilemmas on and matrices of organization and management of university education that are obviously already obsolete or non-effective. Such are dilemmas like: predominant state or private sector in the field of education; funding through the budget or through direct consumers participation; centralized or decentralized governance; autonomy or dependence of universities; mega or mini universities; fundamental or applicable studies; classical studies or practice and business oriented studies, etc. It comes out that most of these dilemmas are artificial dilemmas, particularly for small countries’ education policies, like Macedonia is.

Objectives and priorities of Macedonia’s education and particularly university education policy are: how to supply country’s economy and public services with as highly as possible qualified personnel, capable of answering the challenges of transition, faster socio-economic development, modernization as well as the integration into the euro-Atlantic structures; parallel with this- to achieve the goal- “no university graduate – unemployed”, which means that the quality, profiles and type of education of graduates should be closely adjusted to the demands of the economy, public services, local communities’ needs and state administration demands. These objectives and priorities give a ground for the question- what type of university education to develop and stimulate, what model of organization, management, planning and administering to utilize in order to efficiently face such temptations.

In addition, the determination for this or that alternative, at least speaking for a country as Macedonia is, should take into account the multicultural and multi-confessional structure and diversity, regional discrepancies, investments’ policies, organizational culture and climate etc.

The debate among experts in this country involves particularly experiences and trends in Anglo-Saxon but also in some other European countries. It generally appears that the solutions are not in creating either mega-universities with classical, rigid, petrified structures, dependent basically on state funding and governance; or in small, expensive, specialized, self relied, private and elite- universities or faculties. The best solution probably would be in stimulating and supporting mid-size universities, established on the basis of private-public funding and ownership, without direct funding, control, management from the side of the state (the government). Certainly, this does not imply a direct withdrawal of the government from the current position of owner, funder, supervisor and administrator in the field of university education.

The solution seems to be simple although perhaps not so simply feasible: instead of establishing, funding, governing, administering state owned institutions, the government could easily identify and define country’s as well as its own demands for university graduates (by size, profiles, professions, levels etc.) and advertize public tenders for programs in this sense. Equally, the government could offer support for students (tuitions, fees, accommodation, transportation etc.) applying for enrollment. Contractual relations in such cases could easily be regulated with both the universities/faculties and students, consumers etc. There already have been ideas launched in the academic circles that the government establishes a Council for university education, as an independent state body, composed by university professors, members of the Academy of Sciences and Arts and by government officials- to take the role of accreditation of programs and their quality, providing and distributing funds to appropriate applicants and supervising their implementation.

The next point is- what model of organization, management and administration of universities to adopt or develop, even under the present and current circumstances and regulations? The sources already mentioned spoke of a general division between “old” and “new” universities, the first being organizationally predominant in the classical period, until the first decades of the 20th century and even later. The early stages of development of the “old” universities (civic), demonstrated the predominance of private, non-professional
patrons and elite administrative boards, without management, “skeleton” administration and the rectors as ceremonial titles. The next stage was seen in the period 1920-1970-80, that was called –erudite stage, with a predominant governance and supervision of elite academic councils, with marginal role of professional management and charismatic role of chancellors and vice-chancellors; The next two-three decades (particularly after students’ movement 1968) have witnessed the rise of “democratic” and autonomous universities, almost throughout Europe, having transparent and socially-controlled bodies, well heard voice of students in governance, consensual decision-making. In the 1980-s “managerial type” of universities appeared as a trend, changing the structure of internal authority, increasing the role of the general and line managements, managerial teams as well as the role of departments’ self-management and planning.

Over the last two decades, many observers describe the birth and growth of “new” universities: local, transitional, corporate. Their features are- increased competencies in governance and planning as well as funding from cities and larger municipalities, bureaucratic hierarchy, less classical managerial involvement; in the last period they somehow provide space to “transitional” and “corporate” universities, with reestablished academic governance, cooperation with local, national and corporative authorities, employment again of strong managerial teams, particularly in the fields of: “industrial relations”, property management, marketing, strategic planning but- also- cooperation with all stockholders involved. (See- Brown, M.C., 2000; McFray, P., 2009; Senge, P. 1995).

Our analyses have to some degree confirmed the receptiveness and possible larger effectiveness of a mid-size university in Macedonia’s circumstances, having combined the properties of transitional, corporative and managerial universities. However, they need more debates on their own organization, planning, management and administration, a serious dialogue with government’s bodies, commercial chambers as well as much more incentives from the side of the academic community.

TOWARDS NEW ROADS: CONCLUSIVE REMARKS, EXPERIENCES AND SUGGESTIONS

Currently, in Macedonia, we have three types of universities by size and program coverage: two or three “mega universities” (for our circumstances), mainly state owned, having 7-8 to 25 faculties and research centers and 5-6.000 to 25-26.000 students; then, 3-5 mid-size universities, mainly private, with 5-8 faculties and with 2-3 to 5.000 students, in addition to 15-20 smaller university colleges, schools, autonomous faculties, mainly private or operating as branches of foreign institutions. The last ones usually enroll 100-200 students annually and have no more than 500-600 students.

The mid-size universities have a rather flexible, efficient in marketing, administrative and profit-making sense organization but are concentrated to education, not to research, fundamental studies, medical, technical, natural sciences. Mega universities have much larger profile and format but are over-organized and bureaucratized, dependent exclusively on the state funds and decisions, in cases of many faculties and departments- just consuming funds. Academic criteria of studies, professional standards, personnel policies are often ignored or avoided. Small size institutions, as a result of poor income are only surviving at a low level of operation, although a few of them are well affirmed- implementing specific study programs in areas like informatics, tourism, arts etc.

FON University is a typical example of mid-size, private, organized in a transitional/managerial style university, with a considerable role of the academic staff in decision making. Again, it consists of social sciences faculties, eight of them. But, all programs and curricula are practice, business and applicatively directed. Programs are fully adjusted to the suggestions of parents, students and potential employers. Internal and external evaluation ranks it at the top list of Macedonian and regional institutions in the field. It covers the entire cycle of education: secondary schooling, undergraduate, postgraduate (Bologna 3+1+1) and is now accrediting for doctoral studies. Most of the working, studies and administrative-financial functions have been digitalized while the university has developed a pretty large network of international exchange and cooperation.

Specific points of its functioning are- the bilingual studies (in Albanian and Macedonian, with potential offer to Turkish language studies), a large amount of the program conducted in companies, public administration,
judiciary, diplomacy and association of teaching with practical projects, e.g. working on projects for companies (a so called program- Factory of knowledge). Over 50 companies sponsored this program, utilizing the results and offering jobs to students. Companies however, are not sufficiently involved in management or administrative bodies of the university, while students do not fully associate their potential jobs with the success of these programs. But generally, experiences are innovative and prospective (Annual Report on the Performance, FON University, Skopje, 2010.11).

Interesting are also experiences of some other, mid-size universities, like The South-East European University in Tetovo, which has been established some 8-9 years ago, having large assistance from the EU in Brussels and where studies are conducted in three languages (Albanian, Macedonian, English), while rules of organization, management, decision-making, instruction methods and curricula are to a great measure adapted to American and western European (EU) standards and requirements.

Some smaller university education units, associated with European academia also offer productive and innovative programs for specific areas’ education, like film, drama and theater, arts and design etc., but their capacity is limited by the modest demand of the public. Nevertheless, on these lines, the prospects for further development of the university education in the country are usually outlined, pointing out especially:

- The need for less interference of the state in the university education and its only indirect role in governance and funding;
- Activation and improvement of internal and external mechanisms of universities for improvement of the quality of studies, teaching instructions, personnel policies, publications, research etc (like- evaluation and ranking procedures, assessment procedures and others).
- Measures to advance managerial functions, practices, management teams’ work and training for management at universities, combined with appropriate role of academia and students participation;
- Introduction of planning and modern administrative practices at universities, particularly on a mid-terms basis; Economics of university education as a science and profession should also be developed and applied at a higher level;
- Strengthening mobility and international cooperation of universities, academia exchange, students’ exchange;
- Introduction of modern equipment and digitalization of as many as possible functional processes in the universities’ performance.

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ANALYSIS OF UNIVERSITY STUDENT’S SUCCESSES IN MINOR AND DOUBLE MAJOR UNDERGRADUATE PROGRAMS WITH DATA MINING

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Abstract
Data mining is a process used to reveal hidden information in data and transform data into codified information by using a combination of both statistical analysis techniques and artificial intelligence algorithm. Data mining, today, is used in many fields including education science. A number of Universities in our country provide undergraduate program students with chance of minor and double major undergraduate program in the same time. By this means, students can get minor or double major undergraduate program diploma from other fields while studying their major fields. The aim of this study is to seek for the successes of the students who study both their major field and minor or double major undergraduate program with the help of data mining program. For this purpose, successes of the students who study in various faculties and also continuing minor and double major undergraduate programs at Selçuk University or have already graduated put under scope by the help of the program WEKA. The results obtained and the proposals discussed are presented.

Key Words: Data mining, WEKA, Minor undergraduate program, Double major undergraduate program.

INTRODUCTION

University education is to prepare capable staff members in various fields for the business world processing them through the basic education. However, the fact that the numbers of universities and graduated students have increased, the significance of self-improvement has gradually been realized on a level with getting into a rivalry among young rivals about a priority to get the job, also unemployment has arisen in the country result in apprehension more and more among young people about unemployment (Dursun and Aytaç, 2009).

To overcome this problem, the young graduate from more than one university and sometimes want to get more than one diploma.

Double major undergraduate program and minor are multipurpose implementations which enable students who are successful in their major fields and interested in other fields to have knowledge of other fields and get diploma from other fields (Council of Higher Education, 2002). These implementations provide awards and extra opportunities for successful students in return for their successes (Atasoy and Girginer, 2006).

Along with the development of computer technique, the data that people accumulated are more and more to the especially extensive use of data base management system. The huge data are being hidden many
important information in the rear, but finds that the covert relation but is not an easy matter with the rule in the huge data. How to solve the appearance the of "data are exploded but knowledge is poor", this query directly helped to bring about the data in the database to be excavated giving rise to of technology (Erdoğan, 2004).

DM (DM:Data Mining ) in being from mass and incomplete and has the noise the and blurred and random real application data, that draws to imply among them and people do not know in advance and but and is the course of potential serviceable information and knowledge. A large number of data that it involves to the data warehouse is drawn, is changed, is analyzed and other model processing, and draw the critical nature data of supplementary policy decision. In brief, the data are excavated data information that is the deep administrative levels analysis method (Wang, 2010).

The aim in this study is to research of undergraduate program students’ successes in double major undergraduate program and minor with the help of the program “data mining”.

METHOD

The aim in this study is to research of undergraduate program students’ successes in double major undergraduate program and minor with the help of the program “data mining”.

For this purpose, raw data are taken from Selçuk University Data Collection Agency. Data clearing, a phase of data mining, has primarily been applied to these data. After data clearing, data conversion process has been applied. As a last phase, Naïve Bayes algorithm has been applied to the data in data-classification with the help of WEKA the program. The distribution of sample has been given in terms of variables such as faculty, gender in the Chart 1.

As it is seen in the Table 1, study data consist of 1320 students (756 male-564 female) who are studying 11 faculties of Selçuk University.

Table 1: Distribution of the sample

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Value</th>
<th>The number of Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1-Faculty of Letters 2- Faculty of Science. 3- Faculty of Fine Arts 4-Faculty of Economics and Administrative Science. 5-Faculty of Theology 6-Faculty of Communication 7-Faculty of Vocational Education 8-Engineering and Architecture Faculty 9-Faculty of Health Science 10-Technical Education Faculty 11-Faculty of Agriculture</td>
<td>1: 200 ,2:230, 3: 50, 4: 400, 5: 30, 6: 35 7: 28, 8: 280, 9: 15 10: 10, 11: 42 Total: 1320</td>
</tr>
<tr>
<td>Programme</td>
<td>Minor: 1 Double major: 0</td>
<td>Minor: 848 Double major: 472</td>
</tr>
<tr>
<td>Sex</td>
<td>M:Male F:Female</td>
<td>Male: 756 Female: 564</td>
</tr>
<tr>
<td>Does he/she has minor or double major programme in the same faculty</td>
<td>The same: 1 Different: 0</td>
<td>The same: 921 Different: 399</td>
</tr>
<tr>
<td>Achievement grade for minor or double major programme</td>
<td>0: Poor 1: Fail 2: Satisfactory 3: Successful 4: Very successful</td>
<td></td>
</tr>
</tbody>
</table>
Data Conversion
In data mining, the most time-taking phase caused by size of data set is pre-processing of data. In data mining applications, 80 percent of resources are spent for pre-processing and clearing of data (Piramuthu, 2003).

Data with the help of data-conversion are converted proper forms for data mining. Data conversion may include various processes such as correction, combination, generalization and normalization. Data normalization is one the most frequent used data conversion processes (Roiger and Geatz, 2003).

In data conversion process, data has been taken from Selçuk University Data Collection Agency as a specialist view and accordingly conversion below has been obtained. It is seen in Table 2 how data are converted.

Table 2: Attribute transformation

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Before data transformation</th>
<th>After data transformation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades (AA, BA, BB, CB, CC, DC, DD, FD, FF)</td>
<td></td>
<td>Grades (4,3,2,1,0)</td>
</tr>
<tr>
<td>Faculty of Letters, Faculty of Science, Faculty of Fine Arts, Faculty of Fine Arts, Faculty of Economics and Administrative Science, Faculty of Theology, Faculty of Communication, Faculty of Vocational Education, Engineering and Architecture, Faculty of Health Science, Technical Education Faculty, Faculty of Agriculture</td>
<td></td>
<td>Faculty (1,2,3,4,5,6,7,8,9,10,11)</td>
</tr>
</tbody>
</table>

Analysis of Data
WEKA is a data mining application developing program which has emerged as a project and later on has been used by many people all over the world. WEKA is an open coded program which is developed on the java platform (Dener, Dörterler and Orman, 2009). In data analysis, data classification Naïve Bayes algorithm has been carried out by the help of the program WEKA. In WEKA packaged program Naïve Bayes algorithm has been chosen and run for data set and indicated with the results obtained in chapter 3.

DISCUSSION AND CONCLUSION
Figure 1 is obtained when Naïve Bayes algorithm is carried out to data set when it is considered if minor and double major undergraduate program are being studied in the same faculty’s other field or not. Red signs show the students who study minor and double major undergraduate program of other field in their own faculty, on the other hand, blue signs show the students who study at other faculties. In the axis X, 1,2,3,4 as achievement scores, in the axis Y, minor and double major undergraduate programs which are studied in the same or different faculties are being indicated. It is possible to evaluate the results of Naïve Bayes algorithm.
It is observed that students who study minor and double major undergraduate program at the other field of same faculty which they already graduated or they are still studying are more successful than those who study minor and double major undergraduate program at a different faculty. As it is seen in the Figure 1, red signs above are pretty much more than the ones below.

The results are obtained when the other features in data set are placed to axis of X and Y one by one.

- It is observed that economic and administrative science faculty's minor and double major undergraduate program applications have got the highest rate with 400 people. Engineering Faculty has the second range with 280 people. It is also observed that students who study at faculties which have big chances for easily assignment such as Faculty of Health Sciences, Vocational and Technical Education Faculties don’t generally demand of minor and double major undergraduate program. Similarly, faculties such as engineering and economic and administrative science faculties which have less opportunity in finding a job after graduation demand of minor and double major undergraduate programs.

- It is observed that students don't prefer minor and double major undergraduate program which are irrelevant to their fields.

- It is observed that when this study was conducted and the number of Selçuk University students was taken about 80 thousand into consideration, the rate of the students who are interested in minor and double major undergraduate programs is pretty low.

Data mining is a process of unexpected inference out of large quantity of data. Undergraduate university students’ successes in minor and double major undergraduate programs are put under scope with the help of data mining program. It is taken into consideration that the results obtained from this study will be helpful and useful for all the universities which enable their students to study minor and double major undergraduate programs. Opportunities of minor and double major undergraduate programs should be introduced more via conference, seminar and other ways and consultancy institution should be more effective about which field can be chosen for students.
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4MAT MODEL’S IMPACT ON THE LEARNING STYLES, SUCCESS AND ATTITUDES TOWARDS MATHEMATICS

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Abstract
Instructors seek new approaches and methods to facilitate and to achieve learning while the learning process constantly changes and develops. Individual characteristics are considered important factors to facilitate learning. An individual’s learning style (LS) is one of the important factors affecting the learning process. There is a consensus among researchers (Dunn, 1990; Claxton ve Murrell, 1987) that knowledge regarding an individual’s LS will facilitate in his/her learning process and it should be considered in the process.

First, the McCarty’s “Student Learning Preferences Survey” and Alkan’s “The Attitude towards Mathematics” were applied to subjects and individuals’ LS and attitudes were identified. The learning process with appropriate techniques for the individual’s LS was initiated and the process proceeded.

Our results indicated that depending on the learning approach applied and the method use, students’ LSs can change. Noticeable changes in the students’ academic success were observed with this approach.

Key Words: Learning style, 4MAT.

INTRODUCTION

There have been many studies done for achieving complete learning in the educational process. Particularly, the contribution of individual differences have been emphasized in education for last three decades. One of the individual differences in question is the individual learning style. The concept of style arising individual characteristics makes generalization difficult in learning due to its role in learning. Researchers have been working on defining the concept of individual learning style using different aspects. Some of them are:

i) Sternberg (1997) gives the learning style as the individual choice regarding in which way the individual will learn (Bedford, 2004).

ii) According to Keeffe (1979), the learning style can be given as set of cognitive emotional, characteristic and physiological factors which are the indicators of how the learners comprehend, how the learners affect one another, and how they respond to learning environment.

iii) According to Riding–Ryner (1998), the learning style is the approach which the individual prefers in the organization and presentation of the information.

iv) Misko (1994) defines the learning style, with a more general approach, as the individual’s own way of approach in learning.
v) According to Garcia and Hughes (2000), the concept of learning style is a structure developed by bringing an activity-centered approach to the concept of style.

Common points of these definitions should be used as much as possible in order to simplify learning process. Therefore, student’s individual learning style must be determined. If the students’ learning styles are known, choosing possible teaching strategies, teaching procedures and techniques, and learning instruments can be facilitated (Akkoynulu, 1995) and also appropriate opportunities can be provided for learners (Claxton and Murrell, 1987). Based on the results from different studies, providing appropriate learning opportunities to students’ learning styles can improve

i) positive development in their attitude towards the fields,
ii) indulgent behaves to those having cognitive difference,
iii) academic success,
iv) behaviour in well disciplined

The Learning Style Model developed by McCarthy, is formed of four quadrants and is called 4MAT. In addition to Kolb’s studies, McCarthy defined the system using the properties of right and left hemispheres of the brain.

![4MAT Learning Style Model (McCarthy, 1990)](image)

Each of the four learning style quadrants was converted into a condition to cover right–mood, left–mood functions. In the second and third quadrants of the established model left–mood is dominant, on the other hand, in the first and fourth quadrants an inclination to right–mood process type is observed (McCarthy, 1990). Students need to exhibit the attitudes in all zones of the cycle in the learning process. Therefore, the completion of the whole cycle becomes more valuable than any part of it (McCarthy, 1990).

Different properties of learning types which is included in each quadrant are distinguished more dominantly. McCarthy presents the individual common characteristics and the differences among them in Figure 2.

As shown in Figure 2, the types that the model defines have very different properties. Hence, if 4MAT model is adjusted for education, a new learning environment for the model, learning activities and learning tools may be needed, because the purpose is not to eliminate these differences but to get benefit from all of them, which requires different approaches.
<table>
<thead>
<tr>
<th><strong>Type 4 Dynamic Learners</strong></th>
<th><strong>Type 3 Common Sense Learners</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>They perceive the information concretely and process actively</td>
<td>They perceive the information abstractly and process actively</td>
</tr>
<tr>
<td>Combine their experiences with practice and learn by trial and error</td>
<td>Combine theory with practice</td>
</tr>
<tr>
<td>Enthusiastic about new things</td>
<td>Learn by testing the theories and using their forethought</td>
</tr>
<tr>
<td>Like differences and easily adapted</td>
<td>Pragmatists; use something if they believe it is of use</td>
</tr>
<tr>
<td>Good at situations requiring flexibility</td>
<td>Solve valid problems of life, do not like ready-made answers</td>
</tr>
<tr>
<td>Often reach entire results where they don’t have reasonable causes</td>
<td>Value strategical thinking</td>
</tr>
<tr>
<td>Get on well with people, and can take risks, sometimes can be seen far directive and insistent</td>
<td>Talent-focused people enjoying making trials and repairs as they need to know how objects work</td>
</tr>
<tr>
<td>In search for affecting</td>
<td>Place reality to the very center of events</td>
</tr>
<tr>
<td>School is very often boring and quite regular because they tend to perform what they are interested in different ways</td>
<td>Regard school time as waste time since they need to work on life problems</td>
</tr>
<tr>
<td></td>
<td>Want what they have learned to be practiced</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Type 1 Imaginative Learners</strong></th>
<th><strong>Type 2 Analytic Learners</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>They perceive the information concretely and process through reflective observations</td>
<td>Perceive information concretely and process it reflective observations</td>
</tr>
<tr>
<td>Combine their experiences with themselves</td>
<td>Combine their observations with what they know and produce theories</td>
</tr>
<tr>
<td>Listen to the thoughts and share their thoughts to learn</td>
<td>Learn by thinking through ideas</td>
</tr>
<tr>
<td>Thinkers with high imagination relying on their experiences</td>
<td>Need to know what experts think</td>
</tr>
<tr>
<td>Work in harmony and need to take part in work</td>
<td>Value systematical thinking</td>
</tr>
<tr>
<td>Take responsibility, interested in culture and people</td>
<td>Need details, perfectionists, diligent</td>
</tr>
<tr>
<td>Sometimes have difficulty deciding since they have a wide viewpoint</td>
<td>Enjoy traditional class environments and find the ideas effective</td>
</tr>
<tr>
<td>Try to obtain the meaning and understanding of events</td>
<td>Sometimes ideas are more appealing to them, and they sometimes can be isolated people living on their own</td>
</tr>
<tr>
<td>Think school is separate from personal hobbies in which they are interested</td>
<td>Look for intellectual competence and personal productivity</td>
</tr>
<tr>
<td>Have difficulty relating what they need to what they learn in school to understand their development and lives</td>
<td>Have verbal ability and are ambitious readers.</td>
</tr>
<tr>
<td></td>
<td>Regard schools as proper places for their need</td>
</tr>
</tbody>
</table>

Figure 2: The main characteristics of 4 Major Learning Styles According to 4MAT Learning Style Model (McCarthy, 1990)

**METHODOLOGY**

This study is a quasi-experimental study depending on pre-test / post-test model with control group. In the intervention of the study, the learning activities have been developed with the principles and main bases of 4MAT Learning Model.

The experiment class is formed of a total of 30 pre-service teachers, 17 females and 13 males, who take Calculus Course, Faculty of Education, in the study year of 2006-2007. The control class at the same grade with 35 students has been used.
2002 version of Learning Styles Measure (LSM), developed by McCarthy, has been used in order to determine the learning styles of students. The measure in question was translated into Turkish and made useable by researchers (Alkan, Elçi, 2002). In the learning environment group work has been preferred. An approach based on activity has been exhibited to make learning easy. However, it has been paid attention for activities to be appropriate to each LS while they were being formed. Before and after the intervention process, LSM measure has been implemented to subject Therefore, the LS of the students were measured and the effects of implementation on the LS of students were tried to be revealed.

During the intervention, the prepared work sheets, the periodical homework, written examinations are used to determine the academic successes of the students.

The collected quantitative data have been analyzed and tried to be interpreted using proper statistical package programs.

**FINDINGS**

In the experiment group before the intervention, the distribution of learning styles of students can be found in Table 1.

Table 1: The Distribution of Students’ According to Learning Styles

<table>
<thead>
<tr>
<th>Learning Styles</th>
<th>Experiment Group (n= 30)</th>
<th>Control Group (n= 35)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>10 (33.3)</td>
<td>20 (57.1)</td>
</tr>
<tr>
<td>Type 2</td>
<td>9 (30.0)</td>
<td>3 (8.6)</td>
</tr>
<tr>
<td>Type 3</td>
<td>9 (30.0)</td>
<td>10 (28.6)</td>
</tr>
<tr>
<td>Type 4</td>
<td>2 (0.7)</td>
<td>2 (5.7)</td>
</tr>
</tbody>
</table>

Students are not equally distributed by learning styles. The numbers of students are equally distributed among the Type 1 (Imaginative Learners), Type 2 (Analytic Learners), and Type 3 (Common Sense Learners) while those in Type 4 (Dynamic Learners) are low compared to the other types in the experiment group. However, the Dynamic Learners can utilize what they have learned and acquired in solving real life problems. The Dynamic Learners can utilize their experiences to solve the real life problems. This shows that our educational system has difficulty in preparing the students to life.

On the other hand, the numbers of students by learning styles are more evenly distributed.
The number of Dynamic Learners has increased during the intervention (Table 2). While the students’ dominant learning styles have developed in the course of the intervention, they have helped students to form their own learning styles when the students have forced them in the learning style in which they are weak.

Kolmogorov–Smirnov test was applied to test the students’ academic success are normally distributed in the experiment and the control groups at the end of the intervention. The results of the test are shown in Table 3. The distribution of the academic success are given in Figure 3.

As shown in Figure 3 and Table 3, it can be said that the academic successes of experiment and control groups are comparable. Two simple t-test was used to compare academic success grades between experiment and control groups before intervention in order to provide comparison.
Table 4: the t–test results of Experiment and Control Groups according to Academic Success

<table>
<thead>
<tr>
<th>Groups</th>
<th>n</th>
<th>Mean</th>
<th>Standard Deviation (SD)</th>
<th>Test Statistic</th>
<th>p–value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment</td>
<td>30</td>
<td>45.40</td>
<td>14.45</td>
<td>-1.48</td>
<td>0.142</td>
</tr>
<tr>
<td>Control</td>
<td>35</td>
<td>41.20</td>
<td>7.78</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results indicate that there is no statistically significant difference between the experiment and the control groups in academic success before the intervention (p=0.142).

Results comparing the two groups in Academic Success after the intervention are given in Table 5, and Figure 5 shows the grades by two groups.

Table 5: t–test results of Experiment and Control Groups According to Academic Success After Intervention

<table>
<thead>
<tr>
<th>Groups</th>
<th>n</th>
<th>Mean</th>
<th>Standard Deviation (SD)</th>
<th>Test Statistic</th>
<th>p–value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment</td>
<td>30</td>
<td>62.20</td>
<td>4.95</td>
<td>-9.98</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Control</td>
<td>35</td>
<td>43.89</td>
<td>8.93</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Results showed that academic success was statistically significantly higher in the experiment group (mean=62.20, SD=4.95) than the control group (mean=43.89, SD=8.93) with p-value of < 0.0001. The intervention increased the success of experiment group.

The academic success of experiment group before and after the intervention is given in Figure 6.
Moreover, the average grades of students in the experiment group increased and amplitude narrowed and it indicates, the academic success of students at the end of intervention process. In other words, the students who seem unsuccessful developed more rapidly and got closer to the successful ones.

Kolmogorov-Smirnov test was used to test normality of the distribution of attitudes towards mathematics in the experimental group. Results of the test were presented in the Table 3.

Table 3: Kolmogorov-Smirnov Test: Attitudes towards Mathematics in the Experimental Group

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Kolmogorov – Smirnov Value</th>
<th>p – value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>30</td>
<td>173.70</td>
<td>14.14</td>
<td>0.486</td>
<td>0.972</td>
</tr>
</tbody>
</table>

Pearson correlation was used to determine the relationship between the attitude scores towards mathematics before and after the intervention (Table 4).

Table 4: Pearson Correlation : Attitude Scores Towards Mathematics Before and After the Intervention

<table>
<thead>
<tr>
<th>Attitude Scores Towards Mathematics Before the Intervention</th>
<th>Attitude Scores Towards Mathematics After the Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>r = 0.501</td>
<td>Positive Relationship</td>
</tr>
</tbody>
</table>

Attitude scores towards mathematics of the subject group before and after the intervention are given in Figure 7 and the relationship between these scores was given in Figure 8.
Pearson correlation was used to measure the correlation between attitude scores towards mathematics of students and their academic success (Table 5). Figure 9 displays the relationships between these two scores.

Table 5: Pearson Correlation: Relationship Between Attitude Scores Towards Mathematics and Academic Success

<table>
<thead>
<tr>
<th>Attitude Scores Towards Mathematics</th>
<th>Academic Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>r = 0.501</td>
<td>Positive Relationship</td>
</tr>
</tbody>
</table>
There is no strong relationship between attitude scores towards mathematics and academic successes. As attitude changes over time, these results are not surprising. Since there is no negative effect of intervention on attitudes, results should be regarded.

CONCLUSIONS

The LSM results obtained from the subjects at the end of the intervention, as shown in the previous studies (Silver et., al. 1997; Tullos, 2000; De Bello, 1990), demonstrated changes in LS of some students. It is important that the learning style does not remain same and it may change by appropriate learning program, the method employed, the measuring tool preferred and the selected learning activities. As known, the individual’s non-dominant LS contributes to the formation of his/her dominant LS. Therefore, it cannot be said that student has a single learning style, but it can be said s/he has a dominant learning style. Then, it is necessary that the activities to include all kinds of LS during the learning process be considered. The fact that each student is different from one another can be explained by their learning styles’ difference. While the learning activities are being planned, the regulazions in a way that will be suitable for each student’s learning style force the students to make contribution to the event.
During the learning process, knowing the student’s learning style provides conveniences to the teacher towards increasing the student’s success (Watson, 2003). On the other hand, the fact that the students explain the reasons of their approaches to the events, facts and concepts also contribute. On the contrary, the learning environment’s being organized suitable for LS takes the teacher’s much more time. In summary, it is clear that when taking LS’s direct contribution to learning into consideration, the learning activities carried out in an appropriate way for LS cannot be ignored in the planning of education. Therefore, it is inevitable that the teachers and administrators designing teaching have sufficient knowledge in this field.

The studies carried out show that the LS’s being taken into account during the learning process positively contribute to the academic success of the student (Appell, 1991; Ursin, 1995). In our study too, it was observed that there is statistically significant difference in favor of the subject group. That’s to say, the learning process performed through the activities suitable for every LS increased the student’s academic success. According to another result reached, the fact that students with every kind of LS are pulled into the learning process in the course of learning process may contribute to students’ positive attitude towards mathematics, while increasing their academic successes (Dunn & Dunn, 1978; Felder & Silverman; Williams, Turner, 2004; quotation on p.7).

In brief, the fact that LS have to be included in the process for increasing the academic success in education is an important and undeniable discovery. A result which is among our findings and which we can consider important is the decrease of amplitude of academic success among the students, in other words, the increase of success substratum. This shows us that the practice can be considered as an important step in trying standardization in education. One of the most important results of the study is that our education system makes less contribution to the dynamic learners. The individuals have difficulty in getting prepared for life. In order to be able to overcome this problem, the arrangements/regulations in which individual differences are driven forward must be performed.

Long-termed trial are required for attitude to change. There are a number of researches as regards the fact that the conducted studies suitable for the learning styles have an effect on attitude development towards the discipline (Ursin, 1995; Wilkerson, 1986; Klenetsky, 1997; Buchanan, 1992). In our study, no statistically meaningful difference was observed. However, wigglings were observed in a positive way. More importantly, no decline in attitude points was encountered in the students. This result, which was obtained in return for a different approach, was positively interpreted. If the trial had been more long-termed, a concrete and positive result would have been reached in the attitude development, as was the case in the academic success, according to the indicators.

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COMPARATIVE INVESTIGATION OF ORGANIZATIONAL FACTORS CREATING OCCUPATIONAL STRESS AMONG HIGH SCHOOL PRINCIPALS IN ZAHEDAN

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Abstract
Present research aims to determine the amount of occupational stress and to identify organizational factors creating occupational stress among high school Principals in Zahedan. Research used was a descriptive-surveying method. Statistical population of research involved all high school principals of Zahedan city. The sample contained 150 principals (78 female, 72 male) who had been selected by stratified-random sampling. Data-collecting tool consisted of: William Dyer’s questionnaire of occupational stress and researcher made questionnaire of effective organizational factors in creating stress with 29 questions on “Lickert’s” five-optional scale. For testing the questions and hypotheses of the research; single-sample T-test, independent t-test and F-test were used. Attained results showed that the high school principals were under occupational stress, and that all four organizational factors, namely occupational necessities, physical necessities, role necessities and interactive necessities were effective in creation of occupational stress in high school principals of Zahedan city. The results also showed that excepting the sort of institution, there were identical insights among principals, based on gender, years of service and their course of study, into the effect of studied factors.

Key Words: Occupational stress, Organizational factors, Occupational necessities, physical necessities, role necessities, interactive necessities.

INTRODUCTION

People and organizations built by them face different factors both inside and outside the organization at present time. Individual’s personality and mentality are, continually, under influence of various factors and gradually become worn out. Worn out bodies and the tensions that target peoples’ bodies are recognizable and easily curable, however the tensions, affecting the soul and mentality of organizational people, are not observable, so they can not be examined and treated easily, so that, these tensions have undesirable effects on trained human force. Although this mental strain, also known as stress, has a long background in medicine, it has prevailed in the science of management and organizational behavior, and due to it’s prevalence in social life of workers, a part of organizational discussions has been devoted to stress (Ghafoorian, 1998:37). Obviously, occupational stresses have harmful effects on employees and managers, too.

Individuals, affected by occupational stress, certainly face problems in decision-making, planning and intrusting with others that lead to poor effectiveness and productivity. On other hand, a stressed employee puts stress on other stuff, as a result, stress in organizations, like a disaster, exhausts the forces and makes the efforts in fertile (Alavi, 1993:7-8).

Therefore, for providing a proper and desirable mental bed in order to study the stress an its’ originating factors, from an organizational view pint, it sounds reasonable that at first according to “Morehed and Griefine’s” method, I have to give a definition for stress: “individual’s adaptive response or reaction to a

1 Requirements, requisites demands-obligations-needs
stimulus which causes a wide range of mental and physical necessities for him. According to organizational approach and the provided definition, they are potential resources such as environmental organizational and individual factors that induce stress.

some cases such as 60 percent of absences from work place in England, and 150 billion dollars annual costs for treatment in American organizations (Hindelniem, 1383: p.p5) that imply decline of organizations’ functions and job-dissatisfaction among (public) workers, are considerable examining effective factors on management and organization failure. There after, some questions arises in the mind, like whether a poor management can be a consequence of occupational stress and which organizational factors cause occupational stress in managers. Of course, stress exits in all people lives; however some stress- creating factors associate with individuals in different organizations such as schools. If stress exceeds beyond the reasonable bounds, it will affect individual’s performance in the organization, and its undesirable state of stress. Now, with respect to abovementioned issues, the questions, set by researcher can be expressed as follows: Do organizational factors that were proved by “Mörhed” and “Griefine”, namely occupational necessities, physical necessities, interactive necessities and role necessities, cause occupational stress in principals? If so, which factor is the most effective?

Regarding the importance of the percent research, it should be said that improving mental health in work place is considered as one of the most important factors of development and optimization of human resources in organizations. for growth and advancement of country in all fields: productive, wise and healthy human force should be utilized firstly, because the use of mentally and physically healthy forces in various economic, service- providing, educational and industrial institution, has a considerable effect on raising the level of productivity and exploitation (Gafoorian, 1999:37). Identifying and avoiding occupational stress- creating organizational factors can prevent the loss of human resources, and economic negative consequences such as decrease in production and deficiency of production. The managers are under influence of social and organizational environment and have become responsible for acquiring and meeting the aims of organization. Then, if they get stressed, negative effects will rapidly interfere with organizational performances (Toosi, 1989:74).

The necessity and importance of this research can be summarized as that the result of the research help the decision- makers and policy- makers to be aware of stress among high schools principals, and to determine organizational factors that create stress, so that they may prevent occupational stress from occurring by planning and cooperating with other stuff of organization and eventually, provide a proper ground for creating a stress- free and safe environment for manager and other stuff to improve their performances.

This research aims to determine the degree of occupational stress and also, to examine occupational stress- creating organizational factors.

Questions of the research
1- How is the rate of high school principals’ occupational stress in city of Zahedan?
2- Dose principals’ occupational stress varies with respect to their demographic characteristics?
3- Are occupational necessities effects in creating occupational stress among high school principals?
4- Are physical necessities effects in creating occupational stress among high school principals?
5- Are role necessities effects in creating occupational stress among high school principals?
6- Are interactive necessities effects in creating occupational stress among high school principals?

Background of research
In a research on “management and mental pressures”, Abtahi (1991) carried out a research, examining the reasons, consequence and coping with exiting pressures in the society, based on, not only library data but scientific and field data. The study involved 30 interviews and 40 completed questionnaires out of 70 distributed questionnaires. The result show that 100 percent of those who completed the questionnaires (had) experienced these kinds of pressure to some extent. In a research under the title of ‘investigation and compares on of principals’ supportive behavior, job maintaining factors and occupational stress full factors in
sport and physical training department of public universities”, Ramzani Zegud (2001) concludes that female coaches are more subjected to occupational stress full factors than male coaches.

Hajibabai (2004) carried out a research under the title of “identifying and preferring the most important factors of increase in high school principals’ stress in city of Qom” the results of which show that cultural, social and personal factors in men and occupational factors in women are the most important stress full factors. There is no relation among such variables as age, gender, field of study and the type of school, while there is a relation among principals’ degree of education, years of occupation and the number of students and teachers.

Ahmad (1995) in a research, examining principals’ sources of stress and comparing them between men and women, concludes that due to multiple roles, lack of appropriate social relations in workplace, conditions and nature of work, male principals have more stress and mental pressure than female. And multiple role is the most stress full factor in female principals.

Moshtaghifar (1998) in a research, investigating the cause of occupational stress and approaches to reducing it from principals’ points of view in high schools of the province of “Kohkilooye – va – Boer Ahmad”, states that there is no difference between male and female principals, regarding the origins of occupational stress. Also, no significant difference exits between principals’ occupational stress full factors and variables of years of management, size of organization and age of principals.

In a research, “Yegane” and “Alizadeh” (2003), identifying the occupational stresses in teachers of the province of “Lurestan”, conclude that there is no difference among the teachers with different occupational backgrounds. Teachers’ average stress among three stages of study (primary- high school, and middle guidance school) is different and highest level of stress belongs to the teachers of guidance schools.

Jamshidnajad (1996), in a research of n “investigation of occupational stress and comparison of job- satisfaction between teachers of primary and high school suggest s that a significant difference wasn’t observed between high and low- experienced occupational stress.

Kashawarz (2001) performed a research, examining the relation of organizational skill of time management with occupational stress among the principals of “Firoozabad” schools. The results show that mean scores of female principals are higher significantly from that of male principals in occupational stress. but regarding the variables including spatiality and non- spatiality, being high or low experienced; triple- stages of study (primary, guidance and high schools) are not effective in the level of stress.

In a research, under the title of “the relation between the styles of leadership and principals’ stress in schools of the city of Khorramab, Walizade (200) concludes that male principals are more stressed than female principles.

**METHOD OF RESEARCH**

With respect to the nature of subject and aims of the research, it has a surveying- descriptive method. Statistical population of the research involves all high school principals, from which 15o principals (78 female and 72 male) were selected by stratified – random sampling method.

To collect the needed information, two questionnaires were used: first, for investigating the level of occupational stress, William dayer’s standard questionnaire was used (in this questionnaire score, 100 or above is the sign of occupational stress).

Second, for determining the organizational factors effecting occupational stress, based on likert’s range, five-optional researcher- made questionnaire (close ended response) was used. these two kinds of questionnaire were distributed among the subjects to determine the expressiveness of tools, content- expressive method was used and to estimate the reliability of the questionnaires, kroonbakh’s alpha method was used, which was attained as: a=0.89 that implies the high accuracy of test. technical statistics, used in the present research
include descriptive statistics which were used to describe the data and involved tables arrangement, mean and standard deviations, and inferential statistics which were used to test the hypotheses of research, and involved single-sample (t) test, independent t, and F-test.

**Analysis of data**

**First question- how is the level of “Zahedan’s” high school principals’ occupational stress?**

Table 1: the results of single-group t-test, regarding the level of principals’ occupational stress

<table>
<thead>
<tr>
<th>group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>test value</th>
<th>t</th>
<th>d.f</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>principals</td>
<td>150</td>
<td>107.27</td>
<td>27.73</td>
<td>100</td>
<td>3.33</td>
<td>149</td>
<td>0.001</td>
</tr>
</tbody>
</table>

The results of table (1) show that principals’ mean and standard deviation in questionnaire of occupational stress are 107.50 and 33.48 respectively. Estimated values are as follows: \( p(0.01, df = 149) \) and \( t = 3.33 \), so, the difference of mean occupational stress with norm of the questionnaire (100) is significant, therefore, it can be concluded that “Zahedan” high school principals have a high level of occupational stress.

**Question 2 : Does occupational stress vary among principals, regarding their demographic characteristics?**

Table 2: The results of t-test, relating to the status of principals occupational stress, distinguishing the gender.

<table>
<thead>
<tr>
<th>Teachers characteristics</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>woman</td>
<td>78</td>
<td>110.81</td>
<td>37.62</td>
<td>1.26</td>
<td>148</td>
<td>.209</td>
</tr>
<tr>
<td>men</td>
<td>72</td>
<td>103.91</td>
<td>28.14</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results show that the mean and standard deviation of female principal’s occupational stress are 110.81 and 37.62, respectively.

While these values for male principals are 103.91 and 28.14, respectively. Estimated statistics are as follows: \( p(0.209, df = 148) \) and \( t = 1.26 \). These values imply that female principals suffer more stress than male. However, the difference between two groups is not statistically significant.

**Question 3: Does occupational stress vary among principals, regarding the kind of institution?**

Table 3: The results of t-test, regarding the status of principal’s occupational stress. Distinguishing the kind of institution.

<table>
<thead>
<tr>
<th>Teachers characteristics</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kind of institution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well-equipped</td>
<td>87</td>
<td>116.21</td>
<td>31.82</td>
<td>3.92</td>
<td>148</td>
<td>.001</td>
</tr>
<tr>
<td>Poorly enquired</td>
<td>63</td>
<td>95.48</td>
<td>32.18</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results show that mean and standard deviation of principal’s occupational stress in well-equipped schools are 116.21 and 31.82, respectively.
While these values in poorly-equipped schools are 95.48 and 32.18. Estimated statistics are as follow: $p(0.01, df = 148)$ and $t = 3.92$, so, observed difference between two groups of study is significant. Principals of well-equipped schools experience more stress than those of poorly-equipped schools.

Table 4: Results of F-test, regarding principal’s occupational stress, distinguishing the years of service.

<table>
<thead>
<tr>
<th>Years of service</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10</td>
<td>69</td>
<td>101.61</td>
<td>36.40</td>
<td>161621.7</td>
<td>2</td>
<td>147</td>
<td>2686.91</td>
<td>1099.47</td>
</tr>
<tr>
<td>11-20</td>
<td>64</td>
<td>110.67</td>
<td>32.87</td>
<td>5371.82</td>
<td>147</td>
<td>147</td>
<td>2686.91</td>
<td>1099.47</td>
</tr>
<tr>
<td>21-30</td>
<td>17</td>
<td>119.12</td>
<td>14.65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of above table, indicate that mean and standard deviation of principals occupational stress, with i-i0 years of experience are 101.61 and 36.40, and for those who have 11-20 years experience the values are 110.67 and 32.87 and for the most experienced principals these are 119.12 and 14.65, respectively.

Estimated statistics are as follows: $p(0.09, df = 147)$ and $F = 2.44$ the results show that the difference among occupational stress of three studied Groups is not significant statistically so the principals with different years of experience suffer from stress identically.

**Question 3: Are occupational necessities effective in creation of principal’s occupational stress?**

Table 5: The results of single group t-test regarding occupational necessities in creation of occupational stress.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>T.value</th>
<th>t</th>
<th>d.f</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kind of job security</td>
<td>150</td>
<td>20.13</td>
<td>5.05</td>
<td>20</td>
<td>2.006</td>
<td>149</td>
<td>.047</td>
</tr>
<tr>
<td>Work</td>
<td>150</td>
<td>9.36</td>
<td>3.03</td>
<td>7.5</td>
<td>7.53</td>
<td>149</td>
<td>.000</td>
</tr>
<tr>
<td>Volume</td>
<td>150</td>
<td>2.59</td>
<td>1.24</td>
<td>2.5</td>
<td>.86</td>
<td>149</td>
<td>.393</td>
</tr>
<tr>
<td>Total Occupational Necessities</td>
<td>150</td>
<td>32.77</td>
<td>7.23</td>
<td>30</td>
<td>4.695</td>
<td>149</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results show that subjects mean and standard deviation, regarding the effect of organizational factor of job necessities on principal's occupational stress is 32.77 and 7.23, respectively. It is more than the test value(30), and this difference is significant with 99% probability ($t = 4.695, df = 149$ and $p(0.01)$

The results also show that sub – component of job security with $p(0.05, df = 149$ and $t = 2.006$ at 95% probability, and kind of work with $p(0.01, df = 149$ and $t = 7.53$, at 99% level of probability are Significant. While, volume of work with $p(0.05, df = 149$ and $t = .86$ at 95% probability is not significant.

**Question 4: Are physical necessities effects in creating occupational stress among high school principals?**

Table 6: The results of single group t-test regarding role necessities in creation of occupational stress among principals.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>T.value</th>
<th>t</th>
<th>d.f</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>150</td>
<td>3.22</td>
<td>1.39</td>
<td>2.5</td>
<td>6.32</td>
<td>149</td>
<td>.000</td>
</tr>
<tr>
<td>Office Arrangement</td>
<td>150</td>
<td>5.81</td>
<td>2.23</td>
<td>5</td>
<td>4.44</td>
<td>149</td>
<td>.000</td>
</tr>
<tr>
<td>Total Physical Necessities</td>
<td>150</td>
<td>9.03</td>
<td>3.36</td>
<td>7.5</td>
<td>5.57</td>
<td>149</td>
<td>.000</td>
</tr>
</tbody>
</table>
The results indicate that mean and standard deviation of subjects relating to the effect of organizational factor of physical necessities in creation of stress among high school principals are 9.03 and 3.36, respectively, which is more than mean of test (7.5). This difference is significant at 99% of probability and with $df = 149$, $t = 5.57$ and $p < 0.01$

The results also show that sub-component of temperature and office arrangement with $df = 149$, $t = 5.57$ and $p < 0.01$ and with $df = 149$, $t = 5.57$ and $p < 0.01$ at 99% of probability respectively, are significant.

**Question 5: Are role necessities effects in creating occupational stress among high school principals?**

Table 7: The results of single group t-test, regarding role necessities in creation of occupational stress among the principals of Zahedan high schools.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>T.value</th>
<th>t</th>
<th>d.f</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role ambiguity</td>
<td>150</td>
<td>15.43</td>
<td>4.52</td>
<td>12.5</td>
<td>7.93</td>
<td>149</td>
<td>.000</td>
</tr>
<tr>
<td>Role contradiction</td>
<td>150</td>
<td>5.46</td>
<td>2.37</td>
<td>5</td>
<td>2.37</td>
<td>149</td>
<td>.019</td>
</tr>
<tr>
<td>Role necessities</td>
<td>150</td>
<td>20.89</td>
<td>6.38</td>
<td>17.5</td>
<td>6/503</td>
<td>149</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results of above table suggest that mean and standard deviation of subjects, regarding the effect of organizational factor of role necessities in creation of occupational stress among high school principals are 20.89 and 6.38 which is more than mean of test (17.5).

This difference is significant with $df = 149$, $t = 6.503$ and $p < 0.01$ at 99% of probability. The results also show that sub-component of role ambiguity and role contradiction with $df = 149$, $t = 7.93$ and $p < 0.01$ at 99% probability and $t = 2.37$, $df = 149$ and $p < 0.01$ at level of 95% probability are significant respectively.

**Question 6: Are interactive necessities effects in creating occupational stress among high school principals?**

Table 8: The results of single group t-test, regarding the interactive necessities effect on creation of occupational stress.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>T.value</th>
<th>t</th>
<th>d.f</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group pressure</td>
<td>150</td>
<td>7.93</td>
<td>2.89</td>
<td>7.5</td>
<td>1.84</td>
<td>149</td>
<td>.068</td>
</tr>
<tr>
<td>Style of leadership</td>
<td>150</td>
<td>6.73</td>
<td>2.39</td>
<td>5</td>
<td>8.85</td>
<td>149</td>
<td>.000</td>
</tr>
<tr>
<td>personality</td>
<td>150</td>
<td>5.49</td>
<td>2.40</td>
<td>5</td>
<td>2.48</td>
<td>149</td>
<td>.014</td>
</tr>
<tr>
<td>Interactive Necessities</td>
<td>150</td>
<td>20.15</td>
<td>6.53</td>
<td>17.5</td>
<td>4.96</td>
<td>149</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results of above table suggest that mean and standard deviation of subjects toward the effect of organizational factor of interactive necessities in the creation of occupational stress among the high school principals are 20.15 and 6.53, which is more than the mean of test (17.5) this difference is significant with $t = 4.96$, $df = 149$ and $p < 0.01$ at probability level of 99%. The results also show that sub-component of leadership style and personality with $t = 8.85$, $df = 149$ and $p < 0.01$, at 99% of probability and $t = 2.48$, $df = 149$ and $p < 0.05$ with 95% level of probability, respectively are significant, while group pressure with $t = 1.84$, $df = 149$ and $p > 0.05$ at 95% level of probability is not significant so, it can be concluded that organizational factor of interactive necessities and sub-components of leadership style and
personality have been effective in creation of occupational stress in principals, while the group pressure has had no considerable effect on aeration of stress.

CONCLUSION

in the recent decade, the issue of mental pressure or stress and its effects in organization have been received a lot of attention. Several of generational factors can create occupational stress and influence the performance and activities of organization. Main goal of the present research is to investigate stress-creating organizational factors among high school principals.

These factors are put in four sets which are the hypotheses of research, based on "morhead and grlef in" theory, namely occupational necessities, physical necessities, role necessities and interactive necessities-first, we deal with the results of research questions, and then, we will provide some suggestions based on the results of data analysis are as follows with respect to first question, that is how is the level of Zahedan high schools principals occupational stress, the results of table (1) suggest that mean occupational stress of principals is 107.27, which is significantly more than the norm of William Dyer's questionnaire (the scores equal or more than 100 imply stress) [107.27 > 100]. So, the principals suffer from occupational stress.

The results of independent t-test (table 2) showing whether principal's occupational stress is different with respect to their demographic features, suggest that despite highly stress among female principals, the difference is not significant statistically. It means that the difference between mean stress of male and female principals is a matter of chance and accident. However, regarding the kind of situations, the results show that the mean occupational stress in principals of well-equipped schools is more than those of poorly equipped schools (table A3). The difference

Regarding the first question, table (1) suggests that mean occupational stress of high school principals is 107.27, which is more than "William dayer's" questionnaire [(107.27>100), equal or more than 100 implies the stress], hence, principals are under stress.

results of independent t-test (table 2), regarding question 2 saying whether occupational stress among principals is different with respect to demographic characteristics, show that despite the fact that occupational stress among female principals is more than male ones, it is not, however, significant statistically. That is, observed difference between the means, stress is male and a female principal is caused by the factor of chance and accident. While, regarding the kind of institution, results suggest that mean stress among will-equipped schools principals is more than that of poorly-equipped ones (table 3). Observed difference is significant statistically. That is, well-equipped school principals are under more stress. Also, the results of f-test show that between the principal of different level years of experience the difference is not significant (table 4) although the principals of more years of experience are more stressed, the reason is that factor of chance or accident.

Regarding question 3 saying the effect of job necessities on creation of stress among principals, the results of table (5) indicate that this factor is effective in creating stress. Investigation of the effects of three sub-components (kind of job, job security and volume of job) shows that sub-factors of job kind and security of the most effective in creating occupational stress, where as volume of job has no effect.

According the findings of research by “Alawan” (1999) on identifying the sources of mental pressure in principals of “Khoozestan” province, as well as by “Nozhat” (1996) on examining occupational stress in principals of “Fars” province, velum of work or “magnitude of functions” is a stress-creating factor among primary school principals, which is not consistent with the results of present study. According to finding of a research carried out by “Ahmadi” 1995 on sources of stress in principals and comparing it between men and women, the factor of work nature and conditions was considered as an important stress creating factor. These findings are in full adaptation present research considering the factor of “kind of work” as one of stress-creating factors.
The results of a research by “Mohammadi” (2002) on examining occupational stress full factors in physical training teachers of “Rasht city” show that job responsibility is one of stress- creating factors among teachers. It is compatible with or results.

Regarding question 4, about the effect of physical necessities in creating stress, the results (table 6) indicate that physical necessities are effective significantly in creating occupational stress. By examining two sub-factors of temperature and office arrangement, it was found out that they were effective significantly. According to the findings of a research by “Dabbagh Yarimshali” (1994) on determining stress full factors among the managers on ministry of Jahad Sazandegi (=reconstruction of war), environmental or place of work was considered as stress full factor. It is consistent with the results of second hypothesis of research. “Alwani” (2009), in a research on “Physical conditions of school” considered them as stress full factors.

This finding is suited with the results of present research based on findings or a research by “Majtahedi” (2004) on investigating occupational stress full factor and their relation with general health of researchers of primary and guidance schools of “Hamedan”, the factor of “Physical conditions of school” was known as stress full. This finding is compatible with our result. Regarding question 5 about the effect of role necessities in creating stress among principals, the results (table 7) show that the role necessities have been highly effective in creating stress. Examining two sub-factor of role ambiguity and role contradiction showed that the effects of than were significant statistically and role ambiguity had the most influence on creation of occupational stress.

Based on findings of a research by “Alwani’” (1999), such factors as ambiguity of functions and different expectation of staff were considered as stress ful. The results of question 5 have proved this fact and the factor of role ambiguity was known as occupational stress- creating. According to a research by “Ahmadi” (1995), the factor “Multiple- roles of principals” was considered as a stress full factor. Similarly, the results of the present research verified this fact, and factor of “role contradiction” was known as stress full.

The results of question 6, with respect to the information of table 8, imply the effected of interaction necessities in stress creation among the principals. examination of the effects of three sub- factors (group pressure, leadership style, and personality) shows that they are significant statistically, in which leadership style and group pressure are ranked as more effective than personality in occupational stress creation among principals.

According to findings of a research carried out by “Hajibabae” (2004) on identification and preference of main factors in raising the stress among “Qom” city high schools principals, the factor of “lack of support by authorities in removing the problems of principals “was known as stress full. The results of the present research verify this fact. The factor of “leadership style” was considered as one of stress- creating factors. Based on the results of a research by “Organi” (1999), “Improper relations between manager and workers” has been known as one of the stress full factors. The results of question 6 of present research verify this fact. And the factor of personality was considered as stress full. Based on Ahmad’s research (1995) “Lack of desirable social relatios” has been know as stress full factor, which is consistent with our results.

DISCUSSION

This research shows that “Zahedan” high school principals are on the sever stress. This problem is more obvious in female principals, will- equipped school principals and low- experienced male principals than poorly-equipped school principals and principals with more years of experience. Organizational factors, known as stress full by “Morhad & Grifine” have been effective is “Zaheden” high school principals. presence of occupational stress among principals, exposes them to many problems in their performance., e.g.planning, decision- making, coordination, supervision, having skills in establishing human relations, group relations, leadership, and ... when principals is under stress, hence all stuff of school including teachers, students and servants will suffer stress, as a result, the organization of school can n’t full fill its aims and objectives and the role of education department fades away. Then, the authorities should pay a certain attention to this issue.
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MEASURING THE EFFECTIVENESS OF PROFESSIONAL DEVELOPMENT

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Abstract
Measuring the Effectiveness of Professional Development lies in arranging and assessing teacher training needs based on knowledge, skills and content. Questions designed at Jeddah Community College (JCC) analyzed and interpreted these three fundamental objectives in relation to a Business Development Unit and how this offers the way forward for faculty members as well as institutes.

Key Words: Business development unit, training, evaluation.

INTRODUCTION

There is a rich and continuous debate between professional development sought by teachers and by institutes such as community colleges (CCs). On the one hand teachers constantly want feedback on their ability to teach well, CCs on the other, appraise teachers in order to evaluate many factors which require time and effort on the part of all stakeholders with a criticality that may be questionable at times. This has been the subject of many researchers who ask questions related to the type of factors that are evaluated (R.M. Cervero 2010, Slowey 2010), in order to reduce or eliminate such encounters.

Teachers are recruited with the knowledge and skills necessary to undertake their roles. Therefore any development they acquire is either of practical or theoretical value not as a result of an initial insufficiency in their ability to perform. The changes that CCs go through demands an increase in meeting objectives set out by governmental agencies as well as meeting targets in highly competitive markets for students that are attractive to private sector interest. These two factors combine into what achieves quality education for CCs. In reference to the government sector, advisory bodies are also involved in making sure that college programs have representative from respective disciplines at university level as well as labor, human resource and chamber of commerce at the governmental level. Then there are commercial and industrial stakeholders that have interest in the quality of education offered within CCs. Therefore teachers are constantly in the front line when quality education is to be achieved.

Quality education is what curriculum demands and institutions ambitiously seek. Quality can only be achieved when outcomes such as those outlined above are met. Teachers therefore teach learners based on the predetermined outcome learners have and the level of its attainment is quality control. Outcome can be a written statement (Adam 2004) or the acquisition of knowledge, skill ((UMIST) 2001,) or as UNICEF defines it the knowledge, skills and attitudes learners have which are linked to the community at large in terms of learner behavior after completing their education (Jeanette Colby, Miske Witt and Associates June 2000).

The vast arrays of literature on such specificities mentioned provide the basic background for this study. The question of how teachers with specific backgrounds develop in order to meet the changing demands for CCs in Saudi Arabia in particular and what indicators that suggest such development has been useful for both teachers as well as CCs are studied in this paper.
Context
The launching of the Prime Minister Initiative (PMI) as well as the Technical and Vocational Education and Training Initiative (TVET) opened a series of student-teacher-administrative opportunities through the British Council, between Greenwich Community College (GCC) and Jeddah Community College (JCC) in 2008, see (T. B. Council, About PMI 2011, T. B. Council, A Review and Taxonomy: International College Partnership Models 2011, College 2008). The result of these initiatives brought about partnerships between UK colleges such as GCC, City College Brighton & Hove with Jeddah Community College (B. Council 2009).

JCC is a relatively new college. It was established in 2003 and it is part of King Abdul-Aziz University (KAU) also based in Jeddah, Saudi Arabia. JCC offers students an associate degree that is awarded from KAU upon completing a three course of study. All students enrolled are secondary school certificate holders or young adults with emphasis to the latter.

The College
The medium of teaching and learning being English at JCC means that there are intensive English language programs for students that do not meet the required level of English before joining their respective programs. There are a total of 41 teachers all with an average of 11.1 (SD=6.9) years teaching experience. There are 12 English language teachers with an average number of 3.4 (SD 1.5) years teaching experience at JCC. They all teach 20 hours of English a week. All of the teachers have a master’s degree and 6 of them are educated to Ph.D. level. Four teachers are from India, three from Egypt, two from Pakistan, two from the United Kingdom, one each from the United States, and South Africa. The administrators made two formal requests from all teachers and language teachers in particular:
1. Increase the level of general English proficiency;
2. Increase the number of students enrolled at the college;

English Language Level
It is easy for teachers to refer to the collection of information regarding student needs, examinations, and teaching-materials and teaching methods in order to positively impact the program. KAU also offers programs for teacher development in order for teachers to continuously improve departmental programs through improving themselves, their students, the materials, and testing. Also in June 2009, the British Council visited JCC and evaluated its English language department, administrators as well as students.

Initially most of the teachers reprobated the idea of being evaluated due to their indented notion of the British Council. This was brought about due the BC offering a written test as part of its evaluation of the teachers. The idea behind it was to identify what teachers knew about the language they were teaching in order for training priorities to be identified. Most teachers were under the impression that since they already have a masters or Ph.D. in English including their number of years teaching experience, 8 out of 13 English teachers completed the two-hour written test.

The observation included teacher competency with emphasis on classroom management, subject knowledge, learner understanding and the use of technology in the classroom. All 13 teachers agreed to be observed in the classroom and the whole process was a thirty-minute observation of each class.

Enrollment
The administrators wanted the program to reach a wider community. The achievement of being accredited by the Council of Education in America was not met with lightly. This provided the administration with a positive attitude towards the teachers and the program offered at JCC. Teachers were therefore part of the campaign of re-launching the newly accredited JCC to the English speaking community. It was a task that required teachers to visit international schools as well as local businesses in order to promote the college.

There was neither the structure nor facility of undertaking such a task because the teachers could not see a vertical or horizontal design in the hierarchical element of the college (Gunder Myran 2003). The task required teachers from different departments to work together, communicate and share ideas together, as well as pool
all that information into a centralized unit where their efforts can be monitored, evaluated and disseminated to the correct entity.

It was during this time that the partnerships between the UK colleges included visits from Greenwich Community College as well as Brighton and Hove College staff to JCC. They held seminars, workshops and identified areas that teachers would like to develop. The subject of enrolment was a frequent one.

On this basis 8 teachers attended a teacher training session at Greenwich Community College. Those who attended the session took active parts in lecture sessions, workshops and classroom observations. The UK trainers identified areas such as:

- teacher roles,
- local learning needs,
- learning theories,
- lesson planning,
- learning styles,
- motivation,
- language development,
- quality framework,
- Lesson observation,
- assessment,
- support and supervision,
- continuous self-improvement,
- business unit.

The visit to the United Kingdom, the fourteen-week training session, as well as the whole experience of visiting a new country, sight-seeing, and visiting different parts of Oxford and Cambridge was met positively by the entire teachers. One of the teachers was particularly more interested in collecting as much hard copies for each session as possible. For another it was the last training day that he could identify with professionally. The Business Unit at Greenwich Community College had transformed the college. This idea was developed and introduced to JCC which had a resounding effect in launching its own Business Development Unit (BDU).

**Business Development Unit (BDU)**

The BDU was set up with its own hierarchy. There were teachers reporting to the BDU coordinator who in turn reported to the dean. The BDU was designed to increase student enrolment and it achieved this by doing three activities:

1. **Parallel programs**
2. **Community services**
3. **Graduate recruitment**

**Parallel programs**

This was set up to attract local businesses to the programs offered to young adults during the day. In the evening, working students can take courses that lead to a higher certificate than the one they have. Teachers also designed and prepared courses that local businesses can benefit from. This provided a distinct advantage of teachers preparing courses that they know students need and they were paid courses.

**Community services**

This was set up to market the college as a whole to the community and maintain a local presence by providing seminars, workshops, inviting guest speakers to speak with students, and allow the community to know that the college was part of the main KAU, but offered courses that can reach all students. This meant that while it was difficult for students to study pharmacy at the main campus, they can take an associate degree that can lead to a degree at the main campus with a minimum requirement of a high school diploma as the requirement. Some of the students enrolled on the courses were attracted through the community service activities set up at local shops, malls and social activities.
Graduate recruitment
The students in the final year completed the program by doing a final year job-placement at any company of their choosing. Once they graduated the college was partly responsibility for making sure students were employed through any of the various numbers of agencies that were on the advisory committee of the college, public and private. This aspect of the BDU ensured that responsibilities and roles were clear amongst the teachers and the correct person was speaking on behalf of the college, students and providing feedback regarding relevant issues to the administration (dean).

Data Collection
The data collected was based on the BC report as well as the survey made regarding teachers knowledge, attitude skills regarding the business unit.

The data collected by the BC regarding the three areas mentioned identified classroom management, subject knowledge, understanding learners and using technology in the classroom. As mentioned earlier each observation lasted thirty minutes. The teachers were observed in order to check that they;

• Facilitated interaction in the classroom that was appropriate to the activity and promoted effective learning
• Demonstrated ability to analyze and describe language systems (lexis, discourse, grammar and phonology) and language use (through spoken and written text)
• Involved all learners and meet the needs of weak as well as strong students
• Learning technologies were used appropriately, and contributed clearly to learning goals for the lesson.

As for the BDU it was set up to increase the number of student enrollment. In order to achieve this, the teachers had to be trained and an office opened that catered for the BDU. This was possible as a result of the training the teachers received from GCC. Upon returning they also trained their colleagues and a questionnaire was distributed which 26 teachers responded. Most JCC teachers clearly identified that they are aware of what the college activities are.

The questions were based on analyzing and interpreting three fundamental objectives. Firstly, assessing what aspects of the BDU, teachers could clearly identify from a given list. Secondly, measuring the level of involvement teachers had with their identified aspect of the BDU. Finally, recognizing how their needs fit a training model so that their previous experiences and current job roles could be productively utilized.

The reasons for these three objectives were two-fold. One was to arrange their awareness of the BDU’s activities and what level of involvement they had with it in a statistical form, and the other was to assess where their training needs in terms of knowledge, skills and content lay.

The last information required was asking for teacher attributes, knowledge and skills in relation to what they wanted to develop in themselves through the BDU. Teachers relationship to their students, how they wanted to increase student motivation, improve communication and develop students personality in order for them to have a better option of selecting favorable courses are connected to teachers attributes. Therefore when asking teachers what aspect of training they felt they needed, the attribute would be those answers related to student recruitment and assessment.

The content knowledge included questions that will highlight teachers need for training in areas such as teaching, assessment, content, numeracy and general health or wellbeing. The last question was related to the teacher skills and what they wanted to improve regarding curriculum activities such as planning, observations, acceptance of feedback and working in teams. The questions regarding the content and skills asked teachers to indicate what they would be interested in regarding numeracy skills, health, technology in the classroom and working in teams. Table 1 below shows the list of attributes, content, and skills that were broken into sub units to allow questions to be used in order to identify teachers need in for developing themselves.
Table 1: Knowledge, Attributes & Skills (TDA 2008)

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Content knowledge</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Relationship</em></td>
<td>Teacher education and student learning</td>
<td><em>Working</em> in teams</td>
</tr>
<tr>
<td><em>motivation</em></td>
<td>Assessment and monitoring learning</td>
<td>Planning (time, projects)</td>
</tr>
<tr>
<td><em>Communication</em></td>
<td>Subject knowledge (an ability to analyze and describe language systems (lexis, discourse, grammar and phonology) and language use (through spoken and written text))</td>
<td></td>
</tr>
<tr>
<td><em>Personal</em></td>
<td>Content and curriculum</td>
<td>Assessing, monitoring and giving feedback (observations and how to observe and more importantly give and (accept) feedback)</td>
</tr>
<tr>
<td><em>development</em></td>
<td>Numeracy and literacy <em>Health</em> and well-being</td>
<td></td>
</tr>
</tbody>
</table>

RESULTS

It is apparent that the area of concern for everyone at JCC was highlighted by the thirty-minute observations. Though the number of teachers that demonstrated competency in the observed areas was between 4 and 11, it is evident that the rest of the teachers need help in understanding how to get all students involved with the lesson. Teachers demonstrated that their knowledge of the subject was evident; they did not pay much attention to their students’ pronunciation or gave them enough practice in speaking. It also means that between 1 and 8 teacher demonstrated competencies in all the areas.

Analyzing the feedback from the BC after their observations revealed that they were received in a positive manner because all teachers observed received their results within thirty minutes of the observation. The author demonstrated competence in all the areas observed including a commendation to the college administrators.

Table 1 below shows the sample of teachers from the college who were observed and how many demonstrated competence including a general comment.

Table 2: Teacher Competency

<table>
<thead>
<tr>
<th>Teacher competency</th>
<th>Number demonstrating Competency</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom management: Facilitates interaction in the classroom that is appropriate to the activity and promotes effective learning</td>
<td>6</td>
<td>Many of the lessons had little or no interaction, so students were not sufficiently engaged</td>
</tr>
<tr>
<td>Subject knowledge: Demonstrates ability to analyse and describe language systems (lexis, discourse, grammar and phonology) and language use (through spoken and written text)</td>
<td>11</td>
<td>Very accurate grammar analysis demonstrated, and some good vocabulary teaching, but little attention to pronunciation and very little student spoken practice encouraged</td>
</tr>
</tbody>
</table>
Involves all learners, meeting needs of weak as well as strong students

Learning technologies are used appropriately, and contribute clearly to learning goals for the lesson

The BDU was set up in order to undertake three activities. These activities were checked through the responses from the questionnaire.

More than 50% of teachers identified those activities of the BDU to be the Parallel Programs and Community Services. Only 46% of teachers indicated that Graduate Recruitment was also part of it. Table 2 shows how teachers identified BDU activities with the college.

Table 3: BDU Awareness

<table>
<thead>
<tr>
<th>Business Unit Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel Programs</td>
</tr>
<tr>
<td>Community Services</td>
</tr>
<tr>
<td>Graduate Recruitment</td>
</tr>
</tbody>
</table>

Based on what the teachers identified above, their level of involvement with the BDU was also ascertained. It is interesting to note that while 3.85 and 7.69 percent of teachers rated their understanding as poor and needs improvement respectively, about 27 and 35 percent of them rated their involvement as adequate and good respectively. It is impressive that 23 percent of them rated their involvement as outstanding which means they were associating teaching students in the evening with the BDU since those students belonged to a program set up through the BDU.

Table 4: Understanding and Association with BDU

<table>
<thead>
<tr>
<th>The Knowledge</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding</td>
<td>23.08%</td>
</tr>
<tr>
<td>Good</td>
<td>34.62%</td>
</tr>
<tr>
<td>Adequate</td>
<td>26.92%</td>
</tr>
<tr>
<td>Needs improvement</td>
<td>7.69%</td>
</tr>
<tr>
<td>Poor</td>
<td>3.85%</td>
</tr>
<tr>
<td>Not available</td>
<td>0.00%</td>
</tr>
</tbody>
</table>
The question of how much involved teachers were based on two questions. The first was whether teachers were involved with the BDU at all and the second being which aspect of the BDU they were involved in. The majority of teachers were involved with the BDU. Table 4 indicates that Only 30.77 percent of teachers were not involved with the BDU which meant that they either taught morning programs only (which is not possible as there are many students that require all teachers at the college to teach) or they represented the 7.69 and 3.85 percent of teachers whose knowledge of the BDU needed improvement or was poor.

Table 5: BDU Involvement

<table>
<thead>
<tr>
<th>Involvement</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>57.69%</td>
</tr>
<tr>
<td>No</td>
<td>30.77%</td>
</tr>
</tbody>
</table>

The second part of the question identified what aspect of the BDU they were involved in.

Table 6 Teacher Involvement

<table>
<thead>
<tr>
<th>BDU involvement</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel Programs</td>
<td>57.69%</td>
</tr>
<tr>
<td>Community Services</td>
<td>15.38%</td>
</tr>
<tr>
<td>Graduate Recruitment</td>
<td>3.85%</td>
</tr>
</tbody>
</table>

Table 5 above shows that teachers were not only involved with the BDU’s Parallel Programs and Community Services, but that they were also willing to point out their involvement through analyzing what they did with their time outside of teaching. Almost 60 percent of teachers indicated that they were involved with the parallel program which involved teaching in the evenings.

In the question asked in Table 2, 50 percent of teachers listed the parallel Program as an aspect of the BDU, even though 40 percent of them highlighted the Graduate Recruitment as part of it. However what the questionnaire revealed was that only 1 percent of them are actually involved with it.

1. **Training**
   - This question is based on the rationale illustrated in Table 6 which is based on two assumptions:
     1. Teachers will match their involvement with the BDU activities to their training;
     2. Teachers will base their training needs according to:
        - Attributes,
        - Content Knowledge,
        - Skills.

The chart below is based on the question related to training needs. From the teacher’s responses, we can see that the trend for training lies more towards content knowledge and skills than attributes with 57 and 53 percent of them indicating this respectively. An indication of 5 percent needing training for student health should not be construed as low or only for the few. Rather it is an indication that teachers who selected that are also willing to be involved with training that includes those who selected questions related to Content Knowledge.

Table 8: Training Needs
DISCUSSION

The reason why this study was carried out was to inform on how teachers develop themselves in an environment that demands more than they can offer, and to provide teachers with indicators of the type of opportunities available for teacher development even when they have acquired higher educational certification in their fields as well as practical experiences. In order to achieve these teachers were observed by the BC and their needs were analyzed and then developed in the UK.

It is unlikely that all development programs will involve teachers travelling to the UK, however, in the event that teachers are going to be developed by their institutes, it is better for the administrators to find out the type of training teachers require so that they do not resist the idea of development.

In spite of the training sessions being short and not having a certification such that teachers can identify with in their profession, the visit to the UK exposed the teachers to how development can achieve positive results. The BC visit as well as the seminars and subsequent UK training session proved to be effective. What can be extremely valuable is having a connection between the teachers return from the UK and another BC visit in order to provide training through the BC.

In this way the UK visit will change the image of teacher development for teachers that feel no need to be trained with practical teaching skills so they can appreciate the difference between practical credentials and theoretical qualification. For instance, teachers learning about how to maximize student engagement in the learning process or student talking time in class or classroom interaction patterns are practical skills which teachers from all indication of the BC observation as well as their interest in content knowledge are practical skills which can benefit students as well teachers.

The BDU achieved its objectives of increasing the number of students enrolled at the college most especially amongst the English speaking community. Every semester since 2010, 70 new students enroll for different programs at the college through the activities of the BDU. Also, establishing a BDU can be the way forward for teachers mainly because they do not have enough time to perform many tasks during their working hours.

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REFERENCES


Appendix 1

Business Development Unit Questionnaire College Activities

1. Which of the following college activities are you aware of? (Tick all relevant)
   - Parallel Programs
   - Community Services
   - Graduate Recruitment

2. How would you rate your knowledge of those areas you selected?
   - Outstanding
   - Good
   - Adequate
   - Needs improvement
   - Poor
   - N/A

College Involvement

3. Are you involved in any of the activities above?
   - Yes
   - No

4. If yes, which one? (Tick all relevant)
   - Parallel Programs
   - Community Services
   - Graduate Recruitment

Training Needs

5. Which of the following would you be interested in?
   - Student recruitment
   - Student assessment
   - Improving student numeracy skills
   - Student's Health
   - Time management
   - Working in teams
   - Technology in the classroom

Additional Feedback

6. Please list any areas in which our service could be improved.
AN INVESTIGATION OF THE IMPACT OF THE COMBINED AND WRITTEN WARNINGS ON THE CIGARETTE POCKETS

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Abstract
The aim of this study is to analyse the effects of the written and combined (written and pictures) warning statements on the cigarette pockets on adolescents. The sample of the study includes a total of 182 undergraduate students. The study was carried out at University of Hacettepe in 2010. The participants were divided into two groups: the first group (n: 90) was presented only written warnings, while the second group (n: 92) was presented combined warning statements. The study has a survey model. The data of the study were collected through survey questionnaires. The data obtained were analysed by make use of descriptive statistical techniques, especially in the form of means, frequency and percentage. Accordingly, the result of the research showed that the combined warnings on the students are effective.

Key Words: Health education, cigarette, cigarette pack, written and combined warnings, fear appeals.

INTRODUCTION
In order to reduce smoking, public institutions and NGOs have been actively developing steps (Bruvold, 1993; Kaya and Cilli, 2002). One of such attempts is to use warnings in the form of written or pictures on the cigarette pockets. It is safe to state that these warnings represent a significant step to avoid smoking (Hurrelmann, 1998; Schill et al., 2004). Those who smoke frequently see these warnings. For instance, a person smoking a pocket of cigarette a day is exposed to them about 7000 times during a year. Therefore, s/he may develop a resistance to smoking as a result of this exposure (Sezer, 1984; Celik and Esen, 2000; Ögel et al., 2004; Kersch, 199iconte2010@gmail.com8; Weiglhofer, 2007).

There is relatively rare empirical research on the effects of these warning signs. One of such studies was carried out by Christiansen, Stander and Töppich (2004). In this study carried in Germany, it is found that ninety percent of the participants read these warnings. It is further found that those who frequently and very frequently read them (%34) reported their wish to quit smoking within the thirty days in contrast to those who rarely read these warnings or those who never read them (%27). Similar difference is also observed between those whose health awareness is at a higher level and those whose health awareness is at a lower level. However, Christiansen et. al. (2004) did not present any indication about whether or not their results are statistically significant.

The aim of this study is to identify the effects of written and combined (written and pictured) warnings that are requested by the WHO and EU Comission and that lead to fear or negative feelings on the adolescents.

METHOD
The study has a survey model.

Sample
The sample of the study includes a total of 182 undergraduate students. study was carried out at University of Hacettepe (Turkey) in 2010. The participants were divided into two groups: the first group (n: 90) was
presented only written warnings, while the second group (n: 92) was presented combined warning statements. The study was carried out at University of Hacettepe (Turkey) in 2010.

Data collection tool
The data of the study were collected through survey questionnaires.

Data Analysis
The data obtained were analysed by making use of descriptive statistical techniques, especially in the form of means, frequency and percentage.

FINDINGS

The study was carried out between December 2009 and April 2010 and the sample of the study includes a total of 182 undergraduate students. The sample was divided into two groups with equal numbers. The mean age of the participants in the written warning group was 23,5 and 24 % of them were female, while 76 % male. The mean age of the participants in the combined warning group was 22,6. The rates of female and female participants in this group were 82 % and 18 %, respectively.

Table 1 shows the participants’ level of fear before and after their exposure to the written warnings. In this group, the rates of the participants who stated that before the exposure they have not have any fear about the following certain illnesses and other related situations are as follows: 43 % heart attack, 52% cancer of the larynx, 43% lung cancer, 54% early aging of skin, 63% death with pain, 62% stroke and 51% early death. After the exposure, the rates of the participants who have fears concerning the same illnesses and related situations are found to be as follows; 51% heart attack, 50% cancer of the larynx, 52% lung cancer, 46% early aging of skin, 52% death with pain, 55% stroke and 52% early death.

Table 1: Views of The Participants in The Written Warning Group

Table 2 shows the participants’ level of fear before and after their exposure to the combined warnings. In this group, the rates of the participants who stated that before the exposure they have not have any fear about the following certain illnesses and other related situations are as follows: 61 % heart attack, 59 % cancer of the larynx, 41 % lung cancer, 53 % early aging of skin, 56 % death with pain, 58 % stroke and 43 % early death. After the exposure, the rates of the participants stating that their fears about the illnesses and related
situations have increased are found to be as follows: 87% heart attack, 89% cancer of the larynx, 92% lung cancer, 78% early aging of skin, 88% death with pain, 93% stroke and 91% early death.

Table 2: Views Of The Participants In The Combined Warning Group

<table>
<thead>
<tr>
<th>Condition</th>
<th>Level of fear before the exposure</th>
<th>Level of fear after the exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart attack</td>
<td>Red</td>
<td>Blue</td>
</tr>
<tr>
<td>Cancer of the larynx</td>
<td>Red</td>
<td>Blue</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>Red</td>
<td>Blue</td>
</tr>
<tr>
<td>Early of aging of skin</td>
<td>Red</td>
<td>Blue</td>
</tr>
<tr>
<td>Death with pain</td>
<td>Red</td>
<td>Blue</td>
</tr>
<tr>
<td>Stroke</td>
<td>Red</td>
<td>Blue</td>
</tr>
<tr>
<td>Early death</td>
<td>Red</td>
<td>Blue</td>
</tr>
</tbody>
</table>

**DISCUSSION AND RECOMMENDATION**

Warnings on the cigarette pockets are regarded as fear stimulant (Ertekin and Çakmak, 2001). Fear stimulants can be defined as a persuasive message or messages that stimulate the related emotions against those factors threatening the health status and therefore, life (Arthur and Quester, 2004; Johnston and Warkentin; 2010). After the exposure to the written warning signs, it is found that students’ negative perceptions about heart attack, lung cancer and early death have increased. However, their levels of fear regarding cancer of the larynx, early aging of skin, death with pain and stroke are found to decrease after the exposure. In regard to the exposure to the combined exposure, it is found that the participants’ levels of fear regarding heart attack, cancer of the larynx, lung cancer, early aging of skin, death with pain, stroke and early death have increased after the exposure. Therefore, it can be suggested that written warning signs are not perceived as persuasive messages. However, the combined warning signs are found to be effective in achieving the desired outcome. Baran et al. (2010) state that the effects of the warnings on the cigarette pockets may vary based on the characteristics of target groups. Therefore, future studies are needed to determine the effects of both written and combined warning signs on different age groups.

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**REFERENCES**


NEW TRENDS IN IN-SERVICE TEACHERS TRAINING IN THE REPUBLIC OF SERBIA

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Abstract
Rapid economical, sociological and political changes, that European societies are faced with during past few decades, significantly affect the changes in education in a way that they radically alter it. Mentioned changes emphasize the request for the review of the existing and the establishment of a new concept of in-service teacher training. Thus, teachers' professional development presently becomes the key question in the reform processes in those countries that endeavor to advance and refine their own educational systems and to adjust them to the needs of a modern society.

In this paper we have analyzed the contemporary trends in the in-service teacher training in the Republic of Serbia. The aim of the paper is to indicate the importance of teachers' role in a modern society as well as the need of their adequate preparation and capacity for achieving professional roles through well designed and arranged system of in-service training. However, the results of the analysis show that despite the existence of decent legal frame, the current system of in-service training does not completely satisfy teacher's professional needs yet.

Key Words: In-service teacher training, teachers' professional development, teacher's competencies, teacher's roles.

INTRODUCTORY CONSIDERATIONS
Considering that the success of a teacher’s activities depends on both the preparation for the profession during the initial education and in-service training, the essential reform of teachers’ education becomes inevitable in a modern society with all its components. Highlighting the importance of a teacher’s role, in the last decades of the 20th and at the beginning of 21st century, contributes to the intensification of researches in education and teachers training. The increased interest in studying the problem of teachers’ professional development contributes to the establishments of larger national and international professional associations and organizations of teachers. With their journalistic activities and also by supporting scientific researches, these institutions conduce the elucidating of the problem of teacher’s education and in-service training. In such circumstances, valuable knowledge about the vital issues of teacher’s education and training is acquired and it considerably benefits the very process of teaching professionalization.

The results of numerous researches mainly indicate the need to review and reform the current systems of teacher’s initial education and also in-service teacher training in almost every modern country, especially in so-
called countries in transition. Contemporary analyses also indicate that the quality of teaching cadre significantly affects students' achievements and also benefits the overall quality of the educational system. The accuracy of these views is confirmed by the results of recent knowledge researches i.e. teachers’ competencies and teachers’ educational system which have been carried out at the international level in recent years (Blömeke, 2006; Frey, 2004, 2005; McKinesy & Company, 2007). By the examining the achievements of countries whose students had best results on PISA (Program for International Student Assessment) and TIMSS (Trends in International Mathematics and Science Study) tests, British researches state a number of surprising results (according to Palečić, 2008). The main finding refers to the importance of teachers’ quality as a key factor why students from these countries achieve the best results on the international tests of knowledge and students’ competencies.

Other authors also emphasize the importance of teaching cadre quality in establishing an efficient system of education. For example, his commitment to establish a national policy that will encourage the teaching profession to develop its own capacity in determining the rigorous standards and assessment of its members, Ingvarson (Ingvarson, 2002) justifies by the fact that the quality of teaching cadre is the most important factor that has a decisive influence on student achievement. In this sense, the author concludes that “nothing is more important for the quality of education in our school than knowledge, skill and commitment of a teacher, and that the achievement of national goals in education in the 21st century will chiefly depend on the teachers’ quality”. In a similar context, the OECD study (OECD, 2010) points out that there is a general agreement that “teachers’ quality” is the most important factor that influences students’ successes, i.e. the effects caused by differences in teachers’ quality are of a crucial importance.

This teachers’ role defining implies the establishment of a high-quality system of teachers’ development based on common European principles. In particular, the system in which teachers will be trained to respond to the numerous educational challenges now facing the European Union and to contribute to improving the quality and efficiency of education in the European countries. To this end, teachers’ education is put into the context of lifelong learning, which implies continuous professional development, ability to advance and adapt to new requirements during their careers. This actually indicates multidisciplinary manner in in-service training of teachers which means, in this case, the obligations of teachers to have the adequate pedagogical-psychological knowledge and also skills and abilities necessary to understand the social and cultural importance of education in addition to knowledge acquirement from a discipline\subject they teach.

**DIFFERENT VIEWS ON THE TEACHING PROFESSION AS A CONCEPT OF A LIFELONG LEARNING**

Since the results of numerous studies that the quality of teachers’ education significantly affects the success in reforming, innovating and improving the educational systems, teachers’ education and training has become a key issue in the reform processes of those countries that seek to enhance and improve their own educational system and to adapt it to the modern society needs. Changes and challenges facing today's society are inevitably reflected on the organization and quality of schools and the entire educational system and therefore the area of teachers’ education. In this sense, the requirements for the reorganization of existing and establishment of a new system of teachers’ education based on the principles of lifelong in-service and pedagogical training through various forms of formal and informal learning, are increasingly emphasized. In fact, due to increased demands that contemporary society faces teachers with in terms of having professional competencies, the teaching profession today must be viewed in the context of lifelong learning.

For these reasons, in modern societies, it is approached to the reviewing the classical concept of preparing teachers and thereby it is emphasized that a teacher’s personality is in a state of developing and that the very teacher should be a lifelong learner in order to successfully carry out tasks assigned by the school and society. Continuous education and training of a teacher are contemporary tendencies in the world, especially in developed countries. It helps teachers to develop a critical attitude towards their work and training. Thus, it is increasingly emphasized the need for compulsory continuous education for certain professions, among which teaching is included.
The need for monitoring the system of teachers’ education and training as a lifelong process is also indicated by the analysis of numerous projects implemented mainly in the European Union. The research results evidence that the systems of teachers’ education in those countries do not provide professionals yet who can adequately meet the needs and expectations of different participants and beneficiaries of the educational system. Therefore, it is necessary to find common solution for the needs of a contemporary society that requires from its members to be involved in the production of knowledge and to be ready for lifelong learning.

By stressing the importance of lifelong learning in the process of teachers’ education and training, some authors (Zafeirakou, 2002) point out that the lifelong learning and continuous professional development are the main mechanisms that promote personal growth and progress and prevent stagnation and routine in the life of an individual and society in general. During the nineties the EU education policy has emphasized, on several occasions, the concept of lifelong learning as a key instrument of a successful coping with social changes. This orientation is confirmed by the crucial international documents produced during the nineties of the 20th and the first decade of the 21st century.

However, despite the general view on the crucial role of teachers in the teaching process as well as the increasing demands that the professional development of teachers ought to be established on principles of lifelong education and learning, in a part of contemporary literature, it is pointed out that many European systems and models of teachers’ education and in-service training are still based on traditional grounds. In this regard, it is indicated the fact that in most of European countries, it is paid more attention on the relatively short period of initial teachers’ education while the importance of their continuous in-service training is neglected. One could actually say that this practice is especially present in most countries in transition, and therefore in the Republic of Serbia.

Pointing out the fact that the philosophy of lifelong learning is recognized in the Republic of Serbia in the early sixties of the last century and that it has been an attempt to reform the educational system on the conceptual basis of lifelong learning, one of the leading contemporary Serbian theorists of adult education, Savičević (2000) also points out that there was no fundamental access to the reform of teachers’ education and training till the end of the 20th century. However, rapid economic, political and social changes, characteristic for Serbian society at the end of the 20th and the beginning of the 21st century, have caused the need for lifelong teachers’ learning and training, while the concept of lifelong learning represents a requirement and necessity for the progress of any kind.

Despite general agreement on the need to organize teachers’ professional development as an open and dynamic system and to become a part of continuous in-service training process, in the Republic of Serbia unlike most European countries, we notice a small number of documents that question the value of current concept of in-service teacher training and explore these issues. This is particularly noticeable in the case of documents based on scientific researches which should serve as a foundation in designing the future, better and more efficient system of teachers’ training and whose contents and programs would be based on learning outcomes.

The need to comprehend the system of teachers’ education and training in the concept of lifelong learning, is conditioned by, among other things, the current situation in the area of secondary vocational education in our society. Accumulated and unresolved problems in the mentioned area and the fact that certain number of experts (engineers, lawyers, economists, doctors, etc.) in various fields is engaged in teaching profession in this segment of educational system but they have never been prepared for it also indicate the need for teacher involvement in the system of continuous in-service training.

The mentioned practice is contrary to the current demands and expectations which stand that, besides the knowledge of a discipline/subject they teach, teachers ought to have knowledge of pedagogical and psychological disciplines as well as methodical knowledge and skills. Besides that contemporary teachers, in their preparation, in-service training, must be familiar with and understand the knowledge society in which their students live and will work (OECD, 2010). In this sense, teachers ought to be able to prepare their students for the society and economy in which they are expected to be self-initiative students, capable and motivated to learn throughout life.
Thus, it is apparent that the current practice is not in accordance with contemporary requirements for the establishing an efficient system of teachers’ professional development, which actually involves constant review and the abandonment of some fixed traditions and concepts as well as the review of objects and plans of in-service teacher training. Taking into consideration the dynamic development of the modern society, some of the leading authors (Buchberger, 2000) point out that, at the time of rapid and great changes, the re-action must be changed into pro-action and that even current quality maintenance makes permanent teachers’ training necessary. For this reason, the entire system of in-service teacher training must be given the opportunity to develop into the systems for learning or the communities engaged in learning at local, regional, national and European level, while teachers’ professional development has to be viewed in the concept of lifelong learning.

IN-SERVICE TEACHER TRAINING BASED ON THE STANDARDS OF TEACHERS’ COMPETENCIES

The reform of European education has been started in the nineties of the last century and it included the need for a thorough change of the system of education and teachers’ training. Rapid economical, sociological and political changes occurring in most European countries, particularly in the South-Eastern Europe, in this period, require a review of current and making a new concept of teachers’ education and training in those countries. In this sense, a new approach known as teachers’ education based on competencies occurs as a possible way to solve many problems in this area. In fact, in most European countries along with the highlighting the importance and responsibility of teacher’s role in modern society it is also implied the necessity of acquiring and developing competencies as an essential precondition of teachers’ professional development during all phases of their career.

As for teaching profession and teachers’ professional development, it is obvious that the competencies today are having more important place in the system of both initial education and in-service training. The competencies also become a key term at all levels of education particularly in secondary education, they are often an integral part of international and national qualifications frames and the framework of the whole idea of teachers’ lifelong education.

The progress of this model of teachers’ education caused the publication of a large number of theoretical papers in which various authors attempt to define and identify the notion of teachers’ competencies and competencies in general. However, based on a broader analysis, some authors (Stanković, 2010) rightly note the existence of certain difficulties in defining this term. In this regard, it is indicated that, along with the certain meaning saturation of the term in everyday speech, the situation is aggravated by the fact that this term is a part of the terminology of several different scientific branches (pedagogy, andragogy, psychology, sociology, philosophy, economy, etc.), which causes the existence of different definitions and usages of the term competence in the social sciences.

The analyses also show that some authors (Poole, Nielsen, Horrigan, & Langan-Fox, 1998) comprehend the term competencies much widely and thus emphasize that competence is: “a combination of knowledge, skills, attitudes, motivations and personal characteristics which allow an individual to actively and efficiently act in a certain (specific) situation”. In another widely accepted definition of competence (Waters, & Sroufe, 1983), it is noted that a competent individual is the one who is able to use natural and personal potentials in order to achieve a decent developing result (according to Hrvatić, & Piršl, 2007).

Within the project The Tuning Harmonization of Educational Structures in Europe (Tuning educational structures in Europe) and based on extensive analyses, a list of 30 key competencies is made. The competencies are grouped into three broad categories: instrumental competencies, interpersonal competencies and systematic competencies. We can also say that the definition of the term competence provided in the said project, is generally accepted in the countries involved in the Bologna process. According to this definition (Gonzales, & Waagenar, 2006) “competency or a set of competencies means that a person utilizes a particular ability or skill to perform tasks in a manner that allows assessment of the level of his or her achievement”. In this respect, it is emphasized that the competencies can be developed, which means that a
person does not have competencies in the absolute sense but to the certain degree that can be seen at the level of development, and it can be developed by exercise and education.

Since the part of activities of the mentioned project are related to teachers’ education and training, one of the project’s results is a consolidated list of teachers’ competencies which serves as a reference framework for the harmonization of European higher educational institutions in the area of teachers’ education. The significant progress is achieved regarding the issue of harmonizing the list of teachers’ competencies and it is testified by the results of some researches (Zgaga, 2006) showing that in the South-Eastern Europe more than a half of the institutions for teachers’ education (57.5%) plans to create a curriculum based on learning outcomes and competencies, and more than a quarter has declared that they already have such a curriculum.

The analyses also reveal that more and more attention is paid to the issues of teachers’ competencies in the pedagogical and andragogy literature in the late 20th and beginning of the 21st century, where it is emphasized the evaluative nature of competency and that it refers to teachers’ ability to use their knowledge and skills in practical professional activities (Laursen, 2006). Thus, the notion of teachers’ competencies is considered as certain knowledge, skills and abilities that a teacher has got, so a competent teacher is one who manifests the developed system of knowledge, skills, abilities, motivating and functional dispositions in achieving the objects of teaching and reaching the high efficiency.

Contemporary education theorist, John Elliot (2006) while defining teachers’ competencies starts from the attitude that certain values are implemented in the basis of the process of teachers’ education and professional activities. According to his opinion, a competent teacher is one who is capable of recognizing educational values while interacting with students. What really distinguishes competent teaching practitioners, the author notes, is their ability to apply “the art of knowledge through intelligence” in order to fulfill the obligations specified by certain form of social practice.

Some authors (Buchberger, 2000), however, observe that teachers’ competencies constitute a complex system, i.e. a set of cognitive and practical skills and abilities, experiences, strategies, habits, but also emotions, values, motivations, attitudes (...) as well as teachers’ ability to use them timely and adequately while solving the problem. In this way, competencies represent an integration of declarative (knowing about), procedural (knowing how) and conditional knowledge (knowing when).

Based on the previous considerations, we could make a conclusion that the mentioned author agree on the view that competencies are not given permanently. More precisely, every teacher has them to some extent, uses them in a special way, and he or she can develop them further through learning and practicing various forms of in-service training.

Since the results of researches and practice confirm that, in the educational system in the Republic of Serbia, especially at the level of secondary vocational education, a significant number of teachers do not even possess adequate pedagogical and psychological education, the current requirements for construction and development of their pedagogical competency even after the initial education are quite reasonable.

Considering that competencies acquisition, as we have already mentioned, is understood as a process that is being constantly changed, improved and refined, it is necessary to establish well organized and integrated system of teachers’ education and in-service training in order to acquire needed competencies. To this end, teachers are to be offered various programs of continuous in-service training that will, among other things, contribute to raising their pedagogical competency.

One of the ways to overcome the current problems and to make the system of teachers’ continuous in-service training more efficient could be the establishment of the mentioned system on the standards of teachers’ professional competencies. In this sense, some authors (Radulović, Pejatović, & Vujisić-Živković, 2010) rightly note that in defining a standardized competency, it is necessary to find the right balance between precision and detail, clarity and comprehensiveness, specific and operational, general and complex, in order to ensure common acceptance of required standards. To this end, based on valid legal regulations, in the professional
institution (the Institute for Education Advancement), the draft of proposals for teachers’ competencies has been established and in its model for creating standards, five competencies have been distinguished.

However, the authors rightly state that when it comes to the process of the document drafting based on the used literature, it may be noticed that the views of the world’s leading authors in the field of teachers’ education have been neglected and that relevant European documents have not been used. It is also pointed out that it is not perfectly clear on which concept of education the document is based, which results in inconsistency in defining teachers’ roles and activities.

As for in-service teacher training, it is obvious that the document refers this segment of teachers’ professional development as an activity separated from other activities and as a process that has its completeness, which is contrary to the concept of lifelong education and continuous professional development. It is not also mentioned in the document which pedagogical knowledge, skills and social competencies a teacher has to acquire in order to allow students to develop their capabilities, to acquire knowledge necessary for further learning and understanding the world around them.

Comparative studies show that today in the developed countries of the world, while searching for a better system of teachers’ education and training, the established standards of teachers’ competencies contain all the elements that provide detailed description of what teachers are expected. Thus, it is not surprising that there are requirements for the existence of coherent and concise profiles and descriptions of what teachers are expected today, expressed in the form of established standards of teaching profession, in most developed countries of the world. Such profiles are essential because they provide clear guidelines for teachers’ initial education, their certification, continuous in-service training and career advancement.

However, despite some shortcomings, the contemporary model of teachers’ education based on competency standards has mostly replaced the former model which has not been proved effective enough in practice. Some expert sources (New Jersey Professional Standards for Teachers and School Leaders, 2004) note that “professional standards serve as a base for the establishing more thorough system of certification, more productive initial education, and more effective and relevant professional development”. Within the standards, the considerable attention is also paid on the issues of establishing certain outer norms by which teachers’ development can be tracked during their careers. It is assumed that teachers have no incentive to think about their practice without some kind of external normative structure (Ingvarson, 2002). The existence of clear norms allows teachers to compare themselves with the standards existing outside their schools and associations.

CONTEMPORARY TRENDS IN IN-SERVICE TEACHER TRAINING

Practice as well as the results of theoretical analyses shows that besides the proclaimed objects and reforming processes started in the Republic of Serbia after 2000, there is still a large gap between the increased demands of society and teachers’ respond to these expectations. A particular problem is the fact that among the teachers who have prepared themselves for this profession, there are so-called “casual teachers” who have found themselves in this profession by coincidence. Here, we think, above all, of those who work in schools but still did not graduate and those graduated to work in the economy, but they teach today without any psychological-pedagogical and didactic-methodological competence.

In-service teacher training is regulated in the Republic of Serbia by the Regulation of continuous in-service training and knowledge acquirement of teachers, pre-school educators and professional assistants (The Official Paper of the Republic of Serbia, 2005). The Regulation prescribes the continuous in-service training which is to be achieved by specific programs that can be compulsory or optional. Teachers are obliged to attend at least 100 hours of various types of training in a period of five years, precisely at least 60 hours of compulsory and at least 40 hours of optional programs. However, the analyses show that despite normative regulating of in-service teacher training area and the publication of the Catalogue of accredited training programs by the Ministry of Education of the Republic of Serbia, the vast majority of teachers have failed to attend planned 100 hours of in-service training programs.
The current accredited programs for in-service teacher training as well as the way of their realization testify that there is still a traditional form of training in the system of in-service training, it is just partially enriched by new themes and often superficially understood as workshops. The analysis of teachers training programs implemented during 2008/2009 confirms that only 63% of programs were being realized during the school year, i.e. 37% or 212 programs did not have any implementation. The reason why these programs were not implemented was unknown. The analysis also reveals that it is not indicated that the systematic monitoring and implementation in practice are built in the programs and catalogue, i.e. in the very system of in-service teacher training there are no program implementation monitoring and teachers support in program implementing, that is to say the very programs are not based on the conception of teachers’ professional development but on a practice, drill, exercise.

These problems in the system of in-service teacher training in our country indicate the need to improve the quality of in-service teacher training and its connecting with initial education. It is assumed that the quality improvement and mutual adjustment of initial education and in-service teacher training would contribute to teachers’ advancement, raising their living standards (through the elaborate system of financing and remuneration), the improvement of their work conditions, the establishment of a selective approach among the teachers (by better defined progression criteria) and finally upholding the profession reputation in society.

These problems are particularly present in the system of initial education and in-service training of teachers in secondary vocational schools among whom there is a significant number of those who do not possess even a basic pedagogical and psychological education. For these reasons, and considering the mentioned problems, in the documents relating to the area of secondary vocational education, it is rightly insisted on the new concept of in-service teacher continuous training which would constitute a part of overall development policy and strategy for in-service education and training. The aim of the concept is to “equip” teachers with functional knowledge and skills that will help them not only to successfully implement new reformed programs but to actively and creatively participate in the further development of in-service education and their own professional development.

It is also anticipated that the system of professional development of teachers in vocational education and training should be open and dynamic and connected with all relevant institutions (universities, science institutions) as well as professional organizations, social partners and expert groups. However, even though these and other programs related to the field of teachers’ training provide the concrete activities for their implementation, the practice indicates the existence of the gap between proclaimed and realized objectives. All of this points out the need for further work and seeking to find a new and efficient system of teachers’ professional development.

CONCLUDING REMARKS

The need for in-service training is determined by increasingly frequent demands that teachers’ knowledge and skills should be synchronized with new curricula, changes in characteristic students’ needs for learning, new researches on teaching and learning and growing pressure to take responsibility for the success of teachers and schools. The purpose of in-service training is to modernize, develop and expand the knowledge that teachers have acquired during their initial education and to help them to develop new skills and insights into the profession.

In this regard, it is necessary to work on more firmly connecting the initial education to the system of in-service training. Among other things, it is obligatory the fact that in the institutions of secondary level of education in the Republic of Serbia, there are teachers with different levels of pedagogical, methodological and psychological knowledge. On the other hand, practice shows that the very knowledge of the subjects’ contents allows teachers to achieve better results in practical work and to establish better relations with the learned.

In addition, since the researches results show that the training is the most effective when organized in specialized institutions and connected with the theory of practical work implementation, it is necessary to
ensure that programs and contents in in-service teacher training provide the knowledge and competencies that can be used in real teaching situations.

Therefore, it is apparent that there is a need for systematic changes in the national programs of in-service teacher training in the Republic of Serbia. The need for these changes, among other things, derives from the recognition that the significant number of teacher is critically minded to the current system of in-service training, believing that there is no an efficient system, in fact, and that it is necessary to establish one as soon as possible, so teachers are to be given the right opportunities for professional development.

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REFORM OF ELECTRICAL ENGINEERING STUDY PROGRAMS
AT POLYTECHNIC UNIVERSITY OF TIRANA

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Abstract
The study programs on the Faculty of Electrical Engineering at Polytechnic University of Tirana are reformed in accordance with the Bologna process. This article aims to give the structure of new study programs on three study cycles, improvements of these programs based on effects and challenges presented during their implementation and share gained experience. It examines the overall changes in the Albanian Higher Education sector and especially for Faculty of Electrical Engineering. The paper is based on the case study of the Faculty of Electrical Engineering and explores the difficulties on implementation of new study programs. Some anticipated effects of these programs, which were developed to be compliant with Bologna declaration, are discussed. Implemented solutions in study programs are expected to increase the quality of teaching and research, using better the laboratories, increasing the possibility of collaboration with European Technical Universities, being more competitive in market.

Key Words: Study program, education, research, reform.

ALBANIAN HIGHER EDUCATION

Higher Education Institutions in Albania are established, function and are accredited in accordance with the Law on Higher Education. Higher education institutions are: universities, academies, professional colleges, Higher Educational Schools and inter-collegiate centers (Official Journal, 2010).

The Polytechnic University of Tirana examined the overall changes in the Albanian Higher Education sector since the beginning of 1990s. During the years 1990-2000 were considered very difficult ones for Albania and difficult years for Higher Education as well. A great number of students and professors emigrated bringing difficulties in realizing quality of work in universities, which can be clearly seen in the reduction of students’ number enrolled in universities and in the numbers of qualified academic staff. As a matter of fact, the situation began to improve after the year 2000, due to great efforts made by the Albanian government and academic staff of universities.
The Albanian government signed the Bologna Declaration on 18 September 2003 brought about new concepts in the importance of development of Higher Education. So, Albania become a participant with full rights in the Bologna process, that began in 1999 and having as final goal the creation of a European Higher Education Area (EHEA). This means that the system of higher education in Albania based on European standards, become comparable and compatible with other European systems of higher education.

The higher education reform aims to implement a diversified system with configuration modern tertiary education in the context of reviewing program content based on Bologna Declaration and the implementation of effective branches and specialties needed from Albania labor market, in accordance with the Bologna Declaration. Albanian legislation was modified based on these standards.

The activity of Higher Education Institutions is regulated under the Law on Higher Education 9741 of 21 May 2007 (Official Journal, 2007) but the situation has evolved lately with very rapid change. Thus the Higher Education Law was amended several times during the last few years and consequently, statutory regulations were adopted, like Criteria for credit assignment to study programmes according to ECTS, three cycles study programs, criteria on accreditation of higher education institutions and study programmes, diploma supplement, etc. (Official Journal, 2010). By the Higher Education Law 9741, Albanian universities were obliged to implement Bologna-compliant study programs and be part of EHEA not later than in 2010.

The main principles of the HEL are the following:
- harmonization with the European higher education system and promotion of academic mobility of teaching staff and students;
- assurance of quality and efficiency of studies;
- participation of students in governance and decision-making, in particular in matters relating to teaching quality assurance;
- harmonization of teaching and scientific research.

Public and private Albanian universities based their daily work to various governing bodies and agencies; some of these important ‘check and balance’ institutions in the Albanian education system are Council of Higher Education and Science, Accreditation and Quality Evaluation Agency, The Conference of Rectors and other important governmental and non – governmental organizations (Official Journal, 2010).

Albanian Higher Education system is a mixture between local and internal strategies of universities, national strategies of the Ministry of Education and Science, European strategies (particularly of Bologna Process) and globalization processes. Thus, in our days the debate is focused on higher education reforms and problems, international student mobility, the role of English language teaching and testing, the commoditization and standardization of Higher Education, partnerships for studying abroad and so on (Dobi, 2011)

ALBANIAN ENGINEERING HIGHER EDUCATION – POLYTECHNIC UNIVERSITY OF ALBANIA

The State University of Tirana was established in 1957, for the first time, on the basis of several institutes, and the Polytechnic Institute was one of them. Over the decades there have been changes time by time, but the most important one happened on 1991 with division of the State University of Tirana in two universities, one of which is the Polytechnic University of Tirana and it is the oldest and the only of its kind in Albania; it may be considered that PUT represents the whole Albanian engineering higher education. PUT is composed of six faculties: Civil Engineering Faculty, Faculty of Electrical Engineering, Faculty of Mechanical Engineering, Faculty of Information Technology, Mathematical Engineering and Physical Engineering, Faculty of Geology/Mining and the Research Institute of Geosciences and Energy, Water and Environment(UPT, 2012).

The number of students which frequent engineering branches appears to decline obviously after 1991 because of:
- Transitional period, after the fall of the dictatorship (the first introduction of personal freedom of the individual; the youth was the part of the population which embraced faster new ideas and tendencies);
A great part of the Albanian industry was shut down, and as a result there were no demands or job openings for future engineers; Economic emigration of the young people.

Fig. 1: The number of engineering students during 1992-2002 years

During this decade (starting from 1991) there were a sensitive migration of academic staff, table 1.

Table 1: Number of Academic Staff Left from PUT during 1991-2000 Years

<table>
<thead>
<tr>
<th>Academic category</th>
<th>Number of staff left from Polytechnic University of Tirana</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Assistant</td>
<td>76</td>
<td>32%</td>
</tr>
<tr>
<td>2 Pedagogue</td>
<td>62</td>
<td>26%</td>
</tr>
<tr>
<td>3 Associate Professor</td>
<td>10</td>
<td>5%</td>
</tr>
<tr>
<td>4 Professor</td>
<td>7</td>
<td>3%</td>
</tr>
<tr>
<td>5 Total</td>
<td>155</td>
<td>66%</td>
</tr>
</tbody>
</table>

The above data, specifically referring to table 1 is the fact that 80 of them are aged 31-45 years and 52 are up to 30 years. These figures highlight the tremendous importance of embracing the Bologna Declaration, and applying it. The figures show clearly the situation in which engineering education was when PUT began reforming the curricula and implement Bologna Process. Base on the figures, in the last ten years we have reached an increasing number of students, apparently with a positive tendency, figure 2 (UPT, 2011).

Fig. 2: Total number of Students and registered for first time during 2006 up to 2011
As Albania’s opening to the rest of Europe, the concepts of distance education and eLearning became familiar, and it was engineering which embraced them first. One could not require new technologies through an out of date teaching system and curricula; thus this brought about the enactment new law of Higher Education which was passed together with many other complementary legal bills.

Actually in Albanian Engineering Higher Education, there are three ways of obtaining the diploma:
- 5 years by face-to-face teaching and learning, old system.
- 3 + 2 years, according to the Joint Declaration of Bologna of 19 June 1999.
- 3 years by distance education, near to Department of Distance Education.

STUDY PROGRAMS BEFORE BOLOGNA PROCESS

Faculty of Electrical Engineering is one of the oldest Faculties in Albanian Higher Education. It was founded in 1951, as Electrical Branch within the Polytechnic Institute (Golemi & Çani, 2005). Faculty of Electrical Engineering (FEE) is a main unit in the Polytechnic University of Tirana that coordinates teaching and research work. Its main tasks are highly professional education of specialists, postgraduate qualifications, training of young scientists and conducting scientific research activities in different specific fields. FEE enjoys all the rights deriving from legal acts of academic freedom in teaching, research and new ideas.

Faculty of Electrical Engineering of Polytechnic University of Tirana, commenced new study programs in the field of electrical engineering based on two Bologna cycles in 2005/2006 and it needs to be stressed that FEE is a pioneer in Albania for implementation of Bologna process. The Electronic Department of FEE began the implementation of Bologna process since 2002/03 as a result of government cooperation between Albania and Italy. The second Bologna cycle program begun to be implemented in 2008-2009 and during this time the academic staff prepared the new study program for third cycle, Master of Second Level. In the course of time different changes are made in study programs of two cycles in accordance with changes of HEL. The third cycle study programs were proposed and opened in 2009/2010, while our previous non-Bologna study programs are running out gradually. The Senate of UPT has decided that non Bologna study programs will be finished in academic year 2014-2015 (UPT, 2009).

Before the Bologna reform, students at FEE-UPT were able to enter the study of electrical engineering in two profiles: Energetic and Automation of Industry. The academic study program consists of 10 semesters of lectures, practices and laboratories and it finishes with presentation of diploma thesis. Therefore the total duration of this study program is 5 years. Students decided to attend one out of profiles in fourth year of their studies and there was no professional practice included in five years study program this happen because of transition situation in Albania. The graduates of the academic level were entitled to enter the postgraduate program: after 2 years, they can either obtain the title “master of science” (magister of science) by presenting their master thesis, or can directly prolong their research work towards doctorate thesis for another 3 years. Figure 3 provides the structure of these study programs.
The students of non Bologna system have finished the obligations (lectures, seminars and labs) and they have only specific obligations in various subjects and exams. Based on Law 9741 (Official Journal, 2007), their degree is equivalent to that of Master of Science. If they have not finished their studies up to academic year 2014-2015, there exists a possibility to transfer to new Bologna program studies.

**IMPLEMENTING OF BOLOGNA PROCESS**

The new study programs at FEE with their most important features will be presented below. The main reasons that led to the presented arrangement of these programs will be discussed, as well as some expected effects that can arise due to particular Albanian circumstances. A special consideration will be given to the difficulties, weakness and big efforts that we are doing to implement the new study programs.

General structure of new study programs in accordance with Bologna Process, based on New Higher Education Law 9741, May 2007, is shown in Figure 4.
First Level Diploma (DNP)  
Time ≥ 3 years  
180 ECTS

First Level Master (MNP)  
Time ≥ 1 year  
60 ETCS

Second Level Diploma (DND)  
Time ≥ 2 years  
120 ETCS

Second level Master (MND)  
Time ≥ 1 year  
60 ETCS

Doctoral studies  
Time: 3÷5 years  
60 ETCS

Further qualification

Labor Market

Diploma of Old System  
Time ≥ 5 years

Equivalence

Labor Market

Fig. 4: New study system 2005 – 2010, based on New Higher Education Law 9741

Where:  
1 ECTS = 25 hours, 10 ÷ 14 hours in auditor and 15 ÷ 11 hours of student work  
1 year = 60 ECTS = 1500 hours  
1 semester = 30 ECTS

Faculty of Electrical Engineering is composed from three departments:  
1. Department of Automation of Industry  
2. Department of Electric Power Systems  
3. Department of Electro-technique

Faculty of Electrical Engineering, during the years 2005 - 2010 offered (Ministry of Education and Science, 2008):  
1. Diploma of First Level in Electrical Engineering direction Professional Energetic  
2. Diploma of First Level in Electrical Engineering direction Formative Energetic  
3. Diploma of First Level in Electrical Engineering direction Professional Automation of Industry  
4. Diploma of First Level in Electrical Engineering direction Formative Automation of Industry  
5. Diploma of Second Level in Electrical Engineering direction Energetic  
6. Diploma of Second Level in Electrical Engineering direction Automation of Industry
Also during academic year 2009-2010 were proposed and opened the study programs of third cycle:
1. Master of Second Level "Automatics and control technologies"
2. Doctoral school in Electrical Engineering with directions:
   - Automation of Industry
   - Electro-technique
   - Electro-energetic

The FEE staff decided to implement both academic and professional first 3 years cycle programs; the second level diploma consequently last 2 years. There were several reasons for such a decision: like our tradition of study programs on old system, based on the advanced experience of the Milan Polytechnic University that we referred during the discussion of our new study programs, needs of Albanian market labor duration of some other study programs, which could compete for the same students like FEE.

The second cycle program which would last 2 year could be followed from graduates on academic first level diploma, formative direction. The study programme leaves the opportunity for prospective professional level graduates to enter the second cycle, as well (Ministry of Education and Science, 2008).

Fig.5: Structure of study programs in FEE-UPT during academic years 2005-2010.
Therefore, we created a flexible structure of study programs, which created the possibility that the student graduated in professional direction, through completion of an amount of credits to enroll in the Diploma of the second cycle. In the same way a student graduated in formative direction, through completion of an amount of credits to meet professional knowledge in each of the profiles. The new study programs were prepared in accordance with specified objective of Bologna Declaration as:

- The adoption of a common framework of readable and comparable degrees, also through the implementation of the Diploma Supplement [Bologna Declaration]. Diploma Supplement follows the model developed by the European Commission, Council of Europe and UNESCO/CEPES. It is in Albanian and English languages;
- The introduction of first degrees no shorter than 3 years and relevant to the labor market;
- Introduction of ECTS-compatible credit systems also covering lifelong learning activities, through credits per curriculum;
- Modalities on student mobility and student transfer;
- Specific objectives of each programme or activity.

**Academic First Cycle Study Program**

As mentioned above, the academic first cycle study program, formation direction, takes 3 years. Since one of the aims of this program is to provide solid fundamentals for students entering the second cycle program. Three years are simply too short, but on the other hand, we offer the professional program with these possibilities as described later. First two years of the academic program comprise of common and fundamental courses and the students may select to continue academic program in formative direction in first semester of the third year. The options are two:

- Formative direction on profile Automatic of Industry
- Formative direction on profile Energetic

The studies of the First level contain the necessary scientific basis for a possible qualification in the electric engineering field. The graduates have the abilities to be employed in the implementing of engineering projects, maintenance and assisted control of engineering systems in electric industry, in assisted design etc.

In order to get this diploma, the student must have realized:

- 60 ECTS – Discipline of general formation;
- 75 ETCS - Discipline of characterize formation;
- 20 ECTS – Former similar Discipline or and integrated with characterize Disciplines;
- 5 ECTS – Formative Discipline chosen by the students among those offered by the institution;
- 12.5 ECTS – Formative activities for the knowledge of foreign language, practices;
- 7.5 ECTS – Preparation of diploma thesis or final exam.

The First Level degree acquires necessity of continuation of studies in the study program of the second cycle. In order to continue the studies in the second cycle, student should take DNP in formative direction and to fulfill the required criteria to DND.

**Professional First Cycle Study Program (Diploma of first level)**

The professional first cycle study program takes 3 years, just like the academic one. The professional program was designed with more practical aspects, providing the graduates with all the skills they might need in job. In its last semester, the professional program includes practice and diploma thesis.

Special features of professional study program are the large number of professional courses, projects and laboratories.

- 50 ECTS – Discipline of general formation;
- 75 ETCS - Discipline of characterize formation;
- 20 ECTS – Former similar Discipline or and integrated with characterize Disciplines;
- 10 ECTS – Formative Discipline chosen by the students among those offered by the institution;
- 15 ECTS – Formative activities for the knowledge of foreign language, practices
10 ECTS – Preparation of diploma thesis or final exam.

Fields of power electronics, electrical machines and drives, power engineering are covered by program study of profile Automation of Industry.

**Second Cycle Study Program (Diploma of Second Level-DND)**

The second cycle study program takes 2 years. The last semester of DND is mostly focused on the preparation of Diploma Thesis. Second level programmes of study provide postgraduates with an advanced level of theoretical, practical education and training in specific areas. The graduated student have the abilities to be employed in the applying of engineering projects, maintenance and control of engineering systems in electric industry, in projection, in laboratories of tests, calibration and certification of electrical systems in accordance with European standardization etc.

In order to get this diploma, the student must have realized:

- 30 ECTS – in the area of general sciences;
- 26 ECTS - in area of fundamental specific sciences
- 32 ECTS – similar or/and integrated disciplines to fundamental specific sciences;
- 12 ECTS – in the area of optional courses the institution offers.
- 20 ECTS – for preparing and sustain the diploma

The second cycle diploma “DND” gives the possibility to its owner to realize the third cycle studies: master of second level (MND) or doctorate studies, as shown in figure 5. For continuing the third cycle studies in Electrical Engineering, the candidate should have “DND” diploma or Master of Second Level and fulfill the required criteria of Doctorate School in Electrical Engineering.

**Effects of Bologna implementation**

The following positive effects, have been noticed during implementation of new study programs:

1. The knowledge obtained in the first cycle of studies has responded to a considerable extent the market demands. The indicator is a good rate of graduates’ employment;
2. Orientation in formative and professional direction and the criteria for admission to second cycle of studies has been a driving force for improving the quality of the first cycle students;
3. Growth of students' ability to solve problems through various tasks, projects and diploma work;
4. New programs of study are associated with improvement in technique and technology in the laboratory basis for the realization of lab work, based on projects prepared and carried out by academic staff with funds from the World Bank and Ministry of Education and Science;
5. During this period, a lot of efforts are made to increase academic qualification in frame of TEMPUS project.

**Weakness**

1) The labor market in Albania does not offer possibilities to accomplish quantitative and qualitative practices, because of a great number of students;
2) Drawback of the reform in Albania is the lack of the financial frames which would provide implementation and quality in execution. Again, there are no standards concerning the number of students per teacher and per group. The number of student’s entrance in first year is decided by Albanian government. Often the number of students is higher than capabilities that FEE has in staff and classes. It has direct impact in the quality of exams;
3) Academic staff is limited in number and young. Hence, two directions on first cycle increase their academic load reducing the quality of teaching and taking more time for their qualifications;
4) Study Programs of second cycle DND must be improved further, in terms of compliance with academic opportunities and improve the relationship between elective courses and those obligated;
5) The lack of possibilities in finding the proper mentor to help students on their diploma thesis is a problem because of a large number of students in the DNP.
SECOND STEP OF POST-REFORM STUDY PROGRAMS, 2010 – on going

The period, from 2007 to 2010, is estimated as a period during which it was done an in-depth the reform in higher education system in Albania. This reform has affected all aspects of this system, in particular the structure and contents of study program, in accordance with the Bologna standards. Implementation of new study programs, during a period of five years in Albania, has shown problematic conditions that should reflect on HEL. The Law on Higher Education was amended by a new law 10307, dated 22.07.2010 (Official Journal, 2010), which regulates the types of tertiary education programmes and qualifications. There is no more first level degree (DNP) but Bachelor degree, as in many other European countries and it is still 3 years with 180 credits. This change was made knowing that Bachelor degree with 3 academic years duration is the most frequently degree applied in most countries.

The new law takes in consideration the conditions of Albania, lack of technical high schools or technical institutes, and guides Universities to have Bachelor, with broader theoretical base so as to provide possibilities the graduates to select master degree not only in their bachelor area but also in 5-6 nearby areas (Tafaj, 2010). Adopting as one of main principles of Bologna Declaration, the study flexibility to transfer credits from one study direction to another direction. The change that is applied in second cycle of study is the Master Professional degree for the first time. There is no more Master of first level, and instead of DND, there is "Master of Science" degree. Before the award of the Master degree, the students must pass an internationally recognized English Language Proficiency.

There was no more Master of Second level degree. It was removed because there is no equivalent degree in other European countries. This kind of degree that lasted only for one year (60 credits) and it was not clear its orientation toward science or professional direction, as such, it was difficult to be recognized from European Higher Education Institutions.

Doctoral studies (research doctorate) programmes of a purely academic nature and are strongly based on research and independent and creative activities. Entering criteria is holding "Master of Science" diploma or a foreign comparable degree; admission is subject to the passing of competitive exams. Normal duration of studies is at least 3 years and comprises 60 ECTS credits for organized studies. In order for the student to be awarded a degree, he should prepare a research thesis. Institutions of Higher Education establish a set of qualifying criteria for the recognition of English Language Proficiency.

The new structure of study programme, based on Law 10307 is given in figure 6.
It is clearly noticed that the new structure of study programme is simplified taking into consideration all the requirements.

1. Improvements of study programs in FEE-PUT, based on Law 10307

The amendments referring to Law 9741 are reflected on study programs of FEE beginning from academic year 2010-2011. The first cycle study program are reviewed and improved based on different experiences. The study program of Master of Science will be reviewed and prepared during this academic year, 2011-2012 and only one change is done which has increased the credit numbers of diploma thesis from 20 ETCS to 32 ETCS, as obligation by Law (Official Journal, 2010).

Some from improvements are made on bachelor degree, based on the experience gained.
1. As the study programme had some specific courses with 2.5 ETCS, it was considered not enough for student formation. Thus, the council of faculty decided the minimal number of credits would be 5 ETCS.
2. Taking into consideration the importance of courses as foreign language and power electronics for our branch, their numbers of credits were increased.
3. There are no more two directions, professional and formative one. This decision was taken into consideration from many reasons: labor market, overload of academic staff and small number of students’ entrance in professional direction, figure 7.

Fig. 6: Study programs and cycles based on Higher Education Law 10307
4. In order to use better the capacities in staff, classes and laboratories it was seen as reasonable that the changes between two profiles Energetic and Automation of Industry to be decreased.

5. Taking in consideration the big difficulties in qualitative preparation of diploma thesis it is decided the final exam instead of diploma thesis.

The Bachelor study program with above changes is being applied during the academic year 2011-2012.

![Fig. 7: Number of students register in two directions of first cycle degree](image)

**FINDINGS**

Some strengths that motivate us for improvements and deepening the reform of our study programs are the following:
- As FEE staff is relatively new but they are motivated and the Institution is encouraging them for their rapid qualification;
- It would be highlighted the fact that the graduates from the FEE are positively accepted by the labor market;
- The collaboration between FEE and enterprises are considered as a effective instrument;
- The laboratory base is improved through different projects;
- Involvement in national and international projects has have direct impact in qualifying staff and updating laboratory equipment.

Some weakness are
- There is still a need for a qualified staff to three cycles of study and research;
- A limited number of exchanges students and staff with the other European universities from the in frame of projects TEMPUS and Erasmus Mundus;
- Limited number of academic staff and funds do not correspond to the growing number of students for three study cycles;
- The number of graduates is small;
- Not enough classes for a better teaching facilities.

**DISCUSSION AND CONCLUSIONS**

Reformed study programs at Polytechnic University of Tirana, Faculty of Electrical Engineering, were presented with modular approach and combined treatment of both courses (compulsory and elective). The feasibility and optimal expenses of programs are considered and solved, at least for the first- and the second-cycle programs.

First experience, obtained from academic year 2009-2010 confirms that the presented structure of study programs ensures viable timetables.
The study programme reform and three cycle study system towards a market oriented education may render the FEE education system attractive for bilateral or multilateral cooperation.

The last results about the implementation of the reformed study programs will be based on the assessment of the employers of our graduates (after 5 – 10 years).

Regardless of the presented programs and their structures, most of the results will depend on teaching quality within specific courses and each student’s endeavor.

Anyhow, the average duration period of study will be prolonged due to specific situation of the Albanian students. Consequently, first cycle program graduates may need 4 or 5 years; while second cycle program graduates 3 more additional years.

An important way for further improvement is to put more efforts to internationalize study programs and to put into practice international study programs.

The pressure on the Albanian universities, both from internal and external factors is very strong and is a very competitive system, with visa liberalization operating in a very open education market. Thus there is a need to improve time and again the study programs in order to be more competitive in the global world.

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**REFERENCES**


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Colleagues that are in editorial board worked hard to determine the articles of this issue. There are also some articles that were presented in “3rd International Conference on New Trends in Education and Their Implications” that took place between 26-28 April 2012 with the contribution of 46 countries. Articles are evaluated by the referees that are either in editorial board or outside the board. According to the evaluations, some articles that were presented in “3rd International Conference on New Trends in Education and Their Implications” will also be published in our next issue.

Although WJEIS is a new journal, it has been welcomed with interest. A lot of journals from various universities are in the evaluation process. We would like to thank cordially our colleagues who work hard in editorial board to evaluate the articles, writers who contribute to our journal and all readers.

1st August, 2012

Best regards

Prof. Dr. Zeki Kaya
Prof. Dr. Uğur Demiray
MANIFESTATIONS OF THE GENDER IDEOLOGY IN THE ZIMBABWEAN SCHOOL CURRICULUM

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Abstract
In this paper we examined the view that what students learn at school is not simply determined by their individual motivations, psychological make-up, or inherent ability but by a number of ideological controls and constraints. We explored the notion of curriculum ideologies as beliefs about what schools should teach, for what ends, and for what reasons. Through content and discourse analyses as well as focus group and individual phenomenological interviews as instruments for data collection, we navigated the view that curriculum ideologies can be tacit rather than explicit and that in some ways, curricular ideologies derive from what might be regarded as world views. We also contrasted ideologies and theories on the grounds that the former are typically value-laden commitments while the latter (theories in the social sciences) are frequently idealized as merely descriptions of the world rather than an expression of what is to be valued. The study revealed that the most influential curriculum ideologies are not those formally acknowledged and publicly articulated through official documents, but rather those that are subliminally ingested as a part of general or professional enculturation.

Key Words: Gender role stereotyping, curriculum ideologies, patriarchy, value laden curriculum.

INTRODUCTION TO THE STUDY
The issue of equality between women and men has never been more contentious and problematized than it presently is in Zimbabwe. In Zimbabwe, as in many other societies, the formal education acquired in schools has frequently been perceived as a mechanism by which gender; sex, race and ethnic-based inequalities can be lessened or even eradicated (Gordon, 1995). Whilst the primary gender role socialization of girls within the dominant patriarchal structure (of which the belief in the genetic inferiority of girls is a part), is a major factor in influencing girls’ academic performance as well as their access to schooling and withdrawal or drop-out, the school itself has been recognized as playing a considerable role in the structuring and reproduction of gender roles and stereotypes (Atkinson, Agere & Mambo, 1993; Arnot 2002). The role of the teacher in this process has also been noted with Machingura (2006) and Mavhunga (2009) claiming that some experienced Zimbabwean teachers have through language use produced and peddled some gender role ideologies which differentially reinforce boys and girls for not only different but highly gender polarized social roles. At independence in 1980, Zimbabwe celebrated the massive establishment of schools across the country, which was accompanied by a massive magnitude of confusion as to which type of education curriculum to follow between the socialist and capitalist forms (Jansen, 2003; Dumbu, 2009). The country endured a number of curricula transformations and revisions as from 1980 a situation that has continued to date. The Curriculum development Unit (CDU), the local institution has thus produced curriculum after curriculum and what we witness in Zimbabwean schools today are lucky and unlucky products (Dumbu, 2009). One student may be lucky to be an expert in a specific field while the other may be unlucky to fail to realize what he intended to attain mainly because he was presented with an unfavorable or wrong curriculum.
Regardless of how powerful the Zimbabwean state’s broad ideological position may be construed, quite a number of individuals or groups harbour their own sub-cultural or counter-cultural ethos as their fundamental orientation to the world (Dokora, 2009; Maphosa 2010). It is therefore difficult and problematic to determine unequivocally what the Zimbabwean school curriculum should be since there are always political process employed to push for or against the stated ideological commitments towards what some social groups and institutions consider fundamental and or practicable. In the Zimbabwean school context the process almost always leads to certain compromises as certain ideological positions tend to take precedence over others. For example, the Zimbabwean school curriculum’s legal framework as enshrined in the Education Act of 1996 (amended with effect from 12 May, 2006) emphasizes the state’s quest or goal to produce a citizenry that is patriotic, self-disciplined, duty-bound and willing to participate in nation building and therefore the Ministry of Education strives through the teaching of a variety of subjects, courses or educational programmes to promote this ideological laden curriculum (Dokora, 2009). As a result, whatever forms the Zimbabwean school curriculum assumes, its content is more often presented to pupils in an ideological way (Lobban, 1998).

**Contextual Background**

In exploring the notion of curriculum ideologies and discourse, we noted that in spite of having a broad, blanket definition of the concept of curriculum, it was necessary for me to draw a distinction between the visible or explicitly stated content of education, the often unwitting signification by teachers of what constitutes gender appropriate behaviour (official curriculum), and the actions and statements of the teachers which include their expectations (hidden curriculum) regarding learners’ gender specific behaviour and attainment. It is in this connection that we taped from feminist views of theorists like Fraser (1999) and Carter (2009) who contend that generally girls and boys receive an ideological laden educational curriculum and girls, by virtue of their gender, are often disadvantaged in comparison with their boy counterpart parts. In Zimbabwe their schooling does not give them the full basis for competing on an equal footing with boys for jobs and in other spheres of their life (Gaidzanwa, 1997; Wolpe, 2006). School textbooks are one form through which the ideology of gender is disseminated to learners (Meena 2000; Mutekwe, 2007).

For centuries books have been regarded as important sources for the transmission of culture, traditions, values and ideologies or societal beliefs, in general, and more specifically, for the socialization of children into their gender roles (Nhundu, 2007). Many other research results on gender roles and stereotypes (for example, Bender and Leone, 1989; Gati, Givon & Osipow 1995; Mutekwe, 2007; Nhundu, 2007) have revealed that books often inadvertently reinforce the gender role ideology and expectations and this often culminates in the gender typing of school subjects and occupations (Thompson, 1990). Given this role of text books in propagating the gender ideology, we argue that the same books have the potential to alleviate the dissemination of these gender role ideologies and the stereotyping of subjects and occupations if appropriate measures are put in place to deconstruct these stereotypes and ideologies (Nhundu, 2007). We thus argue that text books can certainly influence the occupational choices of girls and boys or women and men by first of all portraying them in nontraditional or sexist occupational roles. It is in this connection that Nhundu (2007) maintains that children’s books represent a very powerful vehicle for the socialization of children in ways that have important implications for identity development and future educational and career aspirations.

The stories and characters or models portrayed in many children’s books in Zimbabwe often depict females and males in gender roles traditionally stereotyped as either masculine or feminine (Gaidzanwa, 1997). In line with Yancey’s (2008) contention that books that use stories and pictures or characters of ethnically relevant role models in culturally familiar settings increase the impact of modeling, we argue that the effectiveness of books in mediating the gender-typing of occupations and promoting gender equality and equity in occupational preferences could be enhanced if role models with backgrounds, attributes and qualities with which children can readily identify are used. We also embrace the views of feminist writers, Odaga and Heneveld (1995) who employed the strategy of discourse analysis (Foucault, 1998) to account for the gender imbalances in the curricular material and unearthed a variety of scenarios in which most Zimbabwean school text books in both the primary and secondary schools engender gender ideological biases which empower boys at the expense of girls. This is generally reflected in text books that portray the image that only girls or boys for that matter are good at certain types of subjects, work or professions (Odaga & Heneveld, 1995). Our contention is therefore
that through textbook illustrations and or examples girls and women are frequently treated inadequately or underrepresented in some fields of study, mathematics, science, engineering and technology (Gordon, 1995). For example, many geography text books in Zimbabwe downplay the crucial role played by girls and women in farming while many history text books tend to deal almost exclusively with exploits of men, sideling or marginalizing women’s heroic exploits in war situations thereby portraying the world as a male domain (Yancey 2008; Ministry of Education and UNICEF, 2006).

I draw on the ideas of Oshako (1995) and Delamont (2000) to argue that there is a serious need to eliminate the gender role stereotypes and biases rampant in school curricular material if the Zimbabwean school curriculum designers wish to achieve a realistic situation in terms of gender sensitivity in education. We denounce the portrayal in much of the literature or textbooks of girls and women as either housekeepers, secretaries, cooks or nurses, while boys and men are frequently portrayed as technicians, engineers, scientists, or surgeons because this often relegate girls and women to subordinate roles or render them invisible in certain roles and spheres of life (Momsen, 2006). Drawing on the above argument, we concur with feminist writers (Dale, Esland, Ferguson & McDonald, 2000; Fraser, 1999) and construe schools in general and text books in particular as playing an ideological function in order to engender, reinforce and reproduce patriarchy (male domination) in society. In Zimbabwe, the influence of books in propagating patriarchy is often compounded by teacher attitudes and expectations towards their learners. Zimbabwean feminist scholar, Nhundu (2007) shares similar sentiments when that the gender ideology embodied in the curriculum makes girls as a whole to be disadvantaged compared to boys as a whole. In our concurrence with him, we add that in Zimbabwe boys generally have access to all the educational goodies, or relevant cultural capital (Bourdieu, 1992), which are systematically denied to girls largely because of the ideology of patriarchy.

METHODOLOGY

In this qualitative interpretive study we adopted the case study as design genre to develop an understanding of the manifestations of gender in the school curriculum. Qualitative designs, particularly case studies examine phenomena in their natural setting (Leedy & Ormrod, 2009) and to understand the meaning of a people’s experiences. In this study my intention was to explore learners and educators’ views on curriculum ideologies affecting girls and boys’ aspirations. In an endeavour to generate convincing data findings and interpretations on the above stated phenomena, we employed content and discourse analyses as well as focus group and individual phenomenological interviews as instruments for data collection from our target population of educators and learners from 3 Zimbabwean schools conveniently selected. These methods allowed us to capture elements of the portrayal of gender in the curriculum. In this case study we dealt with the management of several methodological difficulties ranging from avoidance of interviewer bias, confidentiality of respondents, data to the difficulty arising from distinguishing data from the researchers’ interpretation of the data. Since our first research question for this study was to establish the extent to which the Zimbabwean school curriculum disseminates gender as an ideology to learners, our effort in pursuit of answers to this question focused on the content and discourse analyses of 6 ordinary level history text books. The second research question sought to understand the tension between the teachers’ beliefs, attitudes and expectations about gender and the curriculum and their actual practice and how their practice was influenced by the context in which they operate. Pursuant to this objective a structured interview guide was developed and 10 teachers were interviewed individually through face to face sessions lasting for about 30 minutes each. The third research question sought to establish students’ views on gender issues in the curriculum. Pursuant to this question we solicited data through focus group interviews with 30 ordinary level students, with each interview sessions being of 30 minutes duration per focus group of 10 members each.

Theoretical perspectives

Drawing from the views of symbolic interactionist theorists: Mead, Thomas, Blumer and Becker, I contend that the labeling by teachers of girls and boys as certain kinds of people with particular and different personalities, characteristics, and academic and social abilities disseminates the gender ideology and leads them to have different expectations of girl and boy pupils and to treat them differently in the classroom. These differential attitudes and expectations are communicated to pupils during classroom interaction and are one means by which pupils acquire their self-concepts. With regard to why the situation reflects an ideological laden
curriculum we draw on the insights from the symbolic interactionist perspective, a distinctly American branch of sociology whose fundamental premises include the view that human beings act on the basis of the meanings they attach to objects and events rather than simply reacting either to external stimuli such as social forces, or to internal stimuli such as organic drives (Mead, 1934). Founding fathers of the symbolic interactionist perspective such as Mead, Thomas and Blumer reject both societal and biological determinism in the shaping of human behaviour. They assume that meanings arise from the process of interaction rather than simply being present at the outset and shaping future action. Many of the symbolic interactionist proponents (Mead, Thomas, Blumer, Becker, and Keddie) place particular emphasis on the notion of the self suggesting that individuals develop a self-concept, a picture of themselves, which has an important influence on their resultant actions. According to this perspective, a self-concept develops from interaction processes, since it is in large part a reflection of the reactions of others most notably significant others, towards the individual. This explains why Charles Horton Cooley (1864-1929) coined the term looking glass self to denote the view that individuals tend to react in terms of their self-concepts as communicated to them by others especially those they esteem highly or significant others (Mead).

My contention in this study is that gender plays an influential role in the children’s development of self-concepts because of their social experiences particularly the way they are exposed to a gendered social world (Momsen, 2006). This means that the meanings that individuals come to perceive themselves in terms of are socially constructed, developed and modified within interaction situations rather than being predetermined at birth. In the process of interaction individuals do not slavishly follow preset norms or mechanically act out established roles. The resultant meanings are product of interpretive procedures employed by individuals within interaction contexts. By taking the role of the other, individuals interpret the meanings and intentions of others. By means of the mechanism of self-interaction, individuals modify or change their definitions of the situation (Becker), rehearse alternative courses of action and consider their possible consequences. Thus the meanings that guide action arise in the context of interaction through a series of complex interpretive procedures.

The self concept and its impact on gender
Mead and his symbolic interactionist disciples (Thomas, Blumer, Becker, Hargreaves, and Keddie) concur that through the process of role taking, individuals develop a concept of self. By placing themselves in the position of others they are able to reflect upon themselves. For Mead the idea of self can only develop if the individuals can get outside himself or herself experientially in such a way as to become an object to himself (Mead, 1934). To do this they must observe themselves from the standpoint of others, their looking glass self. Therefore the genesis and development of the concept of self lie in the ability to take the role of another. Mead thus distinguished between two aspects in the origin and development of the self, the ‘me’ and the ‘I’. The former is one’s definition of himself or herself in a specific social role while the latter implies one’s opinion of himself or herself as a whole. It is the latter, which represents an individual’s self-concept (Mead, 1934). It is built up from the reactions of others to one’s actions and the way one interprets those reactions. The ‘I’ can exercise a considerable influence over one’s behaviour. For instance, an individual who perceives himself as cowardly on the basis of the self-concept he has built up will be unlikely to act bravely in dangerous situations. For symbolic interactionists the self is not inborn but a product of enculturation from childhood.

Mead conceives of two stages in the development of the self-concept in children, the play and game stages. The former involves children playing roles that are not their own. For example, children may play the roles of mother, father, teacher, nurse, doctor or engineer. As a result of the role play, they often become aware that there is a difference between themselves and the role they have been playing. Thus the idea of the self is developed as the child takes the role of a make-believe other (Mead, 1934). The second level in the development of the self is the game stage because for Mead through playing a game, children come to view themselves from the perspective of the various participants. In order to play a game such as cricket, soccer, hockey or netball children ought to be aware of their relationship to the other players. They must place themselves in the roles of the others in order to appreciate their own particular roles in the game. In so doing, they perceive themselves in terms of the collective viewpoint of the other players. In Mead’s terminology, they see themselves from the perspective of the generalized other. According to this view the development of a conscious self is an essential part of the process of becoming a human being. It provides the basis for thought
and action, and the foundation for human society since without an awareness of the self, the individual can not

direct action or respond to the actions of others. Only by acquiring a concept of the self can an individual take

the role of the self. In this way, thought is possible, since the process of thinking is an inner conversation. Thus,

unless individuals are aware of the self, they will be unable to converse with themselves and thought will be

impossible. By becoming self-conscious people can direct their own action by thought and deliberation. They
can set goals for themselves, plan future actions and consider the consequences of alternative courses of
action. With an awareness of the self-individuals are able to view themselves, as others perceive them. In this

sense the significant others who constitute the children’s looking glass self propagate the gender ideology
whose effect empowers the boy child at the expense of the girl child in a variety of ways.

**How curriculum literature engender patriarchy while marginalizing girls and women**

In this section of the study I present findings from the content and discourse analyses of Zimbabwean history
textbooks as well as those (findings) from focus group and individual face to face interviews conducted with

teachers and students who participated in this study.

<table>
<thead>
<tr>
<th>Form /class</th>
<th>Publisher</th>
<th>Title</th>
<th>Author</th>
<th>Page</th>
<th>Gender ideology and biases disseminated</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>College Press</td>
<td>Focus on History 4</td>
<td>Mlambo, AS</td>
<td>14/16</td>
<td>Rhodesian soldiers killed hundreds of Zimbabweans including women and children</td>
</tr>
<tr>
<td>4</td>
<td>College Press</td>
<td>Focus on History 4</td>
<td>Mlambo, AS</td>
<td>32/19/24/4</td>
<td>The whole book has 76 pictures, of these only 5 show women and the remaining show men. Of these five, 3 show starving women and children.</td>
</tr>
<tr>
<td>3</td>
<td>Zimbabwe Publishing House (ZPH)</td>
<td>People Making History 3</td>
<td>Barnes, T., Mutwira, R., Mvenge, G., Pape, J. &amp; Prew, M.</td>
<td>12</td>
<td>Women cultivating, gathering, making baskets and fetching wood and water</td>
</tr>
<tr>
<td>3</td>
<td>ZPH</td>
<td>People Making History 3</td>
<td>Barnes, T. et al</td>
<td>8</td>
<td>Women gathering fruits, cooking and cultivating and men heading cattle, black smiting, hunting and herding.</td>
</tr>
<tr>
<td>3</td>
<td>ZPH</td>
<td>People Making History 3</td>
<td>Barnes, T. et al</td>
<td>18</td>
<td>Women working hard in the fields and men chanting with friends whilst women working hard.</td>
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<tr>
<td>3</td>
<td>ZPH</td>
<td>People Making History 3</td>
<td>Barnes, T. et al</td>
<td>37</td>
<td>Two circles showing male and female labour.</td>
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<tr>
<td>4</td>
<td>ZPH</td>
<td>People Making History 4</td>
<td>Barnes, T. et al</td>
<td>12/4</td>
<td>Political Power saw divided between chiefs, male elders, young men and finally women.</td>
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<td>4</td>
<td>ZPH</td>
<td>People Making History 4</td>
<td>Barnes, T. et al</td>
<td>12/3</td>
<td>African women of all ages were legally the same as children, could not make decisions on their own; own property in their names, their wages belonged to their husbands and could not open bank accounts in their names.</td>
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<tr>
<td>4</td>
<td>ZPH</td>
<td>People Making History Book 4</td>
<td>Barnes, T. et al</td>
<td>12/4</td>
<td>Thousands of women provided services to workers.</td>
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The content analysis of history textbooks revealed that the ideology inherent in the books accord women a lower status compared to their male counterparts in as far as political activism is concerned. In the book, People Making History Book 4 (Page, 126), statements like:

“Political power was divided among chiefs, the male elders, young men and finally women,”

clearly show that the dominant ideology glorifies men while marginalizing women yet women also played a crucial role in the liberation war of Zimbabwe. Through such ideologies women are portrayed as having played an insignificant role in the liberation fight for Zimbabwe. Men and even younger men are portrayed as having played a crucial role and contributed enormously compared with their female counterparts. The net effect of such a portrayal of men is meant to entrench or buttress the ideology of patriarchy while relegating women to a secondary position on the political hierarchy so as to justify the inequality that often accompanies role selection and allocation in the political sphere of the country. A discourse analysis of the statement that:

“African women of all ages were legally the same as children. They could not make decisions on their own, they could not own property in their names, their wages belonged to their husbands and they could not open bank accounts in their names” (P.123)

also reveals that Zimbabwean women irrespective of their age were not recognized as equal citizens with men. They were viewed and treated as children. This epitomizes the extent of the ideological marginalization endured by women in the socio-political and economic spheres of their life in patriarchal societies. It also meant that no matter how hard women worked, their achievements were not recognized because of their sex or gender. Statements such as these not only engender the ideology of patriarchy among learners but are literally carriers and peddlers of this patriarchal ideology. Such information is bound to have a negative effect on the learners especially girl children. For instance, boys are likely to be encouraged to develop a superiority complex while girls may develop an inferiority complex and have their self esteem affected in the process.

Although the situation of the marginalization of women in Zimbabwe is being addressed through legislative changes, such a portrayal of women in books has negative effects on girl children and should be discouraged at all costs. Another example of a statement which has the impact of propagating the patriarchal ideology is one that reads:

“Thousands of women provided services to workers” (Barnes et al, 1993: p.123).

The statement implies that women were not considered workers since only men were acknowledged as workers clearly indicating that only men’s labour was taken seriously. Such portrayal of women is certainly
replete with gender biases and peddles a patriarchal ideology. Women are portrayed as second class citizens and men as first class, yet the services which they are said to provide are very important for the functioning of the whole society. Similar gender biases are implicit in the statement found in the book, *Focus on History* Book 4:

> “Rhodesian soldiers killed hundreds of Zimbabweans including women and children” (p. 146).

By critical discourse analysis one could interpret the word Zimbabweans here as representing men only and would allege the statement excludes women and children. It would appear as if women could not be accorded the same status of being Zimbabweans as their male counterparts. Yet another blatant example of gender bias is the statement in *Dynamics of History* Book 3, that:

> Young women were handed over as wives to Zulu warriors who had distinguished themselves at the war front” (Mukanya, 1994, p.30)

The statement shows that a woman could be given as a token of appreciation, a mere object of gratitude clearly showing that women sometimes were denied the right to choose men of their choice in matrimony. Some powerful men could choose for her, a clear indication of the effects of the patriarchal ideology propagated in patriarchal societies. Women and girls were apparently denied the agency or free will to choose their own life partners and obviously their life chances were influenced through such practices. In a similar vein, in the book *History of Southern Africa*, the statement which reads: “Lobola was a payment usually in the form of cattle” (Shillington, 1987, p.12) tends to insinuate that women were barter traded on the market. In fact, the use of the word “payment” itself reduces the status of a woman to an item which can be bought on the market. Thus in the History textbooks used by ‘O’level students, women are portrayed as items that can be traded on the market through barter. Again women’s poor status is reflected in the book, *History of Central Africa* Volume 2 especially where the writer says,

> “The Native Registration Act of 1936 compelled every male African to have a registration certificate and other passes” *(Birmingham and Martin, 1983, p. 279)*.

Thus women were not mentioned in the Act, not because they were innocent but because they were regarded as unimportant to be mentioned in the Act, despite that the Act did affect them as well. In the book, *People Making History* 3, pages 8, 12, 18 and 37, the ideology of patriarchy manifests itself in the social division of labour portrayed the society in which women are shown gathering fruits, cooking, cultivating, fetching water and firewood as well as taking care of the children. On the contrary, men are shown hunting wild animals, herding cattle, smelting iron trading and blacksmiths. Women are portrayed doing the kind of tasks which have more to do with domesticity such as providing care to others while men are portrayed as being as adventurers engaged in tasks such as taking up challenges in hunting wild animals, fighting dangerous animals, trading and blacksmithing. Through such an ideological portrayal women are seen as weak and only better at providing services to men such as caring for them when in failing health looking after children in the home. Men are regarded as brave, adventurous and ready to take up challenges in life. This affects learners differently with the boys’ self esteem being boosted while that of their girl counter parts is affected negatively. Girls are also made to believe that their place is in the home where they are supposed to be providing care to men and children. This has a serious impact on their career aspirations in adult life. Their potential ability may be terribly affected and they may end up aiming for subservient occupations traditionally stereotyped as feminine. Apart from the quotations above, an interesting observation was made regarding pictures shown in the analyzed African History textbooks. The pictures of historical importance shown in the books analyzed under present women especially in heroic exploits. Pictures of important historical occasions such as the March 3 Agreement of 1978, where a Caretaker government was temporarily established between Bishop Abel Muzorewa of the UANC and Ian Douglas Smith of the Rhodesian Front was signed under represent women yet a number of women were present and gracing the occasion (p.186).

In the pictures on page 189 in the book, *Dynamics of History* Book 3 the Lancaster House Conference of 1979 (which brought about the independence of Zimbabwe) terribly under represents women yet they equally graced the occasion as did their male counterparts although in an unproportional way. The number of male to female heroic pictures in the books peddles the false idea that men alone were capable of executing the most heroic exploits. The pictures sideline some of the women who played important roles in making these men...
execute and achieve these heroic exploits. Where heroines such Joyce Mujuru, Ruth Chinamano, and Oppah Muchinguri are mentioned, pictures of men are juxtaposed or collocated with them as if to say behind every political heroic exploits performed by women, there were men behind or besides them. Such ideological messages portray men as if they are the main makers of history and women as having played a subordinate role in political history of the country.

In all six textbooks analyzed, only two females are recorded as heroines, Nyamazana and Mbuya Nehanda while the rest are heroes. Nyamazana is recorded in the People Making History Book 3 on page 44 as having defeated Chirisamhuru and nothing more is given about her heroic exploits yet other mighty warriors of her calibre are referred to in depth and are accorded an enormous historical status. The same applies to Mbuya Nehanda, a historical protagonist who is recorded as a heroine who contributed so much in the first Chimurenga. However, her achievements are attributed largely to her being a spirit medium not predominantly as an outstanding female warrior. It is heroes such as Tshaka, Zwangendaba, Mzilikazi, Lobengula, Tangwena, Mujuru (Rex Nhongo), Ushewokunze, Chitepo, Tongogara, Dabengwa, Ziyaphapa, Nkomo, Mugabe and others that are used to demonstrate and disseminate the ideology of patriarchy, male resilience and bravery exploits of males in the history text books analyzed.

The results of the content and discourse analyses employed in this study revealed the extent to which language discourses are a vehicle for the transmission of the gender role ideology and stereotypes. The findings are consistent with the contention of discourse analysts Walum (2008), Henley, Hamilton and Thorne (2000) who concur that language use provides a good illustration of the cultural transmission process. They regard it (language) as the chief vehicle, making social interaction possible since it contains both explicit and implicit messages regarding cultural definitions of male and female roles. In the English language for example, women are included under the rubric man. Henley, et al (2000), elaborating on the impact of language in disseminating the gender ideology of sexual inequality observe that it is through communication (verbal and non-verbal) that much of the pattern of sexist interaction is learnt and perpetuated. Henley’s et al contention that language may be used to dehumanize particular social groups into submission has also been confirmed by the results of the content and discourse analyses methods employed in this study. As the content and discourse analyses of 6 history text books have shown it has indeed been used to expresses the sexist and or ideological biases in a people’s life. It has been shown beyond reasonable doubt that in Zimbabwe language discourse takes basically three forms- ignoring, defining and deprecating (Henley et al, 2000).

Elaborating on how language ignores, many of the participants cited the ways through which the English language ignores females in some situations. As a paramount example, the use of the masculine generic, he, traditionally used for both women and men was cited many interviewees who claimed they use this pronoun to refer to both males and females constantly switched to the feminine pronoun when they spoke of persons in a traditionally feminine occupation, such as homemaker or nurse, raising questions about the inclusion of females in the masculine pronoun. Further exploring the gender definitional impact of language, many interview participants argued that language both reflects and helps maintain a woman’s secondary status in society by defining her and her place. A common example cited by many participants of the phenomenological interviews was that men’s power to define through naming is evident in the tradition of a woman’s losing her own surname and taking her husband’s when she marries.

The view by many Zimbabweans of females as possessions was cited as evident in the common practice of applying female names and pronouns to material possessions such as cars (‘fill her up’), machines and ships among other things. Many of the teacher participants interviewed pointed out that the fact that language generally ignores women also means that when it does take note of them, it often defines their status. Thus terms like ‘lady judge’, ‘lady pilot’, all indicate exceptions to the rule of finding males in these occupations. Expressions like male nurse were cited as much less common, because many more occupations are typed as male and because fewer men choose to enter female typed occupations than vice versa. A very interesting observation was the respondents views that even in cases where a particular field is female-typed, males who enter it often have a term of their own, with greater prestige, such as chef or couturier. It was evident from the interviews, content analyses held for this study that discourses or patterns of language usage subtly reinforce occupational stereotypes and deeper undertones embedded in the discourses further reinforce stereotypes
concerning propriety and competency. These findings are consistent with Henley’s contention that the deprecating of women in the English language can be discerned from the connotations and meanings of words applied to male and female objects citing the meaning of the word virtue as one of the examples in which patriarchy is produced and entrenched. The argument is that the word (virtue) comes from an old root meaning man and therefore to be virtuous is, literally, to be manly (Henley, et al, 2000). Interview respondents also pointed out that through language use different adjectives are applied to the actions or productions of the different sexes citing examples such as that women’s work may be referred to as pretty or nice, while men’s work will more often elicit adjectives like masterful or brilliant. Some respondents even went on to argue that while words such as king, prince, lord, and father have all maintained their elevated meanings, their antitheses such as, queen, madam, and dame often acquire debased meanings. A woman’s sex is treated as if it were the most salient feature of her being. This is not the case for males. This discrepancy is the basis for much of the defining of women and it underlies much of the accompanying deprecation. Sexual insult is applied overwhelmingly to women This observation resonates with what Stanley (1977) found in his research on terms used for sexual promiscuity in which he found 220 terms for a sexually promiscuous woman, compared to only 22 terms for a sexually promiscuous man. Another issue raised by participants in this study was the trivialization that accompanies many terms applied to females. Example cited included the feminine endings ...ess and ...ette and the female prefix lady, which are added to many words not really male-specific such as, poetess, authoress, aviatrix, majorette, and usherette. One interview respondent argued that male sports teams are sometimes given names of strength and ferocity such as Rams, Bears, and Jets while women’s sports teams often have cute names like Rayettes and Rockettes. This argument was found to be consistent with Nilsen’s findings as cited in Cogan and Ballantine (2000) where she employed a chicken metaphor to summarize the deprecating effect of language on girls and women in many societies. In her contention, she argued that the chicken metaphor tells the whole story of a girl’s life during her life course:

in her youth the girl child is a chick, and then she marries and begins feeling cooped up, so she goes to hen parties where she cackles with her friends. Then she has her brood and begins to henpeck her husband. Finally she turns into an old biddy (Nilsen cited in Kogan and Ballantine, 2000, p.109).

The findings from the Zimbabwean history text books analyzed in this study show that they not only express the dominant groups’ ideologies but also help to form attitudes in support of their social position. The history textbooks illustrate one way in which society’s structures imposes beliefs and constrains choices in the youth. They offer concrete examples and substantial accounts of men in past successes and women’s failures in the social, economic and political matters of society so as to empower boys while constraining girls’ choices (Giddens, 2001). These findings are also in tandem with reports made by Burrow (2005) who noted that the ideological support for powerful social groups has always been embodied in the school textbooks throughout history citing the case of religious catechisms of the nineteenth century readers, which supported the social power of the colonial church as a typical example. The results of the content and discourse analyses also confirmed Walum (2008) revelation reports in which after analyzing one thousand nineteenth century school books, she contended that the power of history text books in the dissemination of the ideology of dominant or powerful social groups is indeed enormous. The results from all the data collection methods used in this study have proved that despite periodic changes to Zimbabwean curriculum, an underlying concern for the perspectives of dominant social groups has remained.

In spite of having discussed some of the participants’ responses to the interview questions, below we explore views of interview respondents thematically according to the research questions the study sought to address namely what role the gender ideology plays in the school curriculum?; How gender manifests itself in the curriculum; how prevalent are patriarchal values in the curriculum? And how influential are teacher attitudes and expectations in the dissemination of gender as an ideology in the curriculum?

The role of ideology in the school curriculum
Participants interviewed generally viewed the nature, form and content of education (curriculum) as inextricably linked with their future roles in adult society. Asked to explain the role played by ideology in the school curriculum one teacher had the following to say,

**Yes the curriculum has to be ideological if our children are to be equipped for their different adult roles. The process should actually transmit different forms of knowledge such as the basic fundamental skills of numeracy and literacy essential in an industrial society, the learning of certain types of skills which are necessary for the many and varied vocational type jobs, the development of abstract reasoning among particular sets of children. In addition to this, the curriculum must ensure the transmission of the dominant cultural values specific to the society at that point in time.**

Another teacher interviewee responded by pointing out that:

**If school knowledge is examined as a social product, it suggests a great deal about the society that produces and uses it. It reveals which groups have power and demonstrates that the views of these groups are expressed and legitimized in the school curriculum. It also identifies social groups that are not empowered by the political, economic and social patterns of society and do not have their views, activities and priorities presented in the school curriculum.**

The above responses appear to confirm Bourdieu’s (1990) contention that if it be accepted that culture is the common code enabling all those possessing that code to attach the same meaning on the same words and conversely, to express the same meaningful intention through the same words, it is clear that the school which is responsible for handing on that culture, is the fundamental factor in the cultural consensus in as far as it represents the sharing of a common sense which is the prerequisite for communications. Individuals owe to their schooling, first and foremost a whole collection of commonplaces, conveying not only common speech and language but also areas of encounter and agreement, common problems and common methods of approaching those common problems. One aspect of the common code with all the relevant collection of common places is that which relates to the different expected forms of behaviour of boys and girls, or men and women. The code that relates to the gender differentiation embraces an ideology regarding the nature and form of appropriate gender behaviour and or roles. From childhood on through to adulthood, there exists a complex set of beliefs not only concerning the basic major roles of the two genders in adult society but also the way in which children as well as adults should behave and manifest these basic differences. According to this view, the dominant ideology thus legitimates in a complex and multivariate manner the way in which children are reared and taught to act appropriately.

**Teachers’ views on the gender ideology in the curriculum**

The results of the interview held with teacher participants in this study revealed that owing to the influence of the gender ideology children learn at a very early age in their schooling to identify masculine and feminine roles particularly in relation to broad categories of behaviour characteristics of the division of labour of their parents both in the home and in the occupational structure of society. In addition to this, children themselves soon come to learn to identify with the appropriate gender roles. This is expressed in different forms of overt behaviour which manifest in their everyday lives at home, in school and playground activities. Through focus group interviews sessions with student interviewees it was also established that at an early age children internalize important elements of the ideology about the different roles that men and women, or boys and girls play in their society. According to the teachers interviewed the processes that contribute to this are complex and closely interrelated. Asked to elaborate on this view one teacher respondent had this to say,

**In the early formative years, the family institution is the main medium for the Transmission of the gender ideology, but as the child develops the influence of the peer group, mass media and schooling come into the picture and contribute to the reinforcement of these gendered beliefs. These explains why when it comes to subject choices at the secondary school level many girls tend...**
to follow a curriculum which excludes a whole range of subjects, particularly mathematics, physical sciences and as could be expected vocationally oriented subjects related to trades traditionally stereotyped as feminine.

The above response shows that the gender ideology manifests itself in a variety of ways including subject choices whereby girls pursue in the main those subjects which are considered as more suitable for females such as home economics, the arts, bossiness studies, (which in some cases implies shorthand and typing). Notwithstanding the prevailing ideology that egalitarianism of opportunity exists for both boys and girls alike, their educational experience results in marked differences in their respective levels of attainment and range of subjects passed in qualifying examinations. By this time girls are said to limit their on educational and occupational horizons. Their aspirations about their future employment and the realization of these aspirations for the vast majority of girls do not go beyond the scope of what are regarded as suitable feminine jobs and to this extent the curriculum that girls pursue is appropriate both to their occupational roles in the labour market as well as their roles as wives and mothers. From the interview results with teacher participants it could thus be argued that schools institutionalize the dominant female gender role and ideology. This institutionalization is the result of a number of different processes and structures that characterize the average school. One important aspect covers the ideology of gender differentiation. It is this ideology that provides the legitimation of the various actions; processes and form of teaching that go to making up the school in its entirety. Not only is the ideology expressed in a number of documents that provide the guideline for the overall form and nature that schooling should assume, but it also filters down and becomes part of the common code of the practitioners themselves. The interviewed teachers also confirmed that they not only share parts of the common code of cultural values but also that through the structure imposed by school organization they must transmit much of this ideology to learners through both the formal and hidden curricula forms.

The prevalence of patriarchal values in the curriculum

Patriarchy is a set of social relations between men and women, which has a material base, and which through hierarchical create interdependence and solidarity among men that enable them to dominate women (Nhundu, 2007). Twenty-four (80%) of the thirty student participants of this study concurred that the patriarchal values embedded in the school curriculum are propagated through the school’s hidden curriculum. Although the term hidden curriculum was not mentioned in their responses the factors they cited showed the hidden curriculum and its influence as the factors at work in entrenching the patriarchal ideology in the curriculum. Aspects of the hidden curriculum such as the gender typing of school subjects and occupations were cited as some of the prevalent practices that buttress patriarchal values. Both boys and girls interviewed agreed that boys tend to dominant numerically in the subjects traditionally stereotyped as feminine such as in mathematics and physical sciences while girls dominate numerically in subjects associated with domestic chores such as food and nutrition, fashion and fabrics and the arts. Other girl participants in this study cited the problem of sexual harassment as one of the issues that buttresses the patriarchal ideology. The following responses came from one of the girl interviewees;

Teachers, both male and females tend to view boys as more important than girls in the school and classroom. One would expect lady teachers as our mothers and or older sisters to understand our predicament at the hands of boys and male teachers who harass us but to our disappointment they seem to share the same ideological sentiments as their male counterparts that as girls we are to blame for the sexual harassment that befall us.

Asked to elaborate how the issue of sexual harassment occurs in the school eight (53.1%) of the fifteen girl student participants alleged that it takes a number of forms and occurs at several levels within and outside of the school from verbal to the physical and involves not only the harassment by their school boy counterparts but also by young male teachers and senior members of staff as well including some in the upper echelons of the school management. Nine (60%) of the girls interviewed cited teasing, humiliation, verbal bullying and the unnecessary ridicule of girls by boys as some of the forms of sexual abuse endured by girls in the school leading some of them to suffer withdrawal symptoms and consequently to underachieve academically. Among the responses given by girl student participants the following attest to the above observation;
The boys will be watching you at break time. They will talk loudly and laugh, saying which girl is beautiful and which is ugly. The boys can make you shy. They make comments about your structure, about your body. Boy can unnecessarily criticize the girls telling us we are useless, stupid or prostitute. Then you can just keep quiet in the classroom, not participating.

Twelve female interviewees (80%) alleged that some of the teachers tend to collude with male pupils in the sexual harassment of girls in the school, either subtly, by omission or directly. Asked what the teachers do when boys laugh at girls or ridicule them unnecessarily in the classroom, all the fifteen girls interviewed concurred that more often than not their teachers laugh with the boys at the girls or just ignore the situation without helping it. Asked whether or not they report incidences of sexual harassment by boys or other staff members particularly to lady teachers, nine of the female respondents (60%) indicated that reporting such cases to lady teachers would instead of helping the situation, do more harm than good to the victim of the harassment. The following responses were made to the above question;

If you report it, no that’s not good. You will be on tight, big trouble. The teachers including female ones will say that you are a prostitute why were you seducing the boys or male teachers?

You can tell the lady teachers but they will be angry with you and accuse you of enticing the boys or male teachers. In the end you will be to blame instead of receiving some sympathy. They will say a teacher would not propose love to you if you do not encourage him. May be he has rejected you that’s why you are reporting him. If you are smarter of better fitted by clothes even your uniform than some of these lady teachers they accuse you of competing with them, making the whole case to crumble against you yet you are the victim.

The lady teachers may know about it but because they do not want trouble with their male Workmates, they will tell you that they do not believe your story leaving you humiliated in the final analysis of the story.

While some of the above statements made by girls were collaborated by statements made by the interviewed teachers, the teachers denied others out rightly. In general, both male and female teachers interviewed denied any knowledge of sexual abuse in their schools occurring at the time of the study. However, nearly all the interviewed teachers claimed that such cases had occurred in the past and attributed the offences mainly to untrained or temporary teachers. Much of the blame for the sexual abuse of girls by male teachers was placed on the girls, even though in many cases the girls were under aged and their abuse constituting statutory rape. The following responses were made by some of the teacher respondents interviewed;

Personally I think during that time (at forms 2, 3 and 4) students are beginning to look more beautiful. Males get attracted to them. The boys do not hide their interest nor do male teachers. Some of them are really interested in these small girls, so sometimes the girls feel they can compete with the lady teachers and this often ignites tension between girls and the lady teachers in the school leading to accusations and counteraccusations. Girls sometimes have problems of sexual harassment by boys in their classes and sometimes they have problems with young male members of staff who make advances. We keep reminding the girls that there is really nothing else we can do. Girls are more interested in their beauty. The sometimes want to attract boys and some male teachers by coming to school dressed to kill and as a result, some boys and young male teachers find their actions irresistible.

Out of the ten teacher interview participants in this study, seven (70%) confirmed some the girls’ statements about sexual harassment of girls by their boy student counterparts in their schools. These teachers felt that it was proper for them to ignore such issues that they characterized as silly, immature or harmless and typical of boys and girls in schools the world over. Asked to respond to the question of whether girls or girls are to blame in matters of love affairs and sexual harassment in schools, eight teachers (53.1%) attributed the blame largely to the girls confirming what the girls interviewed in this study echoed about their plight not receiving the attention it deserves when they report their abuse at the hands of boys or male teachers in the school.
The following comments made by some teacher respondents are fairly representative of the feelings expressed by both male and female teachers interviewed:

> Girls are too shy in the classroom. They do not participate, nor answer questions for fear of the boys laughing at them. Girls are too timid. They worry when the boys make comments or laugh at them. They should ignore the boys as I do. Most girls seem to enjoy provoking the boys because they are aware that they are not beaten.

These findings or interview results show that although some teachers tend to allow the harassment of girls by boys in the classroom to go unchecked, others actively participate in the ridicule of girls or encourage some boys to tease and humiliate the girls, excusing it as harmless rivalry between boys and girls in the classroom. It is such practices that engender and reinforce patriarchal values in the curriculum. The belief for example, that girls who are sexually abused by teachers are to some degree responsible for their abuse and the fact that girls in coeducational schools are expected to learn and achieve in an environment in which males dominate numerically and academically in the exercise of legitimate authority and power in which sexual harassment is common and sexual abuse a distinct possibility appear to confirm the observation by Wolpe (2006) that through the school's hidden curriculum patriarchal values are always disseminated to serve the interests of the dominant ideological position of society.

The influence of teacher attitudes & expectations on gender in the curriculum

All the ten teachers interviewed during the study indicated that throughout their teaching experiences they have always found the overall performance of girls not as good as that of their boy counterparts. Asked to explain what they attribute the discrepancy in performance to, six teacher respondents (60%) cited the girls’ acceptance of the feminine role ideology as primarily domestic and the belief that a man should be the provider and head of the family as the major causes of the performance discrepancy between girls and boys in education. Probed further, seven of the ten teachers interviewed (70%) revealed that not only were teachers disseminating these stereotypical views through their teaching, but also that in their personal and family lives they were enculturating their own children into these gendered ideological values and roles. Many of them claimed that they often saw it as their duty to prepare not only their biological children but also their pupils for feminine and masculine roles in adult life. In particular, teachers of consumer studies, biology and biblical studies expressed their commitment to preparing girls to become good wives and mothers and make them morally upright women citizens. The following interview responses by teacher participants attest to the above observations.

> I tell them the value of the subject (Fashion and fabrics) so that as future mothers they will be able to sew clothes for their families.

> Boys should learn to cook. I say to them, "What if your wife goes to the hospital to deliver, who will cook for you until she returns?"

> I think it is part of my job as a teacher of Food and nutrition to prepare girls to be good wives. I prepare them in preparation for their gender role.

> Boys should learn Fashion & Fabrics so as bachelors they can look after themselves. After all, they will not have a wife immediately they leave school and they may be far from their mothers.

> Biology is particularly useful for girls to learn about their bodies. To avoid sex and unwanted pregnancies. For boys it is useful for their jobs. Girls too, can become nurses.

The results of interview held with the ten teacher participants for this study revealed that the gender role ideology, biases and stereotypes propagated by teachers coupled with their (teacher) attitudes towards girl pupils together with their belief about the nature of feminine emotions, abilities and aptitudes do affect their
expectations and their subsequent treatment of girls at school. It was revealed through the interviews that teachers expect girls to pursue certain subjects and to behave in ways they consider appropriate for females. These expectations are often communicated to pupils in a number of ways, overtly and by more subtle means (through the explicit and implicit curricular). These findings confirm Goodacre’s (2000) and Kangayi and Bukaliya’s (2010) assertions that teacher attitudes often influence pupil expectations and also pedagogical practices. The pupils’ self-concepts in relation to the school and beliefs about their academic abilities are, to a larger extent acquired in the school during interaction with teachers. To a great extent the academic self-concepts of the girl participants in this study reflected the ways in which teachers depicted them. This means that the educators’ responses to, and treatment of boys and girls in the school are thus important influences on their aspirations and motivation.

Through the focus group interviews held with girl students in the study, it was also established that there is a high degree of correspondence between their occupational aspirations and those teachers expect them to pursue. The girls’ perceptions of feminine and masculine gender roles within the family and world of work, and their beliefs and values about the hierarchy of power and authority in the family and the public sphere correspond, in the man, with those of their teachers.

In general, girls’ ideas of what it means to be a wife and mother closely correspond with those of their parents. Fourteen of the girls who participated in this study (93, 1%) firmly believe that their future husbands should be the heads of their families and breadwinners while only one (4 %) of the girl interviewees felt that husbands and wives should be on equal footing in both the family (as the private sphere) and the economy (as the public sphere). The following statements represent the views of fourteen (93.1%) of the fifteen girl participants in this study on the question of gender roles in the family and the wider public sphere.

*It is my responsibility as the wife to take care of the home and children while my husband provides for the economic needs of our family. As his wife I should do jobs in the home such cooking, ironing and looking after our children. A husband should be more educated than his wife in order for him to earn more money.*

Such responses were typical of many girls and this showed that most girls and some teachers perceive the role of women in the family as primarily domestic, caring for the physical and emotional needs of heir husbands and children. Whilst 8 girls (53, 8%) believe or hope that their husbands will help them with some of the domestic chores, seven of them (46, 2%) agreed that it is the wife’s responsibility to take care of the home and children and all the domestic chores while husbands’ main responsibilities should centre mainly on fending for the family since they are the heads and bread winners of families.

The findings of this study indicate that teachers’ negative attitudes, beliefs about abilities and their labeling and characterization of females as people with different abilities and aptitudes compared to males, are mirrored in the attitudes, values, ideologies and beliefs of girls themselves. The finding also indicates that teachers are to a large extent unaware of or unwilling to admit to the role they play in influencing girls’ self concepts not only at school in their whole life course. A common belief or misconception among teachers which this study established is that the causes of girls’ underachievement lie outside of the school, in the girls’ homes or within the girls themselves. Such a view relieves the teachers and the school from the responsibility of finding solutions to the problem. It appears that girls in Zimbabwe, as elsewhere are being educated for domesticity. The primary socialization of girls and the education and training and ideology they receive at home are continued at school with the girls being taught that to succeed as women means to underachieve in those subjects and roles considered masculine by their parents and teachers. Ultimately, the blame for the academic underachievement of girls, like the blame for their sexual harassment and abuse at school, is laid on the girls themselves, and more generally on the inherent weakness, inability and emotional nature of females.

**CONCLUSION**

The study has revealed that a whole range of curriculum selection favours the interests of the powerful social groups in society. Although presented as unbiased, the historical interpretations and portrayals of males and
females provide an ideological justification for the activities and prerogatives of these groups and do not legitimize points of view and priorities of groups that compete with these established interests for social acceptance and support. Ideological support for powerful social groups thus dominate curricular material especially school textbooks, teacher attitudes and expectations of pupils’ appropriate gender roles. The interview discussions held with participants also evidenced the effectiveness of textbooks in mediating the gender role socialization as reported by Bender and Leone (1998) and supported by Eccles (1994).

RECOMMENDATIONS

These results also buttress Nhundu’s (2007) findings and Gottfredson’s (1981) recommendations that because school text books have a powerful influence in disseminating traditional gender and sexist roles, ideologies and stereotypes, they can also be used to deconstruct these traditional sexist and gender roles and stereotypes. This is possible if students are constantly exposed to an extensive literature based on selected life stories and experiences of successful female role models of relevant social and cultural backgrounds who have defied odds and managed to excel by venturing into professional fields traditionally regarded as male domains. The interview results of this study also complemented the recommendations expressed by feminist writers such as Gaidzanwa, Gooden and Gooden, Eccles, Fraser, Nhundu and Carter who contend that a complete overhaul of the educational curricular of many African societies in necessary in order to render them more gender sensitive than they are. Many teacher participants also suggested that specially written gender sensitive school text books may go along way in promoting gender sensitivity in education and in motivating girls to redefine their aspirations or ambitions despite the existing gender ideologies peddled through the school curriculum.

REFERENCES


SCHOOL ENVIRONMENT AND ACADEMIC ACHIEVEMENT OF STANDARD IX STUDENTS

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Abstract
The present study School Environment and Academic Achievement of standard IX students was probed to find the relationship between School Environment and Academic Achievement of standard IX students. Data for the study were collected using self-made School Environment Scale (SES). The investigator used stratified random sampling technique for selecting the sample. The sample consists of 400 standard IX students. For analyzing data ‘t’ test and Pearson’s product moment co-efficient were the statistical techniques used. Finding shows there was no significant relationship between School Environment and Academic Achievement of standard IX students.

Key Words: School Environment, Academic Achievement, standard IX students.

INTRODUCTION

According to Dewey (1926) ‘Education is a continuous process of experiencing and of revising or non-revising experiences It is the development of all those capacities in the individual, which enables him to control his environment and fulfill his possibilities’ (Y.K.Singh, p.22). The forces of environment begin to influence the growth and development of the individual right from the womb of the mother. Educational process of development occurs in physical, social, cultural and psychological environment. A proper and adequate environment is very much necessary for a fruitful learning of the child. Especially the home and the school should provide the necessary stimulus for learning experience. The child spends most of his time in school and here his environment is exerting a different influence on performance through curricula, teaching techniques, relationship.

Jawaharlal Nehru declared that if all were well with our educational institutions, all would be well with the nation. Educational institutions are intimately linked with society at large. They are the temples of knowledge. They are the agents of social change and transformation. Therefore, the general condition of our schools, colleges and universities is a matter of great concern to the nation. Environment plays a vital role in the development of the personality of the students. As a student spends most of his life at school, the school environment is highly responsible for the inculcating of great values in him. The Kothari Commission (1964-66) has beautifully said, “The destiny of India is now being shaped in her classrooms” (p.2). As students are the backbones of the nation it is important to maintain a healthy school environment.

SIGNIFICANCE OF THE STUDY

In this ever-growing competitive world everyone desires a high level of achievement as the mark of one’s performance. The whole system of education is centered on academic achievement of students, making it a fertile ground for research work. Learning takes places effectively only when proper and congenial environment is provided for children in classroom. Their learning environment plays an inherent role in moulding the innate potentialities of the individual and school has always been regarded as an important factor
in the child’s education. The education of the child and his achievement is determined to a large extent by the varied and dynamic role of teachers and the facilities provided by them for the child’s education. Since the environment influences on the academic achievement of the students, the investigator tries to find out the impact of school environment factors on achievement. Hence the investigator selected the topic.

STATEMENT OF THE PROBLEM

Statement of the problem is entitled as “School Environment and Academic Achievement of standard IX students”. The investigator adopted the following definitions for the terms used in this title.

School Environment
According to Mick Zais (2011), School Environment means the extent to which school settings promote student safety and student health, which may include topics such as the physical plant, the academic environment, available physical and mental health supports and services, and the fairness and adequacy of disciplinary procedures, as supported by relevant research and an assessment of validity.

Academic Achievement
A measure of knowledge gained in formal education usually indicated by test scores, grade, grade points, average and degrees. Here, the achievement level of the student is judged by the marks that the students have scored in the quarterly examinations.

Standard IX Students
The education given in the school at 9th Standard.

Objective
To find the relationship between School Environment and Academic Achievement of standard IX students.

Null Hypotheses
1. There is no significant difference between standard IX boys and girls in their school environment.
2. There is no significant difference between standard IX English and Tamil medium students in their school environment.
3. There is no significant difference between standard IX rural and urban school students in their school environment.
4. There is no significant difference between standard IX boys and girls in their academic achievement.
5. There is no significant difference between standard IX English and Tamil medium students in their academic achievement.
6. There is no significant difference between standard IX rural and urban school students in their academic achievement.
7. There is no significant relationship between the school environment and academic achievement of standard IX students.

METHOD

School Environment Scale was developed by the investigators were used for the collection of data. Item validity was found by the investigator in item-whole correlation method and reliability of the tools was found through test-retest method. The reliability of School Environment Scale was 0.74. The investigator has adopted survey method for this study. For academic achievement the investigator collected the quarterly marks of the students from their class teachers.

Population for this study was students studying IX standard in high and higher secondary schools in Tirunelveli district.

The investigator used stratified random sampling technique for selecting the sample. The sample consists of 400 students studying IX standard.
For analyzing data ‘t’ test and Pearson’s product moment correlation were used as the statistical techniques.

Data Analysis And Findings
Findings based on the hypotheses and followed by data analysis are given as follows;

Table 1: Difference In The School Environment Of Standard IX Boys & Girls

<table>
<thead>
<tr>
<th>School Environment</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Calculated ‘t’ Value</th>
<th>Table Value</th>
<th>Remark at 5% level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>191</td>
<td>119.20</td>
<td>11.80</td>
<td>0.70</td>
<td>1.96</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>209</td>
<td>118.36</td>
<td>12.35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows that there is no significant difference between standard IX boys and girls in their school environment.

Table 2: Difference In The School Environment Of Standard IX English & Tamil Medium Students

<table>
<thead>
<tr>
<th>School Environment</th>
<th>Medium of Instruction</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Calculated ‘t’ Value</th>
<th>Table Value</th>
<th>Remark at 5% level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>English</td>
<td>60</td>
<td>116.62</td>
<td>15.02</td>
<td>1.24</td>
<td>1.96</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Tamil</td>
<td>340</td>
<td>119.14</td>
<td>11.47</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows that there is no significant difference between standard IX English and Tamil medium students in their school environment.

Table 3: Difference In The School Environment Of Standard IX Rural & Urban Students

<table>
<thead>
<tr>
<th>School Environment</th>
<th>Locality of School</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Calculated ‘t’ Value</th>
<th>Table Value</th>
<th>Remark at 5% level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>310</td>
<td>118.13</td>
<td>12.82</td>
<td>2.39</td>
<td>1.96</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>90</td>
<td>120.94</td>
<td>8.83</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows that there is significant difference between standard IX rural and urban school students in their school environment.

Table 4: Difference In The Academic Achievement Of Standard IX Boys & Girls

<table>
<thead>
<tr>
<th>Academic Achievement</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Calculated ‘t’ Value</th>
<th>Table Value</th>
<th>Remark at 5% level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>191</td>
<td>265.71</td>
<td>88.37</td>
<td>0.02</td>
<td>1.96</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>209</td>
<td>265.87</td>
<td>84.87</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 shows that there is no significant difference between standard IX boys and girls in their academic achievement.
Table 5: Difference In The Academic Achievement Of Standard IX English & Tamil Medium Students

<table>
<thead>
<tr>
<th>Academic Achievement</th>
<th>Medium of Instruction</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Calculated ‘t’ Value</th>
<th>Table Value</th>
<th>Remark at 5% level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>English</td>
<td>60</td>
<td>348.78</td>
<td>66.36</td>
<td>10.14</td>
<td>1.96</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Tamil</td>
<td>340</td>
<td>251.15</td>
<td>81.21</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 shows that there is significant difference between standard IX English and Tamil medium students in their academic achievement.

Table 6: Difference In The Academic Achievement Of Standard IX Rural & Urban Students

<table>
<thead>
<tr>
<th>Academic Achievement</th>
<th>Locality of School</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Calculated ‘t’ Value</th>
<th>Table Value</th>
<th>Remark at 5% level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>310</td>
<td>270.85</td>
<td>86.74</td>
<td>2.23</td>
<td>1.96</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>90</td>
<td>248.36</td>
<td>83.57</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6 shows that there is significant difference between standard IX rural and urban school students in their academic achievement.

Table 7: Relationship Between School Environment And Academic Achievement Of Standard IX Students

<table>
<thead>
<tr>
<th>School Environment and Academic Achievement</th>
<th>N</th>
<th>Calculated ‘γ’ Value</th>
<th>Table Value</th>
<th>Remark at 5% level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>400</td>
<td>0.024</td>
<td>0.098</td>
<td>NS</td>
</tr>
</tbody>
</table>

Table 7 shows that there is no significant relationship between the school environment and academic achievement of standard IX students.

CONCLUSION

Based on the analysis of data the investigators conclude the finding that there is no significant difference in the school environment of standard IX students in terms of gender, medium of instruction. At the same time, there is significant difference in the school environment of standard IX students in terms of locality of school. The urban students have better school environment than the rural students. This is due to the fact that urban students are having very much stressful environment in their day-to-day life because they are living in the mechanical and hurry burry life. So, they feel school environment is very convenient for their studies.

There is no significant difference in the academic achievement of standard IX students in terms of gender. But, there is significant difference in the academic achievement of standard IX students in terms of medium of instruction and locality of school.

There is no significant relationship between the school environment and academic achievement of standard IX students.

From the present study it is found that the school environment of standard IX students is low. It is found out that there is very low positive relationship between the school environment and academic achievement. To make the achievement to a high level, efforts must be taken to strengthen the school environment. So that, the
environment boosts up not only the achievement of students but their social ability, healthy status and moral values also.

REFERENCES


MOBILE-BASED LEARNING VS. PAPER-BASED LEARNING AND COLLOCATION WORDS LEARNING

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Abstract
This study investigated the superiority of mobile-based collocation words learning in comparison with classical paper-based collocation words learning. 80 students from a high school in Ardabil were chosen randomly. After the pre-test 10 participants were excluded from study, because of their partial knowledge of collocation words. Then they were divided into two groups: mobile-based(n=35) and paper-based(n=35). The pre-test was administered in order to identify the level of participants’ prior knowledge of collocation words. The result of pre-test showed that there was no significant differences between the participants. In treatment sessions, the mobile-based group received a list of unfamiliar collocation words via SMS while, the paper-based group received the same list on sheets of paper. After treatment sessions, the result of post-test indicated the superiority of mobile-based group over paper based group.

Key Words: Mobile –based learning, paper-based learning, SMS (short message service), collocation words.

INTRODUCTION

Nowadays the dominant language teaching/learning debates is, using technology in second language teaching/learning. We have a vast body of research devoted to effects of technology on SLA, but a small number of them devoted to the effect of cell-phone on SLA. Although SMS is being widely used by Iranian youth today as a means of communication, few researchers have interested in the application of the SMS in second language learning. Jarke, keing, Lam & McNaught (2008) state SMS (short message service) has been use quite widely in educational institutions. The majority of the uses, however, are for administrative issues rather than for teaching and learning. As SMS is technologically and functionally very simple, it can be considered to be a relatively primitive technology. However, viewing it from another angle, we see that SMS ranks very highly in terms of user convenience. The software and hardware required to make SMS work are by far more popular than other mobile strategies. According to Peters (2005, as cited in Hashemi & Ghasemi 2011) a mobile technology device should meet three criteria: it must be capable of providing communication and/or information functions, be small enough to be easily carried and be used, at least part of the time, without a physical connection to a fixed power source or telecommunications services. Mobile, to most means portable and movable. Wanger and Wilson (2005) state that Mobile –learning can bridge formal and informal learning experiences. With the rapid growth of wireless and mobile learning technology, the use of mobile phone and other portable devices are now beginning to have an impact on language teaching and learning throughout the world. Similarly, the development of language learning technologies recently has tended to be mobilized, portable, and personalized. These trends have led to learning forms changing from traditional classroom learning to electronic learning (E-learning), mobile learning (M-learning) or ubiquitous learning (U-learning). Among these noble learning forms, mobile learning is effective and flexible; that is, mobile learning can overcome restrictions of time and space, enabling learners to study whenever and wherever possible (Chen and Chung, 2007 as cited in Roksan 2011). As Cavus and Ibrahim (2009) mention there is an increase use of wireless technologies in education all over the world. In fact, wireless technologies such as laptop computers, palmtop computers and mobile phones are revolutionizing education and transforming the traditional classroom-based learning and teaching into anytime and anywhere education. According to Ozok and Wei(2007) the high acceptance of SMS by youth people generates a large number of potential SMS- based learning users.

The importance of collocation words learning
Motallenzadeh, Beh Afarin and Daliry Rad (2011) mention collocations are rarely learned and experienced and most of the items ignored in language classes in Iran. The stating fact here is that just the tiny percent of
learners will ever pay attention to collocations. The result whatsoever whether young teachers are not aware of collocations’ important role or the students unconsciously ignore learning them, lead to incomplete English learning, which to be influent though they have passed several intensive course. Skyzypek (2009) indicates the importance of collocation by stating that one of the criteria for knowing a word is being aware of other words with which it keeps company. Maghsodi(2010) states that even though memorizing terms with their respective translation is quick and preferred by learners, it is superficial and doesn’t let students use the needed vocabulary correctly in context. It is widely accepted idea that collocations are very important part of knowledge of second language acquisition and they are essential to non native speakers of English in order to speak or write fluently and accurately.(Jaean, 2007 as cited in Ozgul and Abdulkadir 2012). According to McCarthy ‘in vocabulary teaching there is a high importance of collocation and the relationship of collocation is fundamental in the study of vocabulary, and collocation is an important organising principle in the vocabulary of any language’ (1990:12). learners are often not aware that collocation knowledge is important for their language learning. For many students, learning vocabulary simply equals learning the meaning of new words (Woolard 2000).

The aim of the study
The goal of this study is to find out whether learning collocation words via SMS will result in better learning than learning collocation words using classical techniques such as memorizing.

Research question
Does learning collocation words via SMS result in a better learning of these words than learning them using classical techniques (memorizing)?

Alternative Hypothesis
H1: There are significant differences between mobile –based learning and paper-based learning in collocation words learning of second language learners.

Independent and dependent variables
Independent variable was the learning type (SMS- based and paper-based) and dependent variable was students’ scores measured by post test.

METHODOLOGY

Subjects: 80 students in Ardabil high school were chosen randomly. Any participants who indicated even partial knowledge of the collocation words was excluded from experiment. After pre test 10 participants were excluded from the study. Then they were divided into two groups. The two groups, in which there were (n=35) mobile based group and (n=35) paper based group were placed in two treatment conditions.

Procedure
In order to identify the subjects’ collection words knowledge before experiment a pre test was administered. This test included 60 multiple choice items , with its reliability to be 0.85 using Kr-21 formula. 45 collocation words were unfamiliar to all participants. Only the collocation words from those participants who demonstrated absolutely no prior knowledge of them included in this study. The result of pre test showed that except 10 participants , all of them are homogenous. Before the beginning of the treatment sessions it was checked if all the mobile based participants had mobile phones. During treatment sessions the list of unfamiliar collocation words was delivered to mobile based group via SMS . Each message contained a collocation words followed by descriptions and examples. Each students received the same SMS , but never got the same SMS twice. The same list was delivered to paper based on sheets of paper. The paper based group received the collocation words on one class day in the participants’ regular classroom during their regularly scheduled classes, while the mobile based group received these words via SMS after school. (Time=30 minutes for both group) After nine sessions for investigating the effects of mobile-based and paper-based techniques on the learning collection words all students were given 40 minutes to complete the post test. It was included 40 multiple choice questions. Both groups answered the post test on the answer sheet.
Data analysis
All of the 70 participants were homogenous based on pre-test that was administered before starting the study. Results obtained by participants in the post-test were compared for the paper-based and mobile-based in order to determine each of their effects of on collocation words learning outcomes. A t-test was run to test the alternative hypothesis. The data were the score of two groups after the two types of learning condition (mobile-based and paper-based).

Table (1) shows groups descriptive statistics, from this we can see that x= 17.45 and SD= 1.46 (Mobile-based group) and x= 14.5 and SD= 2.47 (Paper-based group).

Table 1: t-test result

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>14.5</td>
<td>2.4764</td>
<td>35</td>
</tr>
<tr>
<td>Group B</td>
<td>17.4571</td>
<td>1.4571</td>
<td>35</td>
</tr>
</tbody>
</table>

| t-Statistic    | -6.078 | Result             |
| Degrees of Freedom | 68     | Reject the null hypothesis. |
| Critical Value  | 1.9944 | Conclusion         |
| 95% Confidence Interval | [1.1418, 4.7725] | Group A is significantly different from Group B. t(68) = -6.078, p < .05. We are 95% confident that the mean difference lies between 1.1418 and 4.7725. |

Group A: Paper-based          Group B: Mobile-based

Also table (1) indicates the result of the t-test. In this table we can see that t(68)= -6.07, p< 0.05, therefore mobile-based group is significantly different from paper-based group, and we can support the alternative hypothesis.
DISCUSSION AND RESULT

A quantitative analysis of the results in this research shows that mobile-based group outperformed significantly paper-based group. The result of this research is in line with Thornton and Houser (2005), Jalalifarahani &Ghovehndoushan(2011) , and Başoğlu &Akdemir(2010), Cavus &Ibrahim(2009), Li(2009)and Song(2008) . These researchers found that cell phone can be valuable tool for supporting students learning. Mobile-based learning help to individualize the language learning experiences. According to Ketabi, Zarei and Khazaie (2011) mobile technologies provide the learners with the aids to connect their learning processes with real world experiments, developing new ways for converging what is learnt in the classroom and what should be learnt outside seems unavoidable. The students can learn after classroom, as Grace(1998) said because of the class time constraint, vocabulary reinforcement and study is frequently the responsibility of the student outside the classroom . Also they can learn on their own in anyway and anytime. Therefore we can conclude that SMS plays an important role in vocabulary and collocation words learning. We as a teacher should be aware of the benefits of technology, specially cell phone in the language learning.

Acknowledgements: I thank my dear son, Pouya, for his helping.

REFERENCES


AN INVESTIGATION OF THE RELATIONSHIP BETWEEN PERSONALITY ASPECTS AND TRANSFORMATIONAL LEADERSHIP AMONG THE SCHOOL MANAGERS OF THE EDUCATIONAL REGIONS 1 AND 2 IN URMIA

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Abstract
This study was conducted in order to investigate the relationship between personality aspects and transformational leadership among the school managers of the educational regions 1 and 2 in Urumia. In order to measure personality and transformational leadership, NEO-PIR and MLQ-5X questionnaires were used respectively. The results indicated that Extraversion and Openness to Experience have a positive and significant relationship with transformational leadership, but the other aspects didn’t have a significant relationship with this variable. Moreover, Openness to Experience predicted about 15 percent of the transformational leadership’s variance.

Key Words: Personality, personality aspects, transformational leadership.

INTRODUCTION
Educational system represents the foundation of all the activities and substantial issues of a society and guarantees its survival and development. Consequently management and leadership of the educational system as a motivating, controlling and coordinating factor is of particular importance. Turbulent conditions of the organizations and the existence of a high level of uncertainty, has lead to severe disorders in the organizations, and it has endangered planning for the organizations’ development, as well as threatening their survival. In such a situation, the leaders are supposed be able to act effectively in complicated and risky conditions and strengthen in themselves and their subordinates the capability to react appropriately when facing probable challenges and opportunities. Many theorists believe that transformational leadership is the most appropriate style of leadership in such environments. Transformational leadership is a conscious, moral and spiritual process that provides patterns of equal power relationships between leaders and subordinates, in order to fulfill a collective purpose or make a genuine reform in the organizations or social systems by a reliable participatory plan (magliocca & Christakis, 2001). By being responsible, using their imagination and realizing their ideas, transformative leaders motivate the sense of commitment, voluntary participation and remarkable efforts in their subordinates. By doing this, they develop learning organizations that are able to recognize situational needs and provide themselves with the necessary tools to be adapted to these needs. Consequently, such leaders can build the basis for organizational creativity and effective harmony towards fulfilling the purposes (Bass, 1985). Transformative leaders provoke thinking in their followers, strengthening in them the creativity and problem solving potentials and producing a high level of confidence, commitment and appreciation in the subordinates (Balthazard et al, 2008). Such leaders design missions and aims to enforce the personal and social identities of their subordinates (Bass et al, 2003). The results of the conducted research
projects indicate the importance of this sort of leadership in organizations. Such studies have confirmed the positive effects of transformational leadership on organizations and their members. More specifically, many studies have proven its effects on organizational efficiency and competence, and the subordinates’ commitment, satisfaction and integration, as well as their remarkable endeavor towards the organizational purposes (Avolio 1999). Besides, Leithwood (1992; as cited in Kinekid 2007) maintains that transformational leadership leads to stunning positive results; moreover, there is an evident relationship between transformational leadership and the teachers’ collaboration. As a result, transformational leadership turns the attentions of the stakeholders to improvement of the efforts. By reviewing the conducted studies, Lubis, Duris and Jentzi (2005, as cited in Hevimiskel, 2008) present four results about the effects of transformational leadership:

1. the effects of transformational leadership on organizational effectiveness are significant and extensive.
2. the effects of transformational leadership on the independent index of organizational effectiveness is positive and significant.
3. the effects of transformational leadership on the independent evaluation of the students’ files is promising.
4. the effects of transformational leadership on the students’ participation and collaboration is relatively positive.

The conducted research on transformational leadership has revealed five aspects of this concept. These aspects include Idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Idealized influence is divided into two parts; idealized influence Attribute and idealized influence Behavior. Idealized influence Attribute or charisma refers to the fact that the followers perceive their leaders as charismatic, reliable and powerful individuals who are focused on high-level and moral principles. Idealized influence Behavior includes the activities of the charismatic leader, that are focused on values and beliefs and the way the concept of commitment is perceived (Antonakis, Avlio and Sivasubramnamiam, 2003). As for inspirational motivation, the leaders behave in a way that motivates the people around them by providing challenges and special issues. They enhance the individuals’ collective and personal spirit. They enforce the sense of optimism and enthusiasm in their subordinates and stimulate them about appealing opportunities in future (Bass et al, 2003). The intellectual stimulation aspect refers to stimulation of the followers by the leader in order to discover new solutions and rethink about solving organizational problems (Tunkenejad, 2007). The leaders who make use of this aspect don’t tell the individuals what to do, but they rely on the trained working forces and improving their mental abilities (Alive and Bass, 2002). And individualized considerations is paying attention to the individual differences between the followers, communicating with all of them, and motivating them by giving responsibilities to learn and gain experience (Tunkenejad, 2007).

Personality is defined as an organized system that consists of relatively permanent characteristics and differentiates the individuals from each other (Scholts, 2005). Paying attention to personality and leadership and the relationship between personality aspects and transformational leadership has started from decades ago (De Hoogh, Den Hartog & Koopman, 2005) and has received a new wave of attention from 90s (Hayutala, 2005). Conway (2000) believes that measuring the personality of leaders is an important element in recognizing successful leaders. Similarly, Ross and Offerman (1997) declare that certain personality traits are related to transformational leadership. Recent studies also show that personality traits can predict the leaders’ success and certain aspects of personality are related to transformational leadership (Kavnoy, 2000). The personality aspects and models that have received the highest level of attention by the researchers are the ones integrated in McCary and Kasta’s five factor model (Judge et al, 2002). According to this model, personality consists of five factors, namely extraversion, agreeableness, conscientiousness, neuroticism and openness to experience. Extraversion reflects the preferences and attitudes in social settings. Agreeableness refers to the inclination to interact with others. Conscientiousness shows how organized and perseverant the individuals are in following their purposes. Neuroticism is the inclination to experience negative feelings and thoughts. And finally, openness to experience reflects the amount of tolerance in facing cultural beliefs and interests.

Studies have shown that transformative leaders are more extrovert, embrace new experiences, enjoy a high level of agreeableness and adaptability, and receive a low Neuroticism and a high conscientiousness grade.
(Bono & Judge, 2004). The results of some other studies have cast doubt on these findings (Shao and Weber, 2004). Roush and Atwater (1992) have found out that understanding interests has an insignificant relationship with transformational leadership. Later on, investigations of Edvater and Yamarino confirmed these findings (Hayutala, 2006). Judge et al. (2002) also reviewed the conducted studies to conclude that the relationships between Neuroticism, Extraversion, openness to experience, and conscientiousness are significant in 90% of the relations. Generally, the five factor model of personality has a 0/48 multiple correlation with leadership. Nevertheless, the results of conducted studies on this subject seem to be paradoxical, and many experts have argued that the research projects related to characteristic viewpoints as predictors of the style of leadership are insufficient (Lim & Ployhart, 2004). Bass (1998 and 1999) and Haws and Hall (1992) have also requested more studies on the relationship between personality and transformational leadership (Hayutala, 2006).

According to what was said, certain characteristics are required for transformational leadership. But the conducted studies have figured out different characteristics for transformative leaders, and the results of these research projects are limited and unclear (Ferry, 2007). Moreover, considering the fact that the educational system of our country is facing various problems and issues regarding its stagnancy and inflexibility, research projects seem to be necessary to clarify the vague points about this style of leadership and prepare the conditions for its utilization. Besides, applying this style of leadership requires certain qualities and capabilities that the educational managers need to know and improve in order to be prepared to use it. So, the purposes of this study are:

1. to investigate the relationship between personality aspects (Extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience) on the one hand, and transformational leadership and its aspects (Idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration) on the other.

2. to determine the role of the five aspects of personality in predicting transformational leadership among school managers of the educational regions 1 and 2 in Urumia.

**METHOD**

The current study is a descriptive-correlational research. The statistical population of this research consists of 75 school managers of the educational regions 1 and 2 in Urumia. Regarding the fact that the population was limited and in order to enhance the reliability of the research in sampling, the census method was used and 56 managers were studied.

**Data collecting tools**

To measure transformational leadership, the fifth revision of Multi-leader Questionnaire (MLQ) (Bass and Avolio, 2004) was used. This questionnaire has 36 units, of which 20 units measure the elements related to transformational leadership. The Alpha coefficient of this questionnaire in the current research was 0/93, that indicates its high level of reliability.

To measure the personality aspects of the school managers, NEO-PI-R (Kasta and McCary, 1999) was used. This questionnaire consists of 60 parts, with each part including 12 units. The reliability of each element in this study was 0/79 for Extraversion, 0/72 for agreeableness, 0/74 for conscientiousness, 0/71 for Neuroticism, and 0/75 for openness to experience.

**The method of data analysis**

For data analysis, Pearson correlation coefficient was used. To determine the role of personality aspects in predicting transformational leadership, stepwise correlation was used.

**RESULTS**

In order to look at the relationship between personality aspects on the one hand, and transformational leadership and its aspects of the other, correlation matrix has been presented in Table 1.
According to Table 1 the correlation between openness to experience (0.38) and extraversion (0.37) on the one hand and transformational leadership on the other, is positive and significant in 0.01 level of significance. Correlation of the other aspects with this variable is not significant. Moreover, the correlation of these two personality aspects with individualized consideration and intellectual stimulation is positive and significant in 0.05 level of significance. The relationship between the two aspects of openness to experience (0.44) and extraversion (0.43) on the one hand and Idealized influence Behavior is positive and significant in 0.01 level of significance. It must be mentioned that none of the five aspects of personality has a significant correlation with idealized influence Attribute and inspirational motivation aspects.

In order to determine the role of each personality aspect in predicting transformational leadership, stepwise regression was used. In this equation the openness to experience variable was able to maintain its significance, and the other aspects got out of the equation. These results have been shown in Table 2.

Table 2: The results of multivariate regression analysis for personality aspects and transformational leadership

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Neuroticism</th>
<th>Extraversion</th>
<th>Openness to experience</th>
<th>Agreeableness</th>
<th>Conscientiousness</th>
<th>Idealized influence behavior</th>
<th>Idealized influence Attributed</th>
<th>Inspirational motivation</th>
<th>Intellectual stimulation</th>
<th>Individualized considerations</th>
<th>Transformational leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td><strong>0.35</strong></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness to experience</td>
<td><strong>-0.27</strong></td>
<td><strong>0.41</strong></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreeableness</td>
<td><strong>-0.38</strong></td>
<td><strong>0.35</strong></td>
<td><strong>0.31</strong></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td><strong>-0.41</strong></td>
<td><strong>0.35</strong></td>
<td><strong>0.26</strong></td>
<td><strong>0.54</strong></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Idealized influence behavior</td>
<td>0.08</td>
<td><strong>0.43</strong></td>
<td><strong>0.44</strong></td>
<td>0.11</td>
<td>0.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideal viewpoint</td>
<td>0.17</td>
<td>0.01</td>
<td>0.09</td>
<td>-0.05</td>
<td>0.03</td>
<td><strong>0.46</strong></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspirational motivation</td>
<td>0.13</td>
<td>0.20</td>
<td>0.23</td>
<td>-0.09</td>
<td>0.11</td>
<td><strong>0.76</strong></td>
<td><strong>0.47</strong></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellectual stimulation</td>
<td>0.02</td>
<td><strong>0.31</strong></td>
<td><strong>0.30</strong></td>
<td>-0.07</td>
<td>0.06</td>
<td><strong>0.70</strong></td>
<td><strong>0.57</strong></td>
<td><strong>0.79</strong></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualized considerations</td>
<td>0.02</td>
<td><strong>0.25</strong></td>
<td><strong>0.26</strong></td>
<td>0.06</td>
<td>0.16</td>
<td><strong>0.71</strong></td>
<td><strong>0.55</strong></td>
<td><strong>0.68</strong></td>
<td><strong>0.84</strong></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>0.07</td>
<td><strong>0.37</strong></td>
<td><strong>0.38</strong></td>
<td>0.15</td>
<td>0.25</td>
<td><strong>0.84</strong></td>
<td><strong>0.72</strong></td>
<td><strong>0.77</strong></td>
<td><strong>0.80</strong></td>
<td><strong>0.78</strong></td>
<td>1</td>
</tr>
</tbody>
</table>

According to Table 1 the correlation between openness to experience (0/38) and extraversion (0/37) on the one hand and transformational leadership on the other, is positive and significant in 0/0 1 level of significance. Correlation of the other aspects with this variable is not significant. Moreover, the correlation of these two personality aspects with individualized consideration and intellectual stimulation is positive and significant in 0/05 level of significance. The relationship between the two aspects of openness to experience (0/44) and extraversion (0/43) on the one hand and Idealized influence Behavior is positive and significant in 0/01 level of significance. It must be mentioned that none of the five aspects of personality has a significant correlation with idealized influence Attribute and inspirational motivation aspects.
According to the results of regression analysis, openness to experience, as a predictive variable, predicts 15% of transformational leadership's variance. Moreover, the amount of F in the equation refers to significance of the correlation between criterion variable and predictive variable.

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>T</th>
<th>Significance level</th>
<th>Partial Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>0.19</td>
<td>1.44</td>
<td>0.15</td>
<td>0.19</td>
</tr>
<tr>
<td>Extraversion</td>
<td>0.25</td>
<td>1.86</td>
<td>0.07</td>
<td>0.25</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>0.04</td>
<td>0.30</td>
<td>0.77</td>
<td>0.04</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>0.16</td>
<td>1.26</td>
<td>0.21</td>
<td>0.17</td>
</tr>
</tbody>
</table>

**DISCUSSION**

The purpose of this study was to investigate the relationship between five personality aspects and transformational leadership. The results showed that openness to experience and extraversion have a positive and significant relationship with transformational leadership. Besides, the relationship between these two aspects on the one hand, and individualized consideration, intellectual stimulation and idealized influence Behavior on the other hand, is also significant. The results of regression analysis indicated that the variable of openness to experience is able to predict transformational leadership, and interprets about 15% of its variance.

Transformational leadership is defined as a kind of leadership in which the leaders enjoy a sort of divine endowment, provide spiritual motivations for their followers, guide them by finding a way to their hearts and try to establish a relationship between individual and collective interests. As a result, a higher level of extraversion seems to be specifically necessary to conduct such kind of leadership.

In using their ideal charisma, the leaders need certain capabilities to communicate with others and win their confidence. This way the leaders would be able to gain their subordinates’ appreciation, respect, and trust, and the subordinates would feel easy with their leaders and accept the values and viewpoints created by them. As for inspirational motivation, criteria like enhancing the individuals’ motivation, paying attention to their feelings, enforcing their optimism and enthusiasm and making them involved in organizational life, creating collective commitment, developing powerful identities and inspiring the people to grasp their missions are considered, and these criteria are related to the features correlated with extraversion. The relationship between intellectual stimulation and extraversion can be justified by the fact that prompting the followers to discover new solutions and rethink about the issues as well as challenging their thoughts, ideas and senses of creativity, requires the leaders to establish clear, sympathetic, and honest communications with their followers. The same is true about individualized considerations. Paying attention to individual differences, trying to broaden the individuals’ potentials by creating new opportunities to learn, and using mutual relationships with all the individuals, are among the behaviors that are necessary for successful individualized consideration, and all these behaviors are related to extraversion elements. Studies conducted by Mo’meni et al. (2007), Zarandi (2007), Judge and Bono (2000), Johnson et al (2004), Lim and Ployhart (2004), Doher (2006), Veyfald (2008), and Saror (2008) are in accordance with this study to confirm the relationship between extraversion and transformational leadership.

Significance of the relationship between openness to experience and transformational leadership indicates that such leaders try to make a change in cultural values and strengthen the sense of creativity. They are inclined to introduce a new horizon towards growth and development to their organization by creating new ideas and perspectives. Such leaders also challenge the individuals to perform inventive and exceptional deeds. They enjoy a broad viewpoint and consider the organizational issues in a multidimensional manner and in relation with the evolutions in their environment. To do this, such leaders need to be open-minded, wise and courageous to devise and trace inventive methods. The behaviors related to openness to experience in transformative leaders can include insightfulness and creation of values in an idealized influence Attribute aspect, flexibility and making changes with regards to the idealized influence Behavior aspect, emphasizing inner motivations and feelings and encouraging the followers to accept responsibilities with regards to the inspirational motivation aspect, and paying attention to the individuals’ personal feelings and needs, and

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Another finding in this study was the 15% prediction of transformational leadership’s variance by openness to experience, which is in accordance with the studies conducted by Mo’meni et al (2007), Zarandi (2007), Judge and Bono (2000), Lee (2007) and Saror (2008). However, this finding was not in accordance with the findings of Judge and Bono (2004), Doher (2006), and Chen and Chen (2008).

RESEARCH LIMITATIONS AND SUGGESTIONS

Regarding the fact that this research used a descriptive correlational method, and since in such research methods various variables may affect the results, and on the other hand one cannot deduce a causal relationship on their basis, the findings of this study should be interpreted cautiously. Moreover, because of the population’s diversity and the limited number of subjects, and since not all the individuals in the population were included in the survey, one should be careful in interpreting and generalizing the findings.

According to the study’s findings, it can be suggested that the leaders make use of training sessions or self-study to enhance characteristics like openness to experience, so that the possibility of transformative behaviors is strengthened. Besides, because of the correlation between personality aspects, and their internal relations with the style of leadership, procedures like recruitment, employment, development and training of organizational leaders and codification of educational plans can be devised with emphasis on these features.

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PLAGIARISM VIA INTERNET ON UNDERGRADUATE STUDENTS IN TURKEY

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Abstract
347 students from 3 different universities prepared paperworks on first semester of 2011-2012 educational year. After a deep investigation using an internet based plagiarism detect engine and searching expression in google its observed that %94,0 of students had prepared their papers with copy-paste method. % 50,7 of them did not had any references while %35,2 of them had not proper references. % 27,1 had their formatting exactly same with the source while %34,3 of them had partially copied the source formatting.

Key Words: Plagiarism, Internet, undergraduate students, Turkey.

INTRODUCTION
Internet gives researchers opportunities which never seen before. Searching, multimedia, document sharing, world wide access to knowledge, online journals, real time video chat with other experts, easy access from everywhere even while you are mobile, synchronous and asynchronous communication and exc. With this opportunities scientists have a variety of new patterns and processes. On the other hand information is so rapidly produced there is no way of being informed on every study even on a single field. With the non-scientific, replicated and unorganized documents people are complaining about information pollution.

Information pollution is only one aspect of the information era. Another issue that Internet effects information is academic dishonesty. Although academic dishonesty is not a 20. century problem, it has been easier and more common with the development of Internet. Cyber-plagiarism is a rising problem. Another important point is, with so many resources it gets harder to detect the dishonesty.

Plagiarism is widely used as one kind of dishonesty. It is defined as partially or fully copying the intent or format of a source without sticking on the quotation rules. Another similar term is pseudopigraphy which is defined as ascription of false authorship to a piece of writing (Page, 2004). Other similar terms continue as misconduct, falsification, fraud and exc. (Decoo, 2004)

Researches show that internet is widely used (Hitlin, 2005) and also for schoolwork (DeBell and Chapman, 2003). Some researchers agree that plagiarism exist. (Probet, 2011; Born, 2003; Hansen, 2003; Thompson 2006; Scanlon and Neumann, 2002). Some say it could happen even before the internet era (Simmons, 1999). Simmons refers to Dorris Dant’s survey made in 1986 on high school students as evidence. It is considered as a vital problem (ATL Survey, 2008, 46). On a research on over 18.000 students from 2001 to 2005 McCabe (2005) found plagiarism is as common as %60 and plagiarism via internet is nearly %50.

Plagiarism may occur as naive and unintentional action or intentionaly and dishonestly (Probet, 2011). Plagiarism may occur partially or as entirely copying of the source or sources. (Austin & Brown, 1999) When the
source is digital or internet they do not have to even read it. They do a collection of copied and pasted texts
(Thompson 2006; Paulhus et al 2003; Park 2003,; Scanlon and Neumann, 2002; McMurtry, 2001). The
educational preferences of such papers are a vital question. Another way of plagiarism is to acquire finished
research papers for a fee (Paulhus et al , 2003). Appropriation of ideas is also considered as plagiarism and
sometimes content and format copying is not necessary (Lindsay, 2003).

Although there are a lot of researches that show the positive effects of computer and internet usage in
education, it is not true that the more we use computer and internet the better the performance is. Actualy
Fuchs and Woessmann find a surprising change on performance with the usage of computer and internet. The
best performance is provided with the moderate computer use, while little and frequent computer usage
causes poor performance.

METHOD

From 3 Universities, 9 departments, 347 students were attended to this research. Plagiarisma.net plagiarism
detection engine is used for detecting the plagiarism on students paperworks. There were two main aspects
the researchers were looking for. First of all they were looking for the content. The other main subject they
were looking for was the copy of formatting. At this point The indents, alignments, font properties and styles,
paragraph properties exc. were checked.

Plagiarisma.net has been choosen as plagiarism detection system. This site provides 3 papers limited 1000
words for free, but the researchers have bought a premium account for speeding and easing the process.
Before deciding, many sites were investigated with the limit of free tries. The results were compared. Some
detection sites detected higher levels of plagiarism on papers. They also gave the link of the sources. Checking
and being sure that this high levels of plagiarism are not a false alert the low level alerting sites were
eliminated. After that, the reporting formats of the remaining sites were checked. The criterion was
compatibility to analysis. Plagiarisma.net plagiarism detection site not only with links it provide for the
source/duplicate files but also providing a percentage of originality proved that its the most suitable all
amongst the plagiarism detection sites. Except plagiarisma.net names of the plagiarism detection systems that
are checked are given on the list below

http://www.plagiarismdetect.com/
http://thetplagiarism.com/
http://plagiarism-detect.com/
http://www.ithenticate.com/plagiarism-checker-products/
http://www.copyscape.com/
http://www.attributor.com/
http://academicplagiarism.com/
http://www.scanmyessay.com/
http://www.articlechecker.com/
http://www.plagiarism-detector.com/
http://www.dustball.com/cs/plagiarism.checker/
http://www.plagiarismchecker.com/
http://searchenginereports.net/articlecheck.aspx
http://www.plagscan.com/
http://etest.vbi.vt.edu/etblast3/
http://chimpsky.uwaterloo.ca/login
https://www.turnitin.com/static/index.php
http://dejavu.vbi.vt.edu/dejavu/

47 students from Afyon Kocatepe University (Afyon/TURKEY) , 119 students from Mevlana University, 181
students from Selcuk University total 347 students were attended to this study. From this students 47 are from
college, 147 from Educational Faculty, 109 technical education faculty and 44 from formation classes. 47 students participated from Afyon Kocatepe University. On their management organization class they were asked for a paper about industrial revolution. The sub subject was depending on students. 119 students participated from Mevlana (Rumi) University (Konya/TURKEY). All of them were first year educational faculty students. On Computer I class a list of subjects were prepared about computers, Operating systems and office applications. Deadline for this papers was 28.11.2011. Students from Selcuk University Technical Education Faculty and from formation classes are asked to prepare a paper about “material design principles” on educational technologies and material design class. This class is four hours a week and is given on 3th year. The special education students prepared their papers for program development class about quantum learning.

The process was mostly like
1- The papers were gathered and saved in categories depending on departments
2- Names, universities, faculties, departments, form numbers, student numbers exc. are written down on a table
3- All the texts on the papers have been copied and pasted on the text box on the site and checked by clicking “check duplicate content” button. (large texts are checked by Bing Started from 12.08.2011)
4- The result page shows uniq and duplicate content areas. The duplicate contents were checked with links provided by detection site.
5- Google is also used to find the duplicate contents. The results are written on the same table on content, formatting and reference fields.
6- The originality percentage received from detection site is also written down to the table.

The process has been repeated for each participant. The data gathered has been analysed and tabled. The mentioned tables can be seen in results section.

RESULTS

Table 1: Frequency and Percentage of Paper Contents Originality

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>All From One Source</td>
<td>122</td>
<td>35,2</td>
<td>35,2</td>
<td>35,2</td>
</tr>
<tr>
<td>All From Multiple Sources</td>
<td>204</td>
<td>58,8</td>
<td>58,8</td>
<td>94,0</td>
</tr>
<tr>
<td>Part From One Source</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>96,0</td>
</tr>
<tr>
<td>Part From Multiple Sources</td>
<td>9</td>
<td>2,6</td>
<td>2,6</td>
<td>98,6</td>
</tr>
<tr>
<td>Original</td>
<td>5</td>
<td>1,4</td>
<td>1,4</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>347</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

As seen from table 1 %94 of the students had their paper from other sources without using any unique content. Only 21 students of 347 had partial written their own papers. This seem to be very high for plagiarism.

Table 2: Frequency and Percentage of Papers References

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference Given Correctly</td>
<td>49</td>
<td>14,1</td>
<td>14,1</td>
<td>14,1</td>
</tr>
<tr>
<td>Reference Given Not Correctly</td>
<td>122</td>
<td>35,2</td>
<td>35,2</td>
<td>49,3</td>
</tr>
<tr>
<td>No Reference Given</td>
<td>176</td>
<td>50,7</td>
<td>50,7</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>347</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>
As seen on table 2 only %14.1 of students showed their references nearly proper. Because the participants were freshman an International referencing standart is not required. Showing understandably which part has been taken from which source is considered as correct referencing. %50.7 of student didn't have a reference section on their papers.

Table 3: Frequency and Percentages of Papers Formatting

<table>
<thead>
<tr>
<th>Style Descriiption</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Style Same With Source</td>
<td>94</td>
<td>27.1</td>
<td>27.1</td>
<td>27.1</td>
</tr>
<tr>
<td>Style Similar To Source</td>
<td>119</td>
<td>34.3</td>
<td>34.3</td>
<td>61.4</td>
</tr>
<tr>
<td>Style Original</td>
<td>134</td>
<td>38.6</td>
<td>38.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>347</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

%61.4 of students had totally copy-paste papers without even revising the format. %38.6 of students had changed the formatting while they still copied the content.

Table 4 The Mean and Standard Deviation of Originality Percentages.

<table>
<thead>
<tr>
<th>Result</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result</td>
<td>347</td>
<td>34.73</td>
<td>22.714</td>
</tr>
</tbody>
</table>

Table 4 shows mean of originality percentages given by the detect engine. The detect engine gave a mean of %35 for the originality of the papers. And standard deviation for the originality of the papers is quite high like 23.

While on table 1 %94 of the papers were plagiarised Table 4 show an originality percentage of %35. This is due to detection engines can not search on file with PDF, PPT exc. extensions. But searching deeper using google showed the papers were copy-paste.

In this study %94 of the students did full copy-paste. In an early research in 1986 Dorris Dant observed eight percent of the students paper had plagiarism evidences before the wide use of Internet. After the Internet era compared Thompson 2006 only six percent of the students did. Breen and Maassen found on their research in 2005 that more than %50 of University students involved somehow on plagiarism via Internet while they were students.

Studies show a rise on plagiarism via Internet. From ten percent in 1999 to %40 in 2005. On a single plagiarism detection engine Turnitin, more than 30% of submissions are determined to be plagiarized (Apple Computer, 2004).

**CONCLUSION**

Detection system are not enough for detecting plagiarism. Because incompatibility or copying errors when lowercase “i” was replaced with “ı” the detection system could not detect the plagiarism. Also some unique informations like name, department, lecturers or universities name, and exc. caused higher originality percentages on detection engine. Even different titles and punctuation caused the detection engine to misjudge the papers. Those factors caused %10-15 higher result for originality.
Because the detection system (plagiarisma.net) was using Bing for searching the phrases, googling a few phrases seem to give better results. As a result recent plagiarism detection systems may produce a hundred percent originality report for a full copy-paste paper. (because of the inability finding the source). Also it is impossible to detect plagiarisms from some PDF’s and audio visual files with recent systems. It is observed that the papers not only same with internet sources but only same with each other because most of them were prepared using 3-5 same sources.

What experienced once more with this research was that the difficulty of checking a home work. It is not only time consuming but also a never ending and uncertain process. Doesn’t matter how long and deep you check the papers there is no way of being certain that the paper is original. Not being able to find the source does not mean that there isn’t one.

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AFTER SCHOOL STUDENT CLUB PRACTICES
IN U.S. KINDERGARTEN THRU 12TH GRADE EDUCATIONAL INSTITUTIONS

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Abstract
Student clubs held in after school hours are extracurricular activities that improve the academic performance of students by keeping the students engaged. Through after school clubs, students also explore new areas of interest and enhance social skills. Within this study, certain after school club practices from United States Kindergarten thru 12th grade public schools are reviewed within the context of policies and regulations including attendance and discipline issues; after school club categories that are activity clubs, tutorials, practices, study halls, after school care programs; financial resources; human resources; integration with the extracurricular activities held within school hours and integration with curricular activities.

Key Words: Extracurricular, tutorial, study halls, after school care.

INTRODUCTION
After school programs are widely common in U.S. Kindergarten thru 12th grade public and private schools (Parsad & Lewis, 2009). Effective afterschool programs bring a wide range of benefits to youth, families and communities. After school programs can boost academic performance, reduce risky behaviors, promote physical health, and provide a safe, structured environment for the children of working parents. A national evaluation revealed that over 40 percent of students attending 21st Century Community Learning Center programs improved their reading and math grades and that those who attended more regularly were more likely to make gains (Naftzger et al., 2007). Effective afterschool programs can improve classroom behavior, school attendance, academic aspirations, and can reduce the likelihood that a student will drop out (Wisconsin Department of Public Instruction,2010; Huang & La Torre, 2008). Participation in afterschool programs has been associated with reduced drug use and criminal behavior (Cunha & Heckman, 2006; UCLA National Center for Research on Evaluation, 2007).

After school programs can play an important role in encouraging physical activity and good dietary habits. Participation in afterschool programs has been associated with positive health outcomes, including reduced obesity (Mahoney, Lord, & Carryl, 2005). Working families and businesses also derive benefits from afterschool programs that ensure that youth have a safe place to go while parents are at work. Parents concerned about their children’s afterschool care miss an average of eight days of work per year, and this decreased worker productivity costs businesses up to $300 billion annually (Brandeis University Community, Families and Work Program, 2004; Catalyst & Brandeis University Community, Families and Work Program, 2006).

TYPES OF AFTER SCHOOL PROGRAMS/STUDENT CLUBS
Types of activities that regularly take place during after school hours are;
• regular student clubs
• study halls
• after school care programs
• paid after school programs that are optional to enroll in
• teacher tutorials for students behind academically programs that are free of charge
• norm-reference test tutorials and prior selection process by school
• projects is common
While the first three types of after school programs are reviewed within this study; last three programs that are teacher tutorials for students that are behind academically, norm-reference test tutorials for tests such as SAT, and for science fair projects, science Olympiads and other competitions, are not. As a reason, last three categories are for students usually chosen by the school via a prior selection process and thus there is no admission or payment aspect, while regular student clubs as well as study hall and after school care programs are paid programs that student/parent submits an application for.

First type of programs is usually referred as fee-based stand-alone day care programs. These programs operate primarily to provide adult supervision for students after school, although the programs may also incorporate homework help, recreational activities, and cultural enhancement activities such as arts and crafts (Parsad & Lewis, 2009).

Second type is usually referred as stand-alone academic instruction/tutoring programs that focus exclusively on academic instruction or tutoring to improve student performance in core academic subject areas such as math, reading, and science. These programs include the supplemental educational services (SES) in schools that did not make adequate yearly progress (AYP), other stand-alone programs that focus on improving academic standards of students who are at risk of school failure, and programs that may provide additional academic exposure for students who are doing well in school (Carver & Iruka, 2006).

Supplemental Educational Services (SES) are a component of Title I of the Elementary and Secondary Education Act as reauthorized by the No Child Left Behind Act (NCLB). Under this legislation, schools that did not make Adequate Yearly Progress (AYP) are required to provide extra academic assistance for eligible children (No Child Left Behind Supplemental Educational Services, 2011).

Examples to regular student clubs, which is the type of after school program reviewed within this study along with study hall and after school care clubs, are arts and crafts club, book club, chess club, board games club, choir club, drama club, folk dance club, Spanish dance club, foreign languages clubs, e.g. Spanish for U.S., journalism club, yearbook club, digital graphics and animation club, robotics club (students usually present their work in robotics competitions), sports clubs that are separate for lower grades such as elementary school students and higher grades such as middle school students. Example to sports clubs are physical activity and gymnastics club, soccer club, basketball club, table tennis club, American football club, baseball club, table tennis club, karate club, etc. (Grossman, Price, Fellerath, Jucovy, Kotloff, Raley, & Walker, 2002).

Clubs are usually run between 3.00 pm and 4.00 pm since teachers that are still in school can sponsor the clubs and administrators can manage the program. It is common that after 4.00 pm up until 5.00 pm and 5.30 pm, parents request the clubs to be extended. For this reason, students that stay for that extended period of time are gathered in a club named “Study Hall” doing their homework and assignments and supervised for the time being until being picked up. If the number of students stay late are more to be handled in one group, then the second choice is to open a after school care club, which first lower age students are allowed to enrol and separated from older age student playing games at a place such as playground inside school premises or games such as board games if outdoor activities are not possible.

While setting up the after school program, teachers should be approached first as to what clubs they might want to sponsor. Afterwards, parents may be approached directly or preferably through PTOs (Parent-Teacher Organizations) or PTAs (Parent-Teacher Associations) for volunteering or as paraprofessionals (Desforges & Abouchaar, 2003). As the third resource, part-time personnel may be employed whom could be substitute teachers that come to school to substitute for classes when the need arise and whom are paid on an hourly basis.
ADVANTAGES/DISADVANTAGES OF AFTER SCHOOL CLUBS

Advantages of After School Clubs

It would be convenient to categorize the advantages of an after school club program via students’ perspective, parents’ perspective and that of the school as these are the three major sides involved in the process (Yohalem, Pittman, & Edwards, 2010). From students’ aspect, after school clubs allow students to be kept engaged by

• exploring new areas of interest that they may not have during regular school hours,
• enhancing social skills,
• improving academic performance.

Additionally, through after school clubs students find more time for subjects such as art, music, physical sciences (sports) that are regularly allocated only one or two periods a week in the regular school curriculum. From parents’ perspective enrolling their children in after school clubs is very desirable because most parents work in U.S. and this ratio is even higher if the parents are single parents. Thus, especially students of lower ages that are dismissed from school usually on or around 3:00 pm have to be supervised until the parent(s) get out of work, which is typically on or around 5:00 pm, two hours after school dismissal. If students enroll in the private after school care programs outside of the school, it just complicates the transportation adding one more destination. Thirdly, from the perspective of school administration, schools usually employ teachers up until 4 pm or 4.30 pm since teachers are employed full-time and usually cannot work at a comparable job to maintain the status of their teaching licenses and certificates. And because classes end on or before 3:00 pm and the teachers usually are allocated with the planning periods they are legally entitled to during the school hours, after school clubs appear as the best way to keep engaged teachers similar to students during hours after 3:00 pm. Via after school clubs, schools get extra funding for the extracurricular activities and it is always a plus for a school when compared to other schools that do not administer a successful after school clubs program.

Probable Disadvantages of After School Clubs

Despite after school clubs are preferable by many aspects, some general drawbacks come with them that need to be addressed are;

• ensuring safety
• monitoring after school
• attendance
• setting clear goals
• more work for administrators and teachers may mean complaints
• difficulties in collecting the after school club dues; may mean extra work for front office personnel especially if nonpayment is too often.
• motivation of students that get tutoring at after school hours either because they are academically behind or too advanced is weakened because of peers attending after school clubs during the same hours, which are more fun and desirable.

Some of these disadvantages may be kept at minimum by getting help from outside people, students, and parents thus lessening the work that the teachers and administrators have to do for after school clubs. Parents or outside people may volunteer to help. Also parents or other paraprofessionals may be compensated from the after school clubs budget especially if they will be sponsoring a club. Additionally, financial hardships such as difficulties in collecting dues can be lessened to a minimum by accepting payments upfront and by regulating payments only once or twice a semester (Scott-Little, Hamann, & Jurs, 2002). As a consequence, in a school that is midsized, after school program shall be;

• flexible
• there should be different clubs everyday
• parents/students should be able to choose what to enroll in
• fee should depend on the days and the number of clubs that the student enrolls
• the number of students attending after school program shall not exceed a certain number, for instance 300 for a midsize school that has a little over 1000 enrolment, which seems to work the best.

AFTER SCHOOL CLUB POLICIES

Admission Policies
As minors, students must be enrolled in programs taking place after school hours by a parent or a legal guardian only. After school club program is an entirely optional program and different than the legally required attendance during regular school hours that is usually between 8.00 am and 3.00 pm. Managing admissions on a “first come - first serve basis” is the usual implementation (The Child Care Bureau, 2005). In some cases however certain students may have priority to enroll in some certain clubs due to the requirements to enroll in the respective clubs. For instance, students that are already members of a sports team of the school may have privilege enrolling in relevant clubs. Honor students or students that are gifted and talented may enroll in clubs that prepare its members for certain academic competitions. Students that are already involved in activities directly related to the club content such as students that are in yearbook committee may have privileges over other students to enroll in yearbook club.

Once the limit of number of students that can be enrolled in a club is reached, the students may be placed on a waiting list and student/parent(s) are notified once a spot becomes available. The maximum number of students enrolled in a club may vary depending on the type of the club, on the capacity of the physical location where the club is going to be held, on the limitations by the club sponsor as to what would be the optimum or maximum number of students for the club to be managed effectively, etc.

If after school club program could not be settled entirely within the first few weeks of the school, due to late decisions of enrolment by students and/or late decisions by club sponsors such as teachers as to whether to sponsor a club or what type of club, then it is better to start with clubs that are ready and provide after school care or study hall clubs for all other enrolled students.

Changing the clubs should be made possible only at certain intervals such as at the end of each month, 6 weeks period, after completion of the duration which the payment is made for however based on a policy. Within this policy, students may be given the opportunity to change a club only with a written note from a parent/guardian. It shall be communicated to the student and parent that changes may be only possible depending on the space availability in the desired club. Additionally, the student/parent may be subjected to extra fees if the desired club costs more.

Re-registration to clubs after the duration that corresponds to the first payment ends, e.g. after first semester, may be managed by giving priority over students who enrolled in the same club in the first semester. The rest may be enrolled on a first come first serve as it is in the beginning of the school year depending on the available space in the respective club.

Attendance Policies
Although students are not legally required to attend the school during after school hours, attendance may be required by the school as a pre-condition to be enrolled in clubs (Beckett et al., 2009). Having a regularly attending group of students might be important for successful training of club content as it is for a regular class during school hours. Attendance is usually important for the following clubs;
• clubs that teach content based on previous taught knowledge such as foreign language clubs.
• clubs that have objectives such as yearbook club in which the purpose is to get the yearbook ready by the end of the year; journalism club publishes periodical newsletters or magazines; folk dance, choir or drama club might have a scheduled performance at school to take place on certain days; arts and crafts club members may make preparations for an arts and crafts gallery display at school, etc.
• sports clubs such as a soccer club in which members may be prepared for a tournament.
• other clubs that require some sort of structure such as karate club, which may require attendance even if there is no scheduled tournament or performance ahead.
For clubs which attendance is important, it may be required that students cannot miss the clubs more than 3 times unexcused or they will be dismissed from the clubs and no refunds will be given, etc. Conditions of an excused absence may be exactly as it is for the excused absences during regular school hours such as documented sicknesses, religious exemptions or the conditions on excused absenteeism may be eased to some extent by school administration.

Attendance may not be mandatory for clubs such as after school care club, study hall club, board games club, etc. however even for these clubs daily attendance should be taken and recorded for administrative purposes and has to be filed along with pick-up and drop-off letters signed by the parents; thus it is established that if the student does not attend the club, then the parents pick-up the child.

For coherence and financial purposes, a minimum number of enrolled students should be required to enroll for opening a club. This number may vary depending on the nature of the club and the relevant financial conditions however in general 5 enrolled students may deemed sufficient. However, financial issues such as the payment made to the sponsor of the club or the trainer may increase this number so that the costs can be compensated.

**Discipline Policies**

Disciplinary rules implemented during the after school program should not be different than the rules and regulations outlined in the school’s student handbook and applied during regular school hours since due to its relaxed nature students may tend to cause disciplinary problems during after school programs and easing up the rules may just elevate this tendency. For instance, students should stay at their assigned places during the after school program period and may not be allowed go to their lockers or loiter at the hallways and cafeteria (Harmony Public Schools Student/Parent Handbook, 2011). However, out of necessity certain rules such as dress code may be eased for certain clubs. For instance, in drama club students may wear their costumes; in karate club students may wear their sportswear and gears; students that earned free dress day due to academic achievements, good conduct, etc during regular school hours may be allowed to continue to have their free dress during after school club hours as well.

Failing to follow school rules should result in the regular consequences that are verbal warnings, written warnings, detentions, suspensions and expulsions (Texas Response to Intervention Document, 2009). For instance, if a student fails to follow school rules for the first time, the parent may be informed and the student gets a warning. If the office receives another discipline referral from the same student then a parent conference may be held and the student may be expelled from that certain club and also suspended from the after school program in general for one week. If the same or a different discipline action requiring sanction happens for a third time, student may be expelled from the program and he or she may not enroll for the existing academic year. No refunds are issued if the student receives detention, suspension and/or expulsion. If the parent paid the full amount, refund is issued only for the following payments of that semester/year.

In certain cases, depending on the severity of the disciplinary problem, student may be suspended or expelled from the school as well; e.g. possession of a weapon, drugs, other intoxicants, fights leading to injury, displays of affection, etc. (American Academy of Pediatrics Policy Committee on School Health Out of School Suspension and Expulsion, 2008) Although after school clubs are paid activities and thus different than the regular school activities held during regular school hours; funds received are still to be used for the school and any disciplinary case may be treated as it occurs during regular school hours. A reference to this matter should be mentioned in the after school club policies and regulations booklet or student handbook signed by the parent/legal guardian (Dallas Harmony Charter Schools Student Handbook for Elementary School Students, 2007).

It is often a good practice not to enroll students in clubs that has an “N’ (needs improvement) or “P” (poor) as conduct grades assigned in report cards. As a reason, after school club hours are times when discipline issues may be more probable due to nature of the clubs and lessened rules compared to regular school hours, such as
no school uniform in some clubs, no grades assigned, etc. Also the students and the supervisors are relatively
tired of the day and any disciplinary problem may spoil a smoothly running after school program.

**Medication Policies**

Medication may become a more important of an issue during after school program due to the nature of some
certain clubs involving physical activities and due to both students and school personnel being tired of the day
and out of focus. Thus, after school hour times may be more prone to injuries and sicknesses. There are usually
two types of sports clubs at the after school program that are indoor and outdoor sport clubs. The
parent/guardian is responsible for any medical costs incurred in the event of an injury. Out of school premises
club activities may be subject to extra permission slips to be approved and signed by the parent/guardian.

For medication, the policies signed for the regular school period are valid and the authorized personnel are
school nurse or other assigned paraprofessionals. That is, medicine is not to be administered without written
permission from the parent or legal guardian and a parent or guardian is called to pick up a child who is sick or
injured during program.

**Dismissal and Pick-up Policies**

Establishing dismissal times for each and every student attending after school clubs is important both because
of safety reasons to locate the student’s whereabouts at all times until picked-up by the parent and also
because the work hours usually end for all school personnel as the after school program ends so nobody is left
on or around school premises to supervise unattended students. There are usually two time slots when the
students are dismissed from after school clubs; first time slot is after the end of student clubs, that is usually on
around 4.00 pm and the second dismissal is after the end of after school care or study hall on or around 5.00 to
5.30 pm. Students who are not picked up at the first pickup time slot are placed to the next available after
school program and their school accounts are charged the corresponding amounts. Students should not be
in the corridors, at their lockers, or in the school building after 10 minutes of the dismissal unless accompanied by
a staff member. Students must sit and wait at the waiting area until their rides arrive. Students should follow all
the school rules at the waiting area.

Parents can pick students up at designated locations or may have them paged in the front office. Parents
should not walk through the school, unless signing in at the front office first. After the designated amount of
time, e.g. 10 or 15 minutes, if the student is not still picked-up then the school charges the student’s account a
certain amount of fee and there is usually a %10 late fee each month for the payments that have not done on
time. School Administration has a right to call Department of Human Services (DHS), Child Protective Services
(CPS), Police Department, or related authorities for the students who are not picked up after the pickup time
slot and if students are in the facility after these times. If the parent/guardian cannot pick up the child because
of traffic congestion in the school premises, there will be no fee assessed. The school assumes no responsibility
for any student in the facility after designated hours.

**Payment Policies**

Payments are often made to the front office or to the accountant if a separate accounting office is available at
school. The exception is if school has the setting to accept online payments. Payment methods are usually via
credit cards or checks made payable to the school. Cash is not a preferred method of payment since it is more
difficult to keep record of and because personnel are not wanted to hold cash. However, in cases where other
payment methods are not possible cash payments may be accepted. Partial payments should not be accepted
unless the period that the payment covers is more than one semester. For payments not made on-time that is
until the start of the program late notices are issued absent any written and approved notice from the program
coordinator. Nonpayment results in discontinuing of program enrollment. If such situations happen more than
once, the student is not accepted to the program for that entire academic year. A certain amount of late fee
occurs for payments that are not made on time, e.g. 10%.

If school closes a club, parents whose children participated in that club are refunded for the time portion of
club closing and the last day of the program unless they were to choose to attend another club that has space
availability as a replacement. If a student does not attend a club for any reason, there are no refunds issued.
If a student switches from one club to another with the approval of After School Program coordinator, no payment is necessary if both clubs have the same fees. If the new registered club is more expensive than previous club, After School Program coordinator will inform the parent about the fee. No refund is issued if new club is less expensive. If a student needs to drop a club, they must fill out a club drop form from the front office and have a parent or guardian signature. Failure to fill out a drop form results in continuing payment for that club.

There are no refunds for the announced or unannounced official holidays, school holidays, early dismissal days, etc. No refund is issued if club teacher cannot attend the club because of sickness or any other reason. In such cases, students are sent to another appropriate club and supervised by another teacher/supervisor.

OTHER RELEVANT ISSUES

After School Program Duties for Teachers and Administrators
It is common and convenient to assign two sponsors (teachers) to a club. These two teachers can work together to arrange a schedule that fits their needs. Teachers need to report to club, tutorials, or study hall on a timely basis. For any reason that a teacher cannot attend, after school club coordinator has to be notified for necessary arrangements to be made. An activity plan for the club that is sponsored should be submitted to after school club coordinator by the start of clubs. This activity plan shall include activities to be realized preferably for one semester, which is usually the duration that the club dues need to be paid. For equipment or supplies needed for the sponsored club, requests are to be made to the after school club coordinator on a timely manner.

Coordination with Activity Coordinator
Coordination of after school clubs and the activities organized therein with other activities organized to take place during regular school hours is important for the successful implementation of both programs (Beckett et al., 2009). Activity coordinator of the school and the after school program coordinator may be the same person possibly leading to a better coordination of both programs, however this is not usually the case for midsize or bigger school schools that enroll more than 500 students.

The coordination of both programs is important so that similar activities are not repeated and also if there are activities that aim to serve the same purpose they could be worked together, e.g. publishing a yearbook is very common and important as an activity in most schools. Due to nature of the content of the work, the responsible students in the yearbook committee should be able to work during regular school hours to access all the resources, talk to the teachers and students. During regular school hours, this work is done by the yearbook committee and only eligible students are admitted. Often, students that may not be elected to the committee in the first place may want to participate in the yearbook activities. Additionally, usually there is more work to be done by the yearbook committee that cannot be finished during regular school hours. For these reasons a yearbook club may be constituted during after school hours and may work in conjunction with the yearbook committee. Another similar example is the committee that organizes the graduation ceremony and/or prom night and the after school club that helps with the organization of the event.

Often PTOs (Parent-Teacher Organizations) or PTAs (Parent-Teacher Associations) are involved in the organization of major activities such as yearbook and prom and usually after school hours are times that they are available to provide volunteer support after work hours. Thus via after school clubs they are also more conveniently involved in these activities. For effective coordination of both programs, an activity calendar that includes activities run usually during regular school hours and types of programs and clubs those will be established and realized during after school hours must be ready by the beginning of the academic year.

Club list must be made ready by the after school program coordinator and the activity calendar must be made ready by the activity coordinator. Both parties must share this information with one another in the presence of a supervisor and revise their programs if needed to make the most of time, financial and human resources.
club list includes the types of clubs, the sponsors that are teachers, parents or other paraprofessionals, time frame including the days and hours that the clubs are held, etc.

An activity calendar looks like an academic calendar and may consist of sub lists such as field trip calendar. A well-established activity calendar is separated into months or longer or shorter periods of time depending on the number of activities proposed. Such a calendar will also have exact names and dates of the activities as well for which grade levels the activities are intended for. A sample activity calendar draft may be as the following:

September 2008
Sept. 2    Picture Day
Sept. 15   Reading Program Begins
Sept. 18   PTO Meeting/Bake sale; Program-Meet the teacher night/PTO board elections
Sept. 22   Elementary Snack and Soda Drive Begins thru October 17th
Sept. 25   Grandparents Night

October 2008
Oct. 6     School Wide Fundraiser Begins
Oct. 9     Elementary Award Assembly (1st Six Weeks)
Oct. 15    Picture re-take
Oct. 23    PTO Meeting/Bake sale; Program –Talent Show-Elementary
Oct. 25    FALL FESTIVAL
Oct. 28    Pre-K thru 6th grade Fire Safety program- Fire Safety House

November 2008
Nov. 3     School Wide Can Food Drive thru Nov. 21
Nov. 8     Parent Picnic
Nov. 10-14 Book Fair-Theme Week
Nov. 20    PTO Meeting/Bake sale; Program –Talent Show-Middle/High

December 2008
Dec. 5     Mobile Dentist Clinic on campus
Dec. 18    PTO Meeting/Bake sale; Program – Multi-cultural Celebration
Dec. 19    Staff Holiday Party

January 2009
Jan. 9     Muffins with Moms
Jan. 16    Donuts with Dads
Jan. 23    Middle and High School Award Assembly (First Semester)

February, 2009
Feb. 11-13 Mini-Fundraiser-Buy a Valentine Gram
Feb. 12    Take Class/Club Pictures
Feb. 13    4th – 6th Grade Game Night
Feb. 20    Middle School Spring Dance
Feb. 26    PTO Meeting/Bake sale; Program –Black History Program

March 2009
Mar. 5     Elementary Award Assembly (4th Six Weeks)
Mar. 9-13  Book Fair-Theme Week:
Mar. 26    PTO Meeting/Bake sale; Program – Book Fair
Mar. 27    High School Spring Formal Dance

April 2009
Apr. 22    Middle and High School Field Day
Apr. 27    Elementary Field Day - Pre-K and K Grades
Field trip calendar may be distinguished from the activity calendar for convenience. Field trips are usually realized under convenient weather conditions usually during early fall or late spring. A sample draft field trip calendar may be as follows:

October 25, 2007- Pre-K and K    Bill Bates Ranch, Pumpkin Patch
November 6, 2007- 3rd Grade    Museum of Nature and Science
November 7, 2007- 11th Grade    Southern Methodist University, Blanton Building
November, 28, 2007-2nd Grade    Heritage Farmstead Museum
November, 29, 2007- Pre-K and K    Dallas Aquarium
December 12, 2007-1st Grade    Dallas Aquarium
December 13, 2007-10th grade    University of Texas, Dallas
January 24, 2008-9th-11th    Parkland Hospital
February 28, 2008-Pre-K and K    Frisco Fire Safety Town
March 10, 2008-Juniors    Holocaust Museum
March 5, 2008-6th Grade    Texas Discovery Gardens
April 17, 2008- Pre-K and K    Dallas Zoo
April 24, 2008- 2nd Grade    Dallas Arboretum
April 29, 2008-8th Grade    Palace of Wax
May 1, 2008-7th grade    Incredible Pizza Company
May 13, 2008-5th Grade    The Heard Natural Science Museum

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