TOJQIH
The Online Journal of Quality in Higher Education

The Online Journal of Quality in Higher Education

Volume 2 Issue 2
April 2015

www.tojqih.net
01.04.2015

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Sakarya-Turkey

Published in TURKEY

Message from the Editor-in-Chief

Dear Colleagues,

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TOJQIH is confident that readers will learn and get different aspects on quality in higher education. Any views expressed in this publication are the views of the authors and are not the views of the Editor and TOJQIH.

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April 1, 2015
Prof. Dr. Muzaffer ELMAS
Sakarya University

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ANALYSIS OF THE POST-GRADUATE THESES ON THE SUBJECT OF QUALITY IN THE FIELD OF EDUCATION

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Abstract: The present study examines the post-graduate theses the subject field of which are coded as education by YOK (The Council of Higher Education) Head of Journal and Documentation Department based on the concept of quality; according to their publication years, universities, institutes, departments/programs, educational levels, subject fields, and purposes. The study was conducted on a total of 35 theses. Data were obtained via document review. Post-graduate theses on the subject of "Quality" in the work group were downloaded from the website of YOK Head of Journal and Documentation Department in .pdf format. Then, theses downloaded on the computer were analysed in accordance with sub-purposes. Descriptive analysis method was adopted for data analysis. Data obtained via document review were then arranged according to the themes formed by research questions, and were presented in tables. The findings revealed that most-frequently studied subject matter for post-graduate theses was total quality management.
Key Words: *quality. thesis analysis, graduate education, education.*

1. INTRODUCTION

Education has always played the most active role in the development of individuals and societies. Education has been an important investment tool for development for almost every society. The importance of education has become more prominent in 21st of century. Social, cultural, and economic developments, and technological changes in the world made education the most privileged subject. Because, equipped individuals who can accommodate with the developments and changes can only be raised via education.

Education plays a very important role in helping individuals and societies to keep pace with the social, economic, and cultural changes; and also supports the development of the capital required for economic growth. Education systems' performing these roles depends on some factors. These are; educational institutions' and teachers' adapting to the changes, and the content of the education being developed in accordance with the needs of today and citizens of tomorrow (OECD, 2001,1).

Quality in education should be provided for the educational institutions and teachers adapting to changes and development of educational content. A qualified and educated person can only be raised through a qualified education process.

The classical definition of quality is "compliance with standards". However, this definition is not adequate today, and quality is considered as the compliance with customer needs (Kavrakoglu, 1996, 9). According to Arnold and Holler (1995,14), quality is compliance with the standards that are based on the customer needs and expectations that represent the basic features of products and services. Quality in education, on the other hand, refers to compliance with the needs of individuals who expect service from education. According to Senturk and Turkmen (2009,132), quality in education means that education system is appreciated, and perfect; and at the same time, people have the knowledge and skills to follow changes.

One of the founders of quality management philosophy; Dr. Deming defines the basic purpose of education as:" increasing positives, decreasing negatives, and so maintaining the students' desires to learn" (Doğan, 2014, 4).

Many countries are questioning their education systems. The starting point of this questioning is that education systems that produce stereotyped minds, don't have many benefits, and societies need thinking, producing, and problem solving minds. According to these opinions, societies try to put the students in a more active position in the education system. In short, students won't sit down silently and be content with just what is given. Students will see, hear, analyse, speak, do, participate, share and learn to learn (Ozden, 1998, 32). Individuals who can think critically, question, and produce knowledge can only be raised through a qualified education.

European Union determined four domains and 16 indicators related to these domains that indicate quality, in order to achieve its strategic objectives. These four domains and 16 indicators are as follows (European Commission, 2000): **1. Skills:** Mathematics, Reading, Science, Use of Knowledge and Communication Technologies, Foreign Language, Learning to Learn, Civics. **2. Achievement and Transition:** Rates of Leaving School, Rates of Completing Secondary Education, Domains of Transition to Higher Education. **3. Following of Education:** Management and Evaluation of Education, Parents Participation. **4. Sources and Structures:**

Education and Training of Teachers, Participation in Pre-school Education, Number of Computers per Students, Budget of Education per Student. European Union member and candidate countries have focused on education. As a candidate country, Turkey is paying strict attention to education and trying to develop education in both qualitative and quantitative terms. According to Gultekin and Anagun (2006), considering the four domains related to education determined by European Union, Turkey is unfortunately behind European countries.

According to World Bank report (2011), the most important issue that Turkish citizens are worried about is education. Turkey started the education breakthrough with primary education, since primary education underpins education. Almost all citizens attend primary education in Turkey, and now she is in need of enhancing the quality of education. According to the report, another important issue is that, the present quality of primary education in Turkey is lower than many OECD countries; and there are no differences in the education between high and low performance students. The quality of teachers and education was also stated to be lower than international standards. Moreover, the quality varies according to the regions, and it is at a lower level in the eastern and further parts of Turkey. Quality is also not equal in the different types of schools countrywide.

Council of Higher Education (Yuksekogretım Kurulu (YOK)) founded the Council of Higher Education Commission of Qualification, Quality Assurance, and Accreditation (Yuksekogretım Kurulu Yeterlilikler, Kalite Guvencesi ve Akreditasyon (YOKAK)) in May, 2014 in order to determine the principles of quality studies and implementation. Among the primary duties of YOKAK is conducting the studies on the ultimate quality model of Turkish Higher Education for qualification, quality assurance, accreditation, and foreign quality agency (YOK, 2014)

Many studies are being conducted in order to achieve a better standard in education. But, these studies should be multi-systematic, and intended at the modern world requirements. As is the case in the past, quality studies in education are of critical importance for today's and future's world (Cafoglu, 1996, 1). From this point of view, the purpose of the present research is analysing the theses on quality in education.

1.1. Purpose of the Research

The purpose of the present research is analysing the post-graduate theses on quality in education, assessing the present situation, and shedding light on the further studies.

1.2. Sub-purposes

In accordance with the general purpose; we try to seek answers to the sub-purposes below:

- How do post-graduate theses on quality in education range by **years**?
- How do post-graduate theses on quality in education range by **universities**?
- How do post-graduate theses on quality in education range by **institutes**?
- How do post-graduate theses on quality in education range by **departments/programs**?
- How do post-graduate theses on quality in education range by **level of education**?
- How do post-graduate theses on quality in education range by **themes**?
- How do post-graduate theses on quality in education range by **purposes**?

1.3. The Importance of Research

We wanted to determine which themes were studied more frequently, while examining the post-graduate theses on quality in education. We consider that, findings to be obtained in the present research will guide and contribute to the further researches on the subject matter.

1.4. Limitations

The present research is limited with the theses on quality in education that are registered and accessible on the database of "Council of Higher Education, Department of Documentation National Thesis Centre".

2. METHOD

The present research adopted qualitative research method.

2.1. Work Group

The work group of the present research is formed by the MA and PhD theses on quality in education. The research is conducted on a total of 35 theses.

2.2. Data Collection and Analysis

Traditionally, there are three main data collection methods for qualitative researches. These are; interview, observation, and review of documents and publications (Merriam, 2013). The data in the present research is obtained via "document review". Document review comprises the analyses of the written materials that involve information about the target fact or facts to be researched. Document review alone can be a data collection in

qualitative research or can as well be used with other data collection methods. The stages of document review are; accessing the documents, controlling the originality, understanding documents, analysing the data, and using the data (Yildirim & Simsek, 2011). Documents can be in a digital format, and obtained via computers or internet (Bas & Akturan, 2013). The postgraduate theses in the work group of the present research were obtained as follows: We accessed the Council of Higher Education, Department of Documentation National Thesis Centre database online and put in the "quality" term in search area. After the search, we accessed 2000 theses. Among these, we selected the postgraduate theses in the "education" field. Then, the ones that can be accessed via website were downloaded in *.pdf* format. Finally, these downloaded these were analysed in accordance with the sub-purposes mentioned above.

A qualitative research technique; ***descriptive analysis method*** was adopted for the analysis of the data. According to Yildirim and Simsek (2011), in descriptive analysis, obtained data are summarised and analysed in accordance with the themes determined before. Data can be arranged in accordance with the themes presented by the research questions, or they can also be presented considering the questions or dimensions used in interview or observation processes. The purpose is providing the readers with the obtained data in an arranged and interpreted way. With this purpose, obtained data are first described in a systematic and clear way. Then these descriptions are explained and interpreted, cause and effect relations are examined, and some results are obtained. The association, meaning, and prediction of the themes can also be involved among the dimension of the interpretations of the researchers. There are four stages of descriptive analysis. These are: forming a framework for descriptive analysis, processing of the data in accordance with the thematic framework, defining of the findings, interpretation of the findings.

The data of the present research were analysed in terms of the years, universities, institutes, departments/programs, educational levels, themes, and purposes of the postgraduate theses conducted.

3. FINDINGS

Table 1: Distribution of the Postgraduate Theses on Quality in Education by the Years

Years	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
n	1	1	**0**	0	**0**	3	**2**	2	**1**	3	**6**	10	**3**	3
%	**2,85**	2,85	**0**	0	**0**	8,57	**5,71**	5,71	**2,85**	8,57	**17,14**	28,57	**8,57**	8,57

As can be seen in Table 1, most of the postgraduate theses on quality in education were conducted in 2012.

Table 2: Distribution of the Postgraduate Theses on Quality in Education by Universities

University	n	%
Marmara University	**4**	**11,42**
Yeditepe University	4	11,42
Orta Dogu Teknik University	**3**	**8,57**
Gazi University	3	8,57
Selcuk University	**3**	**8,57**
Bogazici University	3	8,57
Abant Izzet Baysal University	**2**	**5,71**
Ondokuz Mayis University	2	5,71
Istanbul University	**1**	**2,85**
Akdeniz University	1	2,85
Ataturk University	**1**	**2,85**
Dicle University	1	2,85
Eskisehir Osman Gazi University	**1**	**2,85**
Firat University	1	2,85
Hacettepe University	**1**	**2,85**
Sabanci University	1	2,85
Pamukkale University	**1**	**2,85**
Adnan Menderes **University**	1	2,85
Anadolu University	**1**	**2,85**
Total	35	100

Tabl
e 2

presents the distribution of postgraduate theses on quality in education by the universities they were written in. The highest number of theses on the subject were written in Marmara and Yeditepe Universities.

Table 3: Distribution of the Postgraduate Theses on Quality in Education by Institute

Institute	n	%
Institute of Social Sciences	**23**	**65,71**
Institute of Educational Sciences	9	**25,71**
Institute of Science	**2**	**5,71**
Institute of Health Sciences	1	2,85
Total	**35**	**100**

Table 3 presents the distribution of theses on the subject by institutes they were written in. The highest number of theses were written on institutes of Social Sciences and Educational Sciences.

Table 4: Distribution of the Postgraduate Theses on Quality in Education by Departments/Programs

Departments	n	%
Educational Sciences	**12**	**34,28**
Management	6	17,14
Education Management and Supervision	**3**	**8,57**
English Language Teaching	2	5,71
Child Development and House Management Education	**2**	**5,71**
Education Management and Planning	1	2,85
Tourism Management	**1**	**2,85**
Public Administration	1	2,85
Physical Education and Sports	**1**	**2,85**
Philosophy	1	2,85
Economy	**1**	**2,85**
European Studies	1	2,85
Construction Education	**1**	**2,85**
Primary School Science Education	1	2,85
Technology Education	**1**	**2,85**
Total	35	100

Table 4 presents the distribution of postgraduate theses on quality in education by departments/programs. The highest number of theses were written by students of "Educational Sciences" and "Management" departments.

Table 5: Distribution of the Postgraduate Theses on Quality in Education by Educational Level

Postgraduate Education Level	**MA**	**PhD**	**Total**
n	26	9	35
%	74,28	25,72	100

Table 5 shows that the highest number of postgraduate theses on quality in education were written in Master's degree.

Table 6: Distribution of the Postgraduate Theses on Quality in Education by Themes

Themes	n	%
Total Quality Management and Application in the schools of MEB	**8**	**22,85**
Life Quality	5	14,28
Service Quality	**3**	**8,57**
Enhancement and Development of Quality in Education	3	8,57
Total Quality Management Applications in Higher Education	**3**	**8,57**
Total Quality Attitudes of Grade Teachers	1	2,85
Quality Criteria in English Language Teaching	**1**	**2,85**
Quality Culture at Schools	1	2,85
Concrete Quality of Construction	**1**	**2,85**
Setting Quality Standards	**1**	**2,85**
Concepts of Quality and Qualified University	1	2,85
Quality Dimension of a Certificate Education Program	**1**	**2,85**
Marriage and Motherhood Quality of Women	1	2,85
Scientific and Socio-scientific Argumentation Quality Related to Cloning	**1**	**2,85**
Total Quality Management Applications in Teacher Unions	1	2,85
Service Quality in Higher Education	**1**	**2,85**
European Dimension of Quality Assurance in Higher Education	1	2,85
Academic Evaluation and Quality Development	**1**	**2,85**
Total	35	100

Table 6 presents the themes and the distribution of the themes of the postgraduate theses on quality in education. Most studied theme was "Total Quality Management and Applications". Most of the studies on the subject were conducted in the schools of Ministry of Education (MEB).

Table 7: Distribution of the Postgraduate Theses on Quality in Education by Purposes

Purposes	n	%
Determining the Opinions Related to the Total Quality Management Applications in the Schools of MEB	**8**	**22,85**
Researching the Total Quality Management Applications in Higher Education Institutions	2	5,71
Giving ideas on the total quality management applications in teacher unions	**1**	**2,85**
Determining the service quality perceptions of students who study at foreign language courses	1	2,85
Examining the significance of the correlation between content knowledge of Science and Technology teacher candidates and socio-scientific argumentation quality	**1**	**2,85**
Determining the correlation between social skill development of male children with Attention deficit/Hyperactivity disorder-Hyperactive-Impulsive and their perceived life quality	1	2,85
Evaluation of the service quality at schools within the context of parents opinions	**1**	**2, 85**
Evaluation of the Baskent University Vocational School of Social Sciences Program of Tourism and Hotel Management in accordance with the total quality management principles	1	2,85
Determining the extent at which quality culture is experienced at schools and the variables that contribute to the formation of the quality culture in accordance with teacher perceptions	**1**	**2,85**
Determining the concrete quality of the buildings	1	2,85
Determining the depression levels of amputee individuals who do and don't do sports in terms of life quality by determining their depression and life quality levels	**1**	**2,85**
Setting quality standards for distant education	1	2,85
Preparing the higher education SERVQUAL scale	**1**	**2,85**
Determining the opinions on the quality standards in pre-school education institutions	1	2, 85
Examining the difference between children with and without learning disability in terms of perceived life quality	**1**	**2,85**
Examining the university life quality of students in terms of some variables	1	2,85

Examining the quality assurance studies on higher education in Europe	**1**	**2,85**
Examining school life quality perceptions of primary school students	1	**2,85**
Examining the quality level and quality enhancement studies of education services in Turkish higher education services	**1**	**2,85**
Determining the perspectives on quality of the primary school with ISO 9001:2000 certificate of quality	1	2,85
Examining the marriage quality, motherhood quality; and the correlation between marriage quality, and motherhood quality among women	**1**	**2,85**
Evaluating the implementation of enhancing quality in education and career steps in terms of teachers' personal rights	1	2,85
Determining the opinions related to the enhancement of quality in preschool education	**1**	**2,85**
Defining students' perspectives related to the concepts of quality, qualified university, qualified education, qualified instructor	1	**2,85**
Determining the applicability of accreditation system in the faculties of education	**1**	**2,85**
Determining the perceived quality dimensions elated to the computed airport reservation and ticketing certificate program organized within the scope of commercial and ground services education	1	2,85
Studying the extent to which quality criteria defined by EAQUALS (Evaluation & Accreditation of Quality in Language Services) are applied in the teaching of English language in secondary education institutions in Turkey	**1**	**2,85**
Total	35	100

Table 7 presents the distribution of the purposes of the postgraduate theses on quality in education. The most common purpose among these purposes is "Determining the Opinions Related to the Total Quality Management Applications in the Schools of MEB".

DISCUSSION AND CONCLUSION

The highest number of theses on quality in education were written in 2012. The most commonly studied theme in the theses on quality in education was "Total Quality Management and Applications". Most of these theses were conducted in the schools of MEB.

Total Quality Management (TQM) perception aims at continuous development and enhancement of all processes, products and services via complete participation basing on quality. The most important five components of it are: internal and external customer satisfaction, continuous enhancement, basing on data, determination of management, and participation of all parties. The basic condition for success is the handling and applying of these five elements with a systematic approach (Ceylan, 1997). TQM perception affected educational institutions deeply, as it affected all organizations. Education systems are questioned, and their structure, operation, and whole education process is reviewed according to this perception (Ozdemir, 1996). Unlike traditional management understanding, TQM projects a close cooperation with other educational organizations that provide input (student, teacher, and educational material). Because, as long as the "input" is not qualified, education cannot be at the desired quality. One of the most important conditions for adapting with the changes in the world is qualified education (Yildiz & Ardic, 1999).

The introduction of Total Quality Management Model to Turkish education system was the Project of National Education Development, supported by the World Bank. The purpose of this project was re-structuring of education system through all dimensions. As a result of the studies for the application of TQM in education management that started in 1995, "Total Quality Management Application Directions" and the project for the application of these directions were put into force in 1999. In 2001, "MEB Field Service TQM Application Project " was put into force, to be applied in MEB field organization and educational institutions. As stimulants for the implementation, prizes in two categories were started to be awarded as 2005-2006 academic year, as "Qualified School/Institution of the Year", and "Qualified Team of the Year" (Aslan and Kucuker, 2011).

The highest number of theses on quality in education were written in 2012. The reason for this may be that after "MEB Field Service TQM Application Project" was put into force, prizes were started to be rewarded as of 2005-2006 academic year. And the theses on the subject matter could be completed only in 2012. The most frequently studies theme in the theses on quality in education was "Total Quality Management and Applications". Most of these studies were conducted in the schools of MEB. The reason for that may be that TQM Project was put into force as of 1999 in MEB Central Organization, and as of 2001 in field organization.

The distribution of postgraduate theses on quality in education by year presents that, a thesis was written in 2001, and after 2006 to 2014, many studies were conducted on the subject matter.
Distribution of postgraduate theses on quality in education by institutes presents that the highest number of theses were written by students of Institutes of Social Sciences, which is followed by Institutes of Educational Sciences. The reason for Institutes of Social Sciences being in the first place is that, many theses written in institutes of educational sciences were completed in institutes of Social Sciences. The second reason is that, theses written in the departments such as Management, Tourism Management, Economy, Public Administration were also conducted in the institutes of Social Sciences. Moreover, most postgraduate theses on quality in education were written by the students of "Educational Sciences" and "Management" departments.
The importance of TQM in the field of Management is increasing day by day. Because, businesses today are in great competition because of the rapid changes in technology. In our time, following technological developments daily is difficult. In such a time, businesses can only succeed with different management styles and implementations. This fierce competition made businesses compete with the businesses that are not even in the same sector. Under this fierce competition, one of the most important developments that gave hope businesses is TQM philosophy (Kaya, 2009).
The distribution of postgraduate theses on quality in education by purposes reveals that, the most common purpose of these theses is "Determining the Opinions Related to Total Quality Management Implementations". Because, both schools of MEB, and higher education institutions place more emphasis on total quality management studies today.
As is the case with other countries, the demand for higher education is increasing everyday, which led to the increasing of studies for quality evaluation and forming an accreditation systems, since maintaining and enhancing the standards is getting more and more difficult (Kavak,1999).
Consequently, the highest number of postgraduate theses on quality in education were completed in 2012. The most common theme studied in these theses was "Total Quality Management and Implementations". Most of these studies were conducted in the school of MEB and then universities. The most common purpose among these postgraduate theses on quality in education was "Determining the Opinions related to the Total Quality Management Implementations". Determining the opinions related to service and life quality followed this as a purpose.

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AUTHENTIC EVALUATION OF COMPETENCE

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Abstract: Describe competence is a problematic operation that depends on the context and, at school, on the disciplinary character involved. It is believed that the competence is inherent to individual and that this represents his knowledge, experiences and abilities (Le Boterf, 1992). According to social constructivist model, competence refers to the subject intimate mental processes, that allow to break a critical situation and then implement original strategies for solution. McClelland (1973) to whom is attributed the authorship of word, believes that the competence needs motivation , occurs in a context and is achieved by means of appropriate behaviors. Particularly at school, *active teaching* strategies using the competence to indicate the student's ability to independently solve a problem, deploying their knowledge in practice (Pellerey, 2004). To assess the competence you need to design tests of *authentic assessment* that encourage students to active their knowledge to solve complex tasks.

INTRODUCTION

New demands of contemporary society, justified by compelling progress of science and technology have profoundly changed the dynamics of the interpersonal relationships. This has produced a significant change in the relational matrix in which individuals are included since childhood. Learning process is supposed to be re-designed and implemented including this transformation. To this day, knowledge is a resource that can be used for work or business, but it is also the basis of interpersonal relationship dynamics. Contemporary people need to have an expertise that distinguish the professional skillset, but also should be provided with greatest flexibility to easily adapt to the changing needs of working environment and social interactions. That being so, knowledge represent the essential structure in order to develop a multi-disciplinary field of knowledge, which allows to render the reality and as a result being able to deal consciously on it.

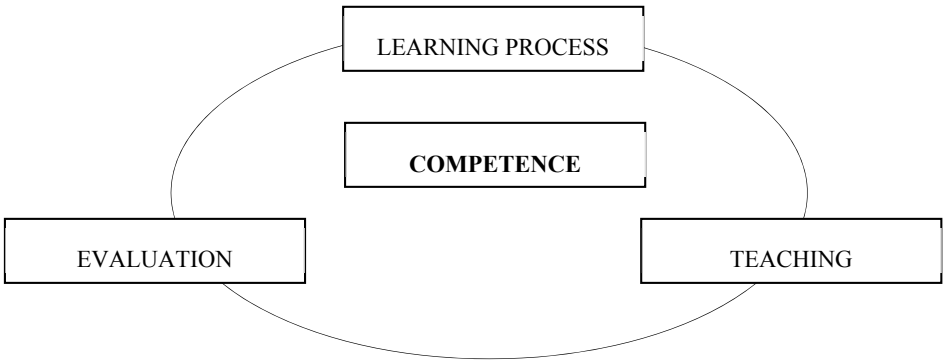
RESEARCH

The gap that exists between school learning and out-door learning was discussed in a paper by Resnick (1995), where the author exposes the difference between academic knowledge and its impact on daily life.

1. Schoolwork requires individual performance while mental work outside is often shared socially;
2. the school requires a thought-free media, whereas outside we make use of cognitive tools or artifacts;
3. the school grow symbolic thought in the sense that working on symbols, while outside of the school the mind is always directly affected by objects and situations;
4. in school are taught skills and general knowledge, while in outdoor activities dominate specific skills related to the situation.

Most of the knowledge sent at school is theoretical and parted from context. The knowledge learned in real life situations, it is instead located and based on concrete action. The distance between these two types of knowledge do not replay the professional and working environment: that's why it is necessary think and promote a kind of learning not separated from the reality that students, who have become citizens, will have to compete. Castoldi (2009) believes that the most important innovation of the last fifteen years in teaching has been the introduction of the construct of competence. The term is not intended to replace existing terminologies, or added to the list of words used as mere labels. The construct of competence carries with it a substantial change in the learning, but also in the teaching going to affect the structure of the training model school (Fig. 1).
It is hard to define in a perfect and complete way the construct of competence: in fact, the use of the term in a lot of fields of knowledge influences its definition. Particular in education, competence refers to disciplinary character involved or at the specific task required. Based on etymology, the term competence derives from the late Latin *competentia*, which follows the verb c*ompetĕre*, composed of *con-* and *competĕ*, that properly means "go, ask together". In general, it indicates the individual ability owns by culture or by experience, to talk, to discuss, to comment on specific topics as well as the power of action that an individual can exercise.

Fig. 1. Training model school based on competence



Competence is characterized by two forms: on one side, it indicates the subjective capacity about a field of experience and on the other side, concurring with, it indicates the ability of the individual to make judgments freely. This second meaning of competence's term affects the administrative law area of interests. By the way Le Boterf (1992) believes that competence can be defined as a *conceptual chameleon*. Consider competence as a practical ability to solve problem it is intuitive for those who believe that in a performance are involved knowledge and skills, and on the other side exquisitely personal traits. In this particular case, the competence is realized after the individual has used appropriate strategies for the solution of a problem and its evaluation is therefore next to the result. Individual skills are commensurate with the context in which they are implemented, and context can influence the level of individual performance used.

Due to its complexity, the argument has led several definition in each specific subject, especially in work environment. Quaglino (1990) judges that competence can be understood as the professional quality of an individual, in terms of knowledge, talent and abilities, professional and personal skills. Le Boterf (1992) believes that the competence is the whole spectrum of knowledge, skills and behaviors who a person employ in a professional area. The first systematic definition in teaching about competence's construct can be ascribe to *behaviorism*. According to behaviorism's studies, competence has been identified as the result of action that can be observable and measurable. Since the 70s of the last century onwards, the study of the competence's concept has resulted in a large literature that, as proposed by Mulder, Weigel and Collins (2006), can be summarized in three main directions of evolution.

- *From the simple to the complex*. Competence is an improvement of the knowledge already owned by subject that involves the activation of knowledge, skills and dispositions. The process engage the cognitive, the motivational and the emotional dimension.
- *From outside to inside*. According to this process, knowledge draws attention to all those subjective dimensions that are not directly observable outside, but that form the basis of individual behavior.
- *From theoretical to pragmatic*. Competence is specifically assumed and it is related to a given context, losing its general sense. Competence is identified with the subject's ability to use operational strategies for the solution of the problem related to specific culture and contextual dimension.

It's still Le Boterf (1990) who provide a concise statement of the evolution of the competence's construct supporting that it manifests the transition from the *know-how* to the *be able to act*, underlining the indissoluble relation that competence has to the context of action in which it is fielded. It is possible to define competence as the ability to perform a task in a satisfactory way, to apply their knowledge in practical situations, problem solving, and/or produce new solutions or objects (Notti, 2002). To let someone know about the complexity of competence's construct and about the long tradition of researches that was interested on topic, it is needed to use a multi-dimensional approach and it has to consider all the dimensions involved in the cognitive skills training. First, the basis of the skills are situated in a solid and structured network of knowledge. The knowledge which occurs to individual is:

- *Declarative knowledge* that represent the *know-what* (names, meanings, etc.).
- *Knowledge of procedure* related to *know-how*, who describe the operational setting to perform specific tasks.
- *Conditional or contextual knowledge* who setting out how to coordinate the procedural and declarative knowledge.

In support of the knowledge's network that are acquired by the individual, whether in formal learning both natural ones, there are placed cognitive processes. Mason (1996) speaks in this connection of the *triple alliance* that is established between cognition, motivation and metacognition. Cognitive processes and knowledge allow the individual to break down, understand and solve problems in a consistent and effective way. It is interesting to note how the person, time to time, always in front of new problems, in specific contexts, is able to assess the existence or otherwise not, of characters common to experience already resolved. Wittgenstein (2009) spoke of *family resemblance* when he noted the "relationship" between linguists practices, related to each other by a network of analogies; in this case it is more appropriate to talk about *family of problems* (Gillet, 1998). That being so, the definition of competence proposed by Gillet (1998) seems to be suitable in this study framework. The author defines competence as a organized system of conceptual, procedural and contextual knowledge, also by metacognition, in operational response schemes constructed on base of experience and with exercise (script, action plans) designed to identify and solve family of problems with an efficient action (Gillet, 1998).

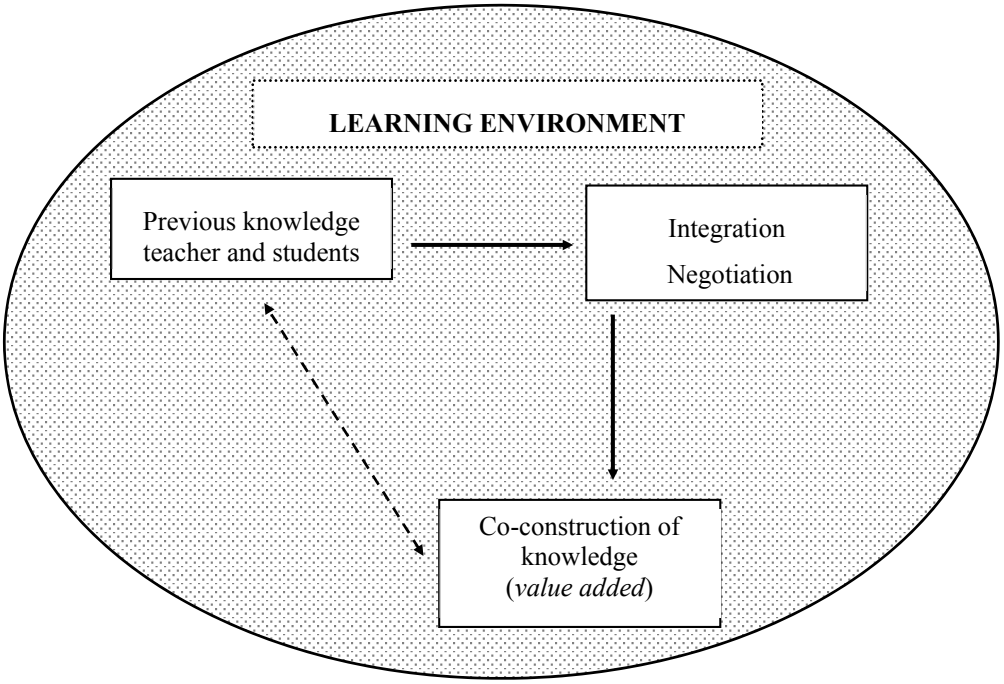
Because the construct of competence interest many subjects we believed that competence is inherent to individual and it represents his knowledge, experiences and abilities (Le Boterf, 1992). McClelland (1973) to whom is attributed the authorship of word, in his article *Testing for Competence Rather Than for Intelligence* (1973) says that the measurements in the professional environment, tend to be made by the intelligence tests that are not responsive to the needs of the real: "neither the tests nor school grades seem to have much power to predict real competence in many life outcomes, aside from the advantages that credentials convey on the individuals concerned" (McClelland, 1973, p. 11).

The American psychologist, discussing the need and the opportunity to use intelligence tests to assess the ability of a worker to reply the needs of its professional environment, he introduced the competence's concept. At the base of the construct McClelland puts motivation, capable of directing the actions/reactions of the individual to complete the performance that is required. Based on considerations of McClelland, many later writers have built their own theoretical framework about the construct of competence, providing interesting insights. Lyle and Signe Spencer (1993), for example, placed the competence in a *cause-effect* relationship, with reference to a performance in a determined context. The authors identify five factors that they consider constituent skills:

- *Motivation*: like McClelland, Lyle and Signe Spencer share the importance of motivation that moves a person to implement behaviors aimed toward a goal.
- *Traits*: show the propensity to action and allow you to select between the behaviors that best suits the situation/ problem.
- *Self-image*: it is the set of values, attitudes and evaluations that an individual has with respect to the cultural itself. This is a spring action that pushes to try to solve any problem.
- *Knowledge*: the form of declarative and procedural knowledge.
- *Skills*: These are skills needed to perform a task.

Some of the factors constituting the skills are explicit in nature; it is about to specific skills that the person uses in action. We can use a metaphor, trying to think a person like an iceberg: the knowledge and skills are the section of an iceberg that is observable in a subject. The other factors, self-image, traits and motivation concern the part of the iceberg that you can't see. It is the most secret and personal part in a person. The training interventions take precedence over components emerged, that is knowledge and skills, because more simple; but often training interventions ignore self-image, traits and motivation. In education, the concept of competence and its formal employment dates back into the educational model of the *active schools* which belong to *experimental pedagogy*. Active teaching strategies use a kind of learning process that is characterized by the creations of artificial and changeable conditions. This educational intervention can stimulate the learner's active participation in the training process. The model of active school is based on learner, who is consider the main actor of learning activities, able to develop personal strategies for thinking and able to mobilize his knowledge to solve concrete problems. The competence construct, as varied and complex as proposed, responds to a specific understanding of the learning process. The theoretical structure that introduces and supports the competence construct is *constructivism* which refers to the learning process how to re-build what student already knows, rethinking network of subject prior knowledge. *Social-constructivism* believes that each knowledge activity involves a process of *active structuring* and *interpersonal negotiating*: it is also enhanced the social and cultural dimension where learning takes place. The context action has a dual function: the context influence the learning process but it is in turn influenced. Furthermore, the context is not only the social and cultural frame in which the individual builds his knowledge, but it is an active resource of knowledge production. The quality and the quantity of interpersonal relationships distinguish the kind of learning. That's why the educational process is fitted on dialogical and reflective basis, on the student interaction and collaboration, on the possibility to produce shared meanings (Fig. 2).

Fig. 2. Construction process of knowledge



Just as the figure shows, the constructivist approach believes that learning processes are the result of interactions that people produce in a given context, talking or discussing about the meaning of cultural objects. The value of the knowledge already held by each are *re-processed* and *re-negotiated* in times of interaction and the *new competence* (the integrated knowledge) is the added value to the individual, but also to the whole learning community. According to the constructivist perspective, communication plays a key role. This is why the training process is carried out primarily by and in the educational and social interaction and communication and is built as a meaningful experience for people.

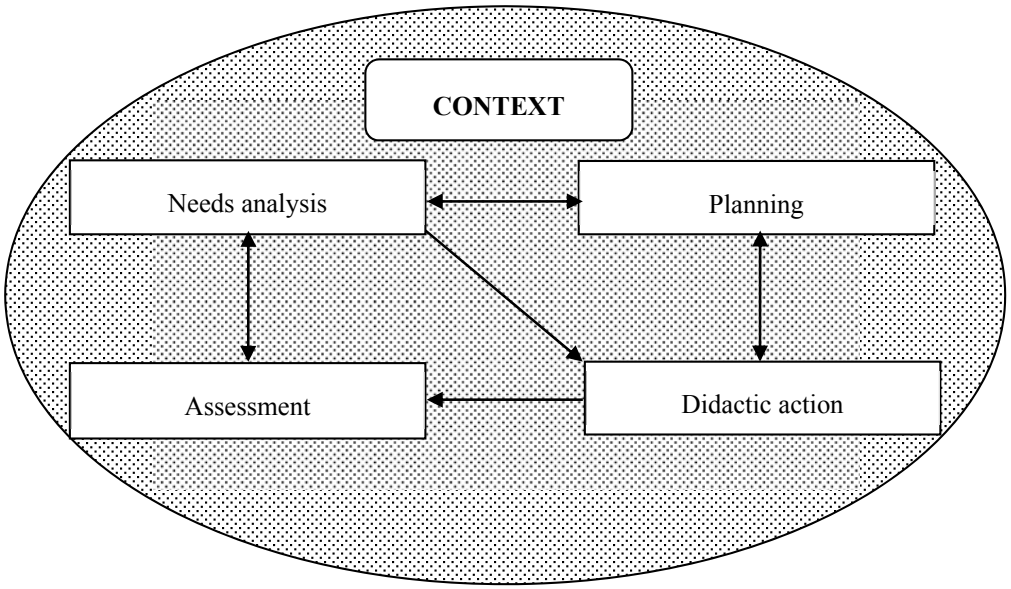
The design of teaching and training is crucial to link the meanings at the real products. The construct of competence fit for the process of learning based on *social-constructivist* theories, because competence support to solve practical tasks. The nature of competence is essentially cross as it is composed by a set of patterns of action that can be spent in different contexts to solve particular situations. The subject, on the basis of the learning process, is called to know how to act according to a purpose. In the national and international debate, a lot of organizations and research institutes interested on this branch were concerned to establish what skills will serve to promote the inclusion on the social and work environment. Precisely, the competence construct is at the heart of the redefinition of training at the school level. In a document edited by the 1993 World Health Organization (WHO), called *Life Skills Education in School*, we try to provide an answer to the demands of the international community about the strategies of social integration. The WHO sets out ten fundamental skills, anticipating, in fact, the identification of *key competencies*:

1. recognize their own emotions and those of others;
2. govern tensions;
3. analyze and evaluate situations;
4. make decisions;
5. solve problems;
6. flexibly cope with the various situations;
7. express themselves effectively;
8. understand others;
9. interact with others.

In Italy, the Institute for Development of Vocational Training (ISFOL) defines soft skills as the total assets of the personal resources that a person enforce to carry out a performance. The institute divides skills into three main areas: *basic skills* that are the minimum knowledge and the prerequisite of access to training; *soft skills*, that are not specifically related to a workplace or business, but testify the ability to adapt; and *technical* and *professional skills* to identify the knowledge needed at work (Isfol, 1997, p. 49-50). ISFOL definition focus on two

fundamental dimensions of expertise: the *cognitive* one, about knowledge and motivation, and the *experiential* one generated in the cultural and educational context of generation. In these writers opinion, the most representative definition of the complexity of the competence construct is the one proposed by Pellerey (2004): "Competence is the ability to cope with a task or set of tasks, being able to start and to orchestrate their own, cognitive, affective and volitional skills, and use external ones in a consistent and fruitful way" (p. 7).
To explain the definition of Pellerey is possible to identify some key elements that define competence in a determined way. It refers to a specific task, in which the individual is required to carry out competent behavior, aimed at the solution of the task: this is its operational dimension, linked to action. Then, the competence requires the mobilization of personal resources. This refers to the holistic nature of the term (Mulder, Weigel, Collins, 2006), by consequence the resources are not exclusively attributable to the cognitive dimension, but also to the motivations, social and emotional components and metacognitive ones. Competence use resources available in the context of action (external resources), particularly of shared meanings, tools and everything that physically and culturally characterize the environment. In this sense that the construct of competence itself absorbs different dynamics of the learning process (Fig. 3).

Fig. 3. The dimension of competent actions (Marzano, 2013, p. 209)



In Italy, the Autonomy Regulations of 1999 (Presidential Decree No. 275), for the first time sets out the results of education, in terms of skills (the term used up to that time was "standard learning". The successive National Guidelines for the Custom Study Plan (Decree No. 56 of 19/02/04), and in particular its *Annex D* outlines the concept by defining what is called Educational, Cultural and Professional Profile of the student: what a learner should know at the end of the first cycle of education (6-14 years). To reconsider the learning process by introducing the construct of competence, involves a rethinking of the teaching action to allow the learner the possibility to use lessons assimilated. The student becomes the actor of the active and intentional learning, since the only way to be able to experience how to dispose of its competences. "As much as the learning acquired during the training processes are experienced, the more flexibility you can exercise your subject in adjusting or reorganizing the skills, needed to navigate within the cultural and professional mobility scenarios, in response to the demands placed on today young people and adults" (Melchiori, 2012, p. 12).
To encourage the *learning by competence* requires that action learning is reformulated in a particular way. The learning process should include activities that require direct and active involvement of the individual learner. The design of the training setting must include the need for this type of teaching, allowing its implementation. The competence practice for the learner involves three dimensions: self-activation of personal skills, coordination of used skills and the focus on the specific problem solving (Maccario, 2012). The course has to provide the basic tools to enhance the process of building skills and to implement the relevant actions.
The whole learning process must be assessed by means of consistent and appropriate tools to achieve the training goal set the learning for competence. "The acquisition of knowledge and skills in the actual conversion of the pure administration" (Bruner, 1973, p. 172), that is to possess skills, and know how, is restricted to the use of new teaching methods.

Planning in education means insert contextual, cultural and social conditions in which it will be operate. In fact the teaching action is addressed, to achieve specific goals for each student, in relation to reality-school and school reference. Design situations and learning environments means finding answers to the subjective and objective needs (Marzano, 2013) in order to promote learning and to stimulate individual curiosity and continuous personal growth. Quaglino (2005) suggests that educational processes should:

> To take start from the specific needs and requests: a survey, therefore, more or less timely, accurate and thorough, but still sufficiently close to a reality of needs to be met, deficiencies to be addressed in relation to areas identified as realistically [...]. The next step will be the translation of what has been recognized as a need in specific directions as to the characteristics to be taken by the setting [...]. So it comes to specify learning objectives, to detail the contents of this knowledge, to choose the most appropriate for its transmission (p.14).

The importance of the competence construct in schools has an impact on the way to evaluate the goal set. The evaluation practices are inevitably mirror the didactic model, the base of which is a specific idea of learning and teaching. As well as, Pellerey (2004) supports that learning, teaching and assessment are closely intertwined: in recent past years teaching approach have had a profound cultural transformation that takes the concept of competence as a cornerstone. Indeed, the change is parked on assessment practices. It change the *significance* of the performance requested in accordance whit the learning project, it change the test *authenticity* reflecting the real world demands, it change the assessment *processuality*, that want capture the indissoluble links between the performance and the achievements, it change the student *responsibility* about the evaluation and the solution of the proposed task, it change the *promotion* of assessment activity in relation to the training process and expected results, it change the *dynamism* of the assessment because it is interpreted like a process aimed to promote the student skills, it change the *entirety* of evolution moment, seeing as all process dimension are studied (cognitive, social, affective and conative dimensions) and, at last, it change the *multidimensionality* of assessment because the reading occurrence is done by many perspectives (Galliani, 2009).
The assessment is divided into three parts: the choice of educational goals, the detection of performance and the judgment of results. Competence construct introduction speaks about authentic assessment. The authentic assessment is the evaluation that occurs in the context of a learning environment and reflects the real learning experiences and worthwhile that can be documented through observation, recording of facts, newspapers, journals, entries work, conferences, portfolios, writing, discussions, experiments, presentations, demonstrations, projects, and other methods. The real reviews can include individual or group tasks. The emphasis is on reflection, understanding and growth rather than answers based on recall of isolated facts. The purpose of authentic assessment is to engage students in tasks that require to apply the knowledge in real-world experiences. The authentic assessment discourages the evidence "paper-and-pen that are disconnected from the teaching and learning that takes place at the time. In authentic assessment, there is a personal intent, a reason to engage, and a true listening that are beyond the capacity/skills of the teacher (Crafton, 1991). To judge knowledge achieve it forces us to adopt a plural perspective of observation. Marzano (2014) believes that is possible basing on a Pellerey proposal (2004), to observe the development of learner's skills speaking about three dimensions: *objective*, *subjective*, *intersubjective*. The subjective dimension preserves the need to detect observable and measurable evidence. To meet this kind of testing, for example, *tasks of fact*, *cases study* or the manufacturer production. Then, the subjective dimension recalls the personal meanings that the student gives in their learning experience. This dimension implies the learner's self-rating process, with whom he establishes his involvement and his motivation to solve the proposed task. Part of the intersubjective dimension are the social matching and judgment of others over the course of the performance required. In the latter case it is possible to talk about an *hetero-assessment*, that involve all the actors committed in the process of co-construction of meanings. Each of the evaluation dimensions needs appropriate instruments according to their specificity, to compose, finally, an articulated and comprehensive framework's assessment. Wiggins supports that in the process of *authentic assessment* is not necessary to judge what the student knows, but what he can do with the things he knows (Wiggins, 1993, p.24). He believes that the *authentic assessment* possesses specific characteristics:

- It is realistic;
- It requires judgment and innovation;
- It requires to student to build the branch of Knowledge;
- Replay or simulate the context in which the student will be immersed when he became adult (we talk about professional environment, social and affective sphere);
- Judge student's ability to solve problem mobilizing his internal knowledge and those made available by the environment;
- Student can have instant *feed- back* that can be used for improve the performance.

How produce an authentic assessment for competence? It is important to note that the judgment can be inferred from competence manifestations, and not from a single performance; Bertagna (2004), in fact, believes that in order to assess the competence you need to consider a number of services, such that they assume the role of *information base* on which to establish the level achieved by the learner. In the construction of the tests of authentic assessment it is necessary to adopt a multi-dimensional approach in order to obtain evidence on the competence shown by the students. The tests of authentic assessment should enable the student to navigate in a complex and interdisciplinary situation, and should lead him to find the original solution strategies, starting from a experiential logic. Kline (1996) identifies on structured test and on semi-structured test "the kinds of questions useful to build test, that will measure the individual advancement in learning the competence" (p. 229).
The main feature of authentic assessment is to immerse the student in a critical condition, in a brief but effective way, to support the start of the test, when the learner has to break into different parts the problem. To help the student in this phase can be used: newspaper articles, essays, photographs or drawings. The documents are necessary to build the frame. The task involves the solution of questions about the problem: these are constructed in a commensurate way in respect with the student background. The test contains two elements: the *originality* and *complexity*. Originality and complexity are subjective in nature, since they depend on the age and on the student prior knowledge. This means that the same task, administered to students over the age would be subjectively less complex. Then the test should be measured to students who are asked to solve it. Test structure have to propose a simulation of the actual circumstances in which to use the acquired skills to extricate himself from the situation-problem.
An interesting example of authentic assessment used for competence evaluation is the PISA 2009 Project (International Programme for Student Assessment), sponsored by the Organization for Economic Cooperation and Development (OCSE), make to assess the competence of fifteen-schooled. The study is based on the assessment of competence in the areas of reading comprehension, mathematics and science. As provided in authentic tasks, the focus is not taken on curricular contents, but the attention is on the ability to use the skills acquired at school to solve problems that are encountered in everyday life, and also is important appreciate the students motivation in the spontaneous and continuous learning. Among the domains of interest of the OCSE-PISA 2009 tests is considered the *problem solving*, with which it identifies the ability of an individual to implement cognitive processes by finalizing the solution to a complex problem.

CONCLUSION

Finally, the introduction of the competence construct in learning has deeply changed the way of understanding the process of formation. The action of education have to be directed to the new demands of contemporary society, where the knowledge should not only be acquired but also put into practice. The competence concept implies, on the one side, the active practice of knowledge to solve real problems, according to the demands, constraints and resources of the environment and, on the other side, competence requires the ability to reshape the knowledge in dealing with new situations and to respond to the challenges that they present themselves. Then teaching means integrate the learning in function of practical action. Learning by competence complies the needs of the contemporary paradigm and it is important to promote the application of this kind of learning more and more.

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COGNITIVE ACTIVATION IN MASS LECTURES THROUGH VOTING SYSTEMS IN THE LECTURE THEATRE

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Abstract: Communication plays an important role in life and especially in education. Nevertheless, most universities have to cope with large numbers of students. Therefore, many introduction courses focus on ex-cathedra teaching. Nowadays, we know that the learning success is limited by such a teaching method. In this paper, I would like to analyse the effects of a new e-learning-tool prepared for large lectures. This new interactive teaching technology allows students to interact with each other even in huge crowded lectures. This paper will compare the learning success of two different teaching methods based on the so-called peer instruction.

1. BACKGROUND AND AIMS

As we have known for some time, frontal instruction in mass lectures is ill-suited to conveying new knowledge. This is confirmed by current neuroscience research on teaching and learning processes (Günther, 2012). Yet most universities adhere to mass lectures. Surprisingly, the issue finds little resonance even in current debates on higher education didactics. Have we given up hope in the face of the sheer numbers of students in mass lectures, which render a teaching discourse or group discussions practically impossible? Have we accepted that the lecturer's role in such situations can only be that of a reader, and the students are merely passive consumers?

We must not rush to affirm these questions since methods for the cognitive activation of large audiences do exist. *Eric Mazur's* (2013) 'peer instruction' teaching method achieves interactive learning and the activation of large student bodies by encouraging the students to independently recognise factual mistakes and to help each other to correct them. Thanks to electronic voting systems in the lecture theatre, peer instruction can be integrated into mass lectures without consuming a lot of time.

The question remains, though, how exactly such a method is to be designed so as to achieve the best possible results. This issue will be examined in detail in the following.

2. METHODOLOGY

Two teaching methods, which rely on essential features of peer instruction, are to be compared using results from a large class of first term Business Administration students at the University of Hamburg. The heterogeneity of the student body – e.g. with respect to prior knowledge, cultural backgrounds and age – poses a particular challenge for the lecturers. How – especially in the well-attended introductory sessions – is one to deliver a sophisticated lecture without losing parts of the audience? The methods described below may offer some help.

Pursuant to **Method A**, the students are instructed to read a text on the foundations of business organisation in preparation for the next lecture. At the beginning of that lecture, so-called 'clickers', electronic voting devices, are distributed among the students, enabling them to respond to a test consisting of single-choice questions.

In a first iteration, the students are to answer a question individually within a time frame of one minute. Their responses are recorded electronically. In the second iteration, the same question is answered again, but this time following a period of one minute during which each student is to convince her or his neighbour of their answer. This method is broadly in accordance with Mazur's peer instruction.

This sequence of two iterations is repeated for each question of the test. Only if the vast majority of students answered the question correctly in the first iteration can the second pass be waived.

In contrast to Method A, according to **Method B** the students are not required to prepare for the lecture with the help of literature. Instead, the lecturer teaches a textbook chapter on Human Resources. Subsequently again a test of single-choice question is conducted in the exact same procedure of two iterations as in Method A.

3. SOME PRELIMINARY RESULTS

Method A was applied to a set of five single-choice questions on business organisation. 90 students participated. Below we list the questions, the answer choices and the results. The correct responses are highlighted.

A1. The functional organisation is characterised by which advantage?

A) avoidance of suboptimal outcomes

B) **gains from specialisation**

C) reduced strain on management

D) direct communication

E) promotion of holistic solutions

Question A1 – relative frequencies of responses					
Responses	A	**B**	C	D	E
1. individual responses	9	**51**	10	19	11
2. responses after discussion	2	**64**	9	13	12

A2. The divisional organisation is characterised by which advantage?

A) simple strategic control

B) low administrative effort

C) promotion of holistic solutions

D) **greater flexibility and speed**

E) reduced duplication of effort

Question A2 – relative frequencies of responses					
Responses	A	B	C	**D**	E
1. individual responses	17	10	11	**39**	22
2. responses after discussion	14	13	12	**44**	18

A3. The divisional organisational form is particularly suited to…

A) small and medium-sized enterprises with a relatively small and homogeneous range of goods and services that operate in a relatively stable business environment.

B) **medium-sized and large multi-product companies that operate in a dynamic business environment.**

C) large multi-product companies that operate in a relatively stable business environment.

Question A3 – relative frequencies of responses			
Responses	A	**B**	C
1. individual responses	23	**45**	32
2. responses after discussion	13	**64**	24

A4. The matrix organisation is characterised by which advantage?

A) strict delimitation of competences

B) low administrative effort

C) easy assignment of success and failure

D) fast decisions

E) **systematic incentives for innovation**

Question A4 – relative frequencies of responses					
Responses	A	B	C	D	**E**
1. individual responses	15	6	18	28	**33**
2. responses after discussion	15	7	14	16	**47**

A5. The line-and-staff organisation is characterised by which weakness?

A) The establishment of staffs requires extensive restructuring of the whole business.

B) **Staffs may influence line managers' decisions according to their preferences.**

C) There are no clear lines of communication and command.

Question A5 – relative frequencies of responses			
Responses	A	**B**	C
1. individual responses	21	**56**	23
2. responses after discussion	20	**59**	21

The results fundamentally show that the students had some issues answering the questions correctly. Remarkably though, the 'convince your neighbour' discussion in the second iteration served to improve the results throughout. The improvement across the five questions is in the range of 3 to 19 percentage points.

Looking at the range of relative frequencies of correct answers after the first and second iteration, respectively, the following picture emerges:

all five questions on Organisation	relative frequencies of correct answers
1. individual responses	33 % - 56 %
2. responses after discussion	44 % - 64 %

The results so far suggest that the peer instruction method can serve to stir interactive learning processes which in turn facilitate improved test results.

Method B likewise relies on five single-choice questions, which this time concern Human Resources. The level of difficulty is comparable to the questions used in Method A; however here the material is taught immediately prior to the test by the lecturer. 60 students participated in the test. The results are presented below.

B1. Which of the following functions can be attributed to the provision of personnel?

A) leadership

B) **personnel development**

C) personnel evaluation

D) personnel administration

E) personnel remuneration

Question B1 – relative frequencies of responses					
Responses	A	**B**	C	D	E
1. individual responses	28	**30**	12	20	10
2. responses after discussion	19	**41**	10	24	7

B2. Complementary goals in human resources are ones…

A) **where the achievement of one goal supports the achievement of the other.**

B) whose chances of success are independent of each other.

C) where the achievement of one goal interferes with the achievement of the other.

Question B2 – relative frequencies of responses			
Responses	**A**	B	C
1. individual responses	**78**	7	15
2. responses after discussion	n.a.		

Due to the good results obtained in the first iteration, the second iteration was waived.

B3. Incentive systems are…

A) combinations of material incentive instruments that can jointly encourage desired actions and discourage undesired actions.

B) **combinations of incentive instruments that can jointly encourage desired actions and discourage undesired actions.**

C) combinations of incentive instruments that can jointly encourage desired actions.

Question B3 – relative frequencies of responses			
Responses	A	**B**	C
1. individual responses	5	**72**	22
2. responses after discussion	4	**82**	14

B4. Which of the categories below refers to a classification of incentives according to the object of the incentive?

A) extrinsic incentives

B) individual incentives

C) cotrinsic incentives

D) internal incentives

E) **immaterial incentives**

Question B4 – relative frequencies of responses					
Responses	A	B	C	D	**E**
1. individual responses	40	29	4	8	**19**
2. responses after discussion	33	14	2	4	**47**

B5. External recruitment is characterised by which advantage?

A) vacancies are quickly filled

B) low recruitment costs

C) **reduced organisational blindness**

D) compliance with the company's remuneration system

E) new positions open up for junior employees

Question B5 – relative frequencies of responses					
Responses	A	B	**C**	D	E
1. individual responses	2	12	**79**	0	8
2. responses after discussion	n.a.				

Due to the good results obtained in the first iteration, the second iteration was waived.

For a **comparison** of the two methods, we first note that the students appear to perform better under Method B. Two questions received 78% and 79% correct answers respectively already in the first iteration, rendering a subsequent 'convince your neighbour' discussion superfluous.

A second iteration was, however, called for in the case of questions 1, 3 and 4. Similarly to Method A, we see the results improving in each case. The range of improvement under Method B is 10 to 28 percentage points, compared to 3 to 19 percentage points under Method A.

The range of relative frequencies of correct answers to all five questions under each method is:

all five questions on Organisation/HR	relative frequencies of correct answers

	Method A	Method B
1. individual responses	33 % - 56 %	19 % - 79 %
2. responses after discussion	44 % - 64 %	41 % - 82 %

In particular the results after the second iteration speak in favour of Method B. The students were clearly informed about the great importance of preparatory reading for Method A, so it is unlikely that a substantial number of them did not read the text. Instead it appears that the first term students encountered difficulties with the reading task of Method A, even though the selected text was well suited for beginners and presumed no prior knowledge of the subject matter. Further research is clearly needed to substantiate these preliminary results.

4. CONCLUSION

We reiterate that peer instruction led to an improvement in the results under both methods, encouraging us to further pursue this central teaching tool. Further, more comprehensive studies should develop additional variants of peer instruction and test their effectiveness.

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CONTRIBUTION OF MEVLANA EXCHANGE PROGRAM INTO INTERNATIONAL EDUCATION QUALITY-PRODUCTIVITY (SAMPLE OF ADIYAMAN AND RUSSIA UNIVERSITIES)

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Abstract: Fast and intense developments in communication and transportation technologies in globalizing world affect all sectors, undoubtedly this situation reflects on educational institutions to large extent. High demand for the education felt in each sector reshapes structure of education institutions and society and market together with education. This change showing continuity causes education institutions to differentiate within the framework of obligation of educating more qualified human who is open for global values, contributes into information production and uses information actively and creatively and transforms these into investment.

Education quality and productivity of higher education institutions are indicators of development level of any country, thus efforts showed in this direction are of importance. "Mevlana Exchange Program" put into operation by Higher Education Institution (YOK) under the leadership of Turkey in 2013-2014 Academic Year gives students and instructors opportunity of exchanging education and training at international level.

This study is to convey information belonging to quantitative and qualitative observation with review of "Mevlana Exchange Program" which was realized by instructors and students coming from Eurasia to Adıyaman University together with instructors and students coming from Adıyaman University to Eurasia.

Key Words: Productivity, Quality, Higher Education, Project, Mevlana Exchange Program.

1. Introduction

Productivity is a proportional relation between product factors used in a good or service production system and emerging production amounts, and to use sources effectively. For mentioning about productivity in an organization, more outputs should have been realized with same inputs or the same output should have been realized with less inputs. While production factors are defined as labor, capital, nature, entrepreneur, since "time" factor is important in productivity, it should be added (Uğur,2013: 8,9).

Role of management has increased in economic development. Besides, increase in number of public officer and public expenditures entailed government offices to develop a measurement technique for productivity. There is a serious difference between productivity evaluation in public sector and productivity evaluation in private sector. Output of private sector is calculated in point of sale and it is directly related with labor used for obtaining output or another input. In public sector, there is a difference between output of an office and success of that office in its duty. Final output of an office which can be compared with input of that office is "effectiveness" of it. Impact provided with program of office is its "productivity" (MPM,2011: 44).

Rising in our life standard is considerably based on increase and increasing the quality and productivity in service sector (Deming, 1994). Education service included in service sector is both subject and object of the sector in terms of including into this sector and training personnel for service sector. Universities within education institutions are undoubtedly constituting the most important place in development and improvement of countries, providing sustainability of this process increasingly is possible with quality consciousness and practices.

Education is a service type. Universities that are higher-education institutions are organizations producing service. Universities included into education sector are competing both between each other and at international level today. Universities improving and developing service quality continuously come to the

forefront of today's intense competition environment and are in the leader position (Güzel, 2006). Universities are subjected to ranking at international level by taking criteria such as elevation in educational level provided to students and rates of scientific publications of academicians into consideration and are perceived as qualified.

It was observed that developed countries determine quality standards in education and there is productivity increase in education as a result of implementation of these principles. Developing countries are striving for equipping education systems with contemporary standards in all aspects for keeping up with competition in today's world where elevation in education level has became indicator of development. Therefore, it is required to question compliance of standards continuously in our country and to develop these standards.

A business producing service is liable to explain service standards in line with customer's expectation and demands. Service standards are helpful in explaining personnel roles and conveying priorities of business and provide a measurement regarding which performance may be evaluated. Standards should not be too much. Establishing the most important ones of customer expectations and in small numbers brings about better results in management of expectations (Örs, 2007:190).

Attempts of establishing close bonds with European Union and integration process into this union have accelerated after 1995. It has been passed to "Bologna Process" progressively within the scope of standardization of process and systems of higher-education implemented in our country with European Union. Qualitative and quantitative increases in organizations show that importance given for quality standards in education has started to increase. Efforts for having more international student and personnel mobility among higher-education institutions and building balanced programs brought service production sector at an international level and competition, quality and increasing productivity became unavoidable in this field.

Activities of institutions in modern business management must become brand. While student and instructor mobility which Higher-Education Institutions conduct each other was realized under the name of **Erasmus** until 2014, now all European Union Projects are realized as Erasmus Plus. As is seen from here, a change and transformation process happens with a single brand image.

Quality in Higher-Education

The most important factor determining and affecting good manner, knowledge, culture, welfare and development level in short general qualifications of a society is knowledge and education level of that society. For this, all societies state expansion and maximizing mass education of its members as the main objective and define detailed targets intended for achieving these objective. For determining educational levels of countries, it is examined that how much young population in certain age ranges makes use of education stipulated to be given for that age range. For example; it is possible to compare schooling rates in elementary, secondary and higher education of countries each other by stating the rates (Köksoy, 1998:1). It is an indisputable fact that quality measurement and audit have many beneficial results in higher-education. They have most important two benefits as is in the other sectors. These are;

- ***First of which;*** is to help in introduction of quality product/services by ones benefiting from higher-education services directly (students and society) and ones using higher-education product/services (employers, institutions making use of science and technology and generally society),
- ***Second;*** is to involve higher-education institutions into a competition environment for offering more qualified product and service for the society and thus, to allow them to strive for removing vulnerabilities and strengthening them (Köksoy, 1998:1).

Mevlana Exchange Program is an opportunity for developing intercultural dialogue in higher-education, realizing technology and information transfer and monitoring, observing and evaluating which stage rivals are in the globalizing world. Thus, development and change of higher-education is provided in our country. Two-way transfer of mutual information, skill and good practice samples are realized.

Universities are big businesses spending excessively and having employees in large numbers in various levels and fields in our present day. Therefore, while production they made considers quality of these products, either science or trained student, they must consider costs of quality. Mevlana Exchange Program creates a certain cost and this situation is financed by Higher-Education Institution (YOK) by taking financial states of countries into account. It should be updated by taking annual inflation and country's economic developments as a basis.

Total Quality Management (TQM) should be built onto the framework of *"quality– cost– benefit– efficacy– productivity"*. System targeting at continuous improvement in the quality aims to increase productivity of organization instead of evaluating function and skills of individuals involved in the production. The faith regarding that quality will create an additional cost in this management type gives its place to the fact that quality increase in long-term may be produced less cheaply. Total Quality Management is a management system covering needs of customers or users ideally in terms of quality, price and service and lowering the cost at the same time. Philosophy implemented in Total Quality Management creates an organization culture based on improvement phenomenon within a participating management process in form of groups and centered in customer and user under the leadership of top management and in line with quality perceptions and expectations of its. Total Quality Management is a general concept and involves the following concepts (Köksoy, 1998:135);

- Quality Assurance
- Quality Control
- Quality Control
- Quality Assessment
- Accreditation
- Quality ranking.

The process should be provided to be effective and sustainable by taking the above-mentioned criteria as a reference within the scope of Mevlana Exchange Program.

Mevlana Exchange Program

A similar program to Erasmus program was put into operation by Higher-Education Institution (YOK) in 2013-2014 academic year, this program in which all higher-education institutions will be exchanged apart from member countries to European Union took a step with "Mevlana" name. Financial expenses of this program which will be an indicator of quality and productivity in education (expenses of student and instructors coming and going) are covered by YOK.

Mevlana Exchange Program is a program which allows student and instructor exchange between domestic higher-education institutions providing education and foreign higher-education institutions providing education. The way was paved for the exchange of student and instructor between foreign higher-education institutions and higher-education institutions in our country pursuant to Regulation published in Official Gazette dated 23 August 2011 and numbered 28034. Unlike other exchange programs, mobility in the body of exchange program covers all higher-education institutions all over the world without discriminating any geographical region. Higher-education institutions located at countries included into Erasmus Plus Program in 2013-2014 Academic year were excluded from the scope of Mevlana Exchange Program. Students willing to participate into exchange program can make use of program for at least one at most two half-semesters and instructors can make use of program for instructing in higher-education institutions in the world for at least 1 week and at most 3 months. In similar way, student and instructors from all regions of the world can come to higher-education institutions in Turkey (www.mevlana.yok.gov.tr, 2013).

Position of instructor is not a profession and title which can be acquired natively or passing from father to son. Just as at least 4-6 years of education is required above high school education for having a profession title and further education or profession experience is required for developing and specializing in the profession, a similar path is followed in growth of an instructor. Various stages which a young instructor candidate reaches to the highest education level (for example; professor) by maturing are examined and searched by trainers.

According to Peter KUGEL (1993), there are various stages differentiating from each other clearly in maturation of instructors. These are;

- Incubations (Zeroth) Stage
- Self, Instructor (First) Centered Stage
- Subject (Second) Centered Stage
- Passive Student (Third) Stage
- Active Student (Fourth) Stage
- Independent Student (Fifth) Stage
- Fine Tuning (Sixth) Stage

1st, 2nd and 3rd stages of instructors in terms of theirs students and relations in class are "*training weighted*" and 5th and 6th stages are "*education weighted*". In other words, as instructor gains experience and

maturates, they foresees that research-practice should be more concentrated on rather than rote learning and training students better should be more concentrated than training many things. However, it cannot be possible to achieve this conscious in the beginning. Due to nature of the work, an instructor has to undergo these stages and live like compulsory stages which an organism has to undergo for further stages. Periods which some instructors will undergo at certain stages may be shortened, however they are regarded as a non-omissible nature. For some instructors, it is not possible to pass to next stages (Köksoy, 1998:75).

Mevlana Exchange Program is a national project encouraging and supporting this process for instructors. This project is an international exchange program contributing into professional development and increasing information, skill, experience and good manners of instructors. Result obtained from interviews made with instructors participating into this program is highly beneficial, efficient and positive.

Quality is a concept which is updated continuously and in parallel with today's conditions, needs and developing technologies. It is required to understand where higher-education goes in 2000's, see what sort of changes are expected in those years and understand who customer types of higher-education are and what their demands are in near future in order to adapting to rapidly changing and developing conditions in the world (Köksoy, 1998:6).

Higher-education systems are affected from changes in the society like every social organizations and adapt to these changes. YOK put an international project named "Mevlana Exchange Program" into effect within this scope.

Discussing the following four dimensions may be adequate for estimating reflections of changes in the society on higher-education.

1. Changes in production system in the world and changes of labor required for operation of new organization types of economy in the world in talent/ability composition,
2. Transition from mass production to flexible production systems revealed,
3. On-going communication revolution changes structure of public and private services' field,
4. While talent and its composition required for a production field change continuously, they have to renew talent and knowledge of employees continuously.

All these changes cause the tendency of generalization of higher-education, bringing it continuity and performing it in a democratic environment (Saatçioğlu, 1999:269).

Subjects mentioned above related with Mevlana Exchange Program are performed in practice for instructors and students. Participants see education system of the country they went closely, live personally and learn and teach by living in interaction.

Subject of Research

Experience sharing for international education's quality and productivity of Mevlana Exchange Program (Sample of Adıyaman University and Russia Universities where Mevlana Exchange Protocols are conducted).

Method of Research

"Scientific Research Projects with Adıyaman Universities and Russia Universities (**ARBAP**): To receive opinions of foreign instructors coming to 1st International Project Bazaar within the scope of research and instructors of Adıyaman University going to abroad with Mevlana Exchange Program and to evaluate their opinions qualitatively.

Sampling of Research

12 foreign instructors coming from 5 different cities and 6 universities as Russia Federation located at Eurasia region and Republic of Tatarstan associated with Russia Federation and 18 instructors of Adıyaman University making use of Mevlana Exchange Program in 2013-2014 academic year; totally 30 instructors. 100% of academic staff coming from abroad and going to abroad in 2013-2014 Academic Year were interviewed.

2. Practices

Practice 1

"Scientific Research Projects with Adıyaman Universities and Russia Universities **(ARBAP)**: 1st

International Project Bazaar" Total 11 instructors presented their papers during the activity lasting for two days organized under the presidency of president advisor who is responsible from foreign affairs on 8-9 May 2013; 2 of whom came from Moscow State University located at Moscow, Nijni Novgorod, Kazan and Naberejniye Çelni cities of Russia, 2 from Moscow Human Sciences University, 2 from Laboçevskiy State University, 3 from Kazan Federal University Oriental and International Relations Institute and 2 from Naberejniye Çelni Pedagogy Institute. In the same way, total 22 papers were presented in Turkish and Russian; 1 of which belongs to 1 instructor coming from Istanbul University and 10 instructors coming from Adıyaman University.

As a result of interviews made between sessions and during the program, it was decided to conduct following common projects between instructors of Adıyaman University and Russia Universities:

- Research on liquid crystals
- Social problems and social policy research
- Project for Providing Opportunity for Recreational Activity
- Tourism-themed Turkish-Russian Textbook
- Turkish and Russian Textbook as Foreign Language
- Risk management in production systems
- Comparing the quality of Russia and Turkey Education Systems
- Study on amalgamations of two cities of poets; Kazan and K. Maraş
- Problems encountered in service quality
- Project of increasing education productivity in Russia and Turkey

Instructors stated their opinions related with activities intended for increasing quality and productivity in education by building collaborations in Higher-Education at the end of project bazaar held with foreign instructors:

Associate Professor Doctor Asiye RAHİMOVA, (Kazan Federal University Oriental and International Relations Institute Head of Turcology Department): "We admired the program. I would like to thank very much for everything. We came and saw here from far far away. We met with your university, instructors and you. Many thanks. We saw so many things within such a short period, believe me many times will pass and we will not forget these and we will want to come to Adıyaman again. We invite you to Kazan, Tatarstan and Russia. We will be glad to see you. I would like to present thank-you note of Prof.Dr. Dinar LATIPOV, Vice President of Kazan Federal University and Principal of International relations and Oriental Institute."

Associate Professor Doctor Galina KUZNETSOVA, (Moscow State Social Sciences University Principal of International and Public Relations Department): "It is a great pleasure to be here for us. I thank to all organizers for this excellent interview leaving really a positive impression on us. We think that this project we planned as "New Bridge" according to us will be starting center of civilization again upon development of universities for real development of region. It is a civilization which is full of tolerance and very sensitive relations. It is a civilization which is respectful for peace and culture of different people. In my opinion, very rapid development of university and being at international level do not play a minor role."

Associate Professor Doctor Dmitry GRAMOKOV, (Moscow State University Instructor of Mathematics, Computer Teaching and Numerical Methods Department): "I likes what I saw here very much. Turkey makes investment for development of education with a big sum of money and human creativity. Countries investing in increasing the quality in education have a huge future and develop more rapidly. Because trained people always mean development, development and development. I thank you very much. I am an expert in information technologies. This field has more international feature. I am ready for collaborating in training of experts particularly in this regard. Since every department of university uses information technology, it is not important which faculty gives this education. I thank you for your warm interest. Everything was organized at the highest level. I participated into many projects during my life and I can say that this is one of the best and warmest projects I participated."

Associate Professor Doctor Alsu NİGMATULLİNA, (Kazan Federal University Oriental and International Relations Institute Instructor of Turcology Department): "I was very pleasant due to international project bazaar program you organized. I thank you very much. We are waiting you to Kazan which is capital city of Tatarstan."

Professor Doctor Alexander LYUBİMOV, (Laboçevskiy State University Dean of Physics-Mathematics Faculty): "I and my colleagues liked the visiting to your nice university very much. Qualified

education system shows development level of country from many aspects and connects country people each other. Relations to be established with education systems of our students and people will undoubtedly provide inter-communal dialogues living side by side for one thousand year to further develop and intensify. Thank you."

Associate Professor Doctor Alexander GORYLEV, (Laboçevskiy State University Dean of Foreign Students Faculty): "I would like to say that I am grateful to President of Adıyaman University for this warm interest and program. Professionalism of all university employees are felt. We admired your students very much. They are very good and very intelligent children. I am sure that we will develop our mutual relations with your university after this project bazaar organized. I hope that your President will visit our university and meet with our instructors and students. We will make our best for this. Thank you."

Associate Professor Doctor Vyatcheslav KUZNETSOV, (Moscow State University Instructor of Mathematics, Computer Teaching and Numerical Methods Department): "I would like to thank you for your nice invitation giving me opportunity for wandering Adıyaman, its counties and surrounding. Such conferences are organized in many places of the world. But, this is made with bilateral relations of Russian and Turkish people and with special relations in Turkey. Tendency of government and world is that this work is performed with certain persons and relations in good faith. These relations are at different planes and different field of interest. While these are cultural relations, scientific collaborations and collaboration in education field, relation complex among all these people allows us to develop, walk together. Even if there were a set of problems in historical development process, there is no problem which cannot be solved if there were interest in common field and we could see real persons who are able to achieve this work among our partners. The perfect Cendere Bridge which we saw and even touched symbolizes our relations on very different fields. I would like to thank to everybody realizing this great work and supporting us with their participations. We maybe saw a small part of this work. That is, we saw only end point of Iceberg. Organizing this activity only for meeting us is another face of the work. Thank you."

Associate Professor Doctor Rustam GİBADULİN, (Moscow State Social Sciences University Principal of Perspective Research Institute): "First of all, I would like to thank all organizers of this project bazaar and university president for their excellent and warm interests. We were highly affected from development of Adıyaman University and interviews made with your students and professional persons. I would like to convey wish of our president Vlademir NAÇAYEVA regarding development of your university and thanks of him for your invitation. We are sure that our universities will find many common points and collaborations will yield in near future. We have many common working areas, however we presented our some concrete offers within this file. Here, there are wishes from our students for your students to study like stars. Offers may be at ecology field, common master of science program field, student exchange field and instructors' exchange field. Thank you again and we invite you (your President) to Moscow at the first occasion. I am sure that this bridge established is a symbol of bilateral movement and collaboration. Thank you."

Expert Gayda İNŞAROVNA, (Naberejniye Çelni Pedagogy Institute Instructor): "In thank you for providing us opportunity of meeting at warm eastern land. You are very hospitable, your people always smile. We took great pleasure for presenting at your lands within these three days. I thank you for First International Project Bazaar you organized in your University. Our projects, projects offered by our colleagues and also Naberejnie Çelni Pedagogy University offer to expand its own broad borders and we hope that we can find opportunity of assessing our all questions in detail when you will come to us next time. I thank all organizers organizing this organization and my colleagues. We found opportunity of making friends with everybody. I would like to state that I am grateful to you (Mr. President) for this organization."

Expert Cemile FAHRADOVNA, (Naberejniye Çelni Pedagogy Institute Head of Foreign Relations Unit): "Hello everybody and thanks everybody for this warm interest. Also, I would like to thank very much for providing the opportunity of meeting with our colleagues in Moscow, Kazan, Nijniy Novgorod, Naberejniye Çelni cities. You provided opportunity not only for common projects to be held with Adıyaman University but also common Russia project in these lands. I thank you very much, but I do not say goodbye. Because, we will start our common project after 3 months. We would like to see your students in our pedagogy institute for education as of 1 September. We are waiting your students for pedagogic internship education this year. We are inviting for increasing occupational experiences of school principals and Kindergarten principals. We have common projects with your instructors and your academicians now.

Research Assistant Mostafa KERULY, (Kazan Federal University Oriental and International Relations Institute Department of Turcology): "I am greeting all of you with respect. I can say that I am happier than everybody as an employee working in Russia Federation and studying at Turkey. There is a word said for Yüriy GAGARIN who is the great astronaut of Russia. When he took his first step in the moon, it was a small step for himself but very big step for humanity. Today, what you saw here can be regarded as minor but

they are very big steps on behalf of dialogue. If we reinforced these steps, we would take very big results in future. I thank all organization team organizing this organization on my behalf and wish them a continued success."

1st International Project Bazaar organized in Adıyaman University formed a basis for signing Mevlana Exchange Protocols with Russia Universities and it was provided to sign protocols with 6 Russia universities.

Practice 2

Mobility of lecturing and taking course of 17 instructors and one doctoral student were approved by YOK for 2013-2014 academic year, 3 instructors from Adıyaman University Economics and Administrative Sciences Faculty, 5 instructors from Faculty of Arts and Science, 3 from Tourism and Hotel Management College, 6 from Foreign Languages College realized lecturing mobility in range from one week to 1 month at universities where protocol was signed.

Activities conducted within the scope of Mevlana Exchange Program, observations and general opinions of other academicians performing mobility were presented in detail.

Good Practice Sample within the Scope of Mevlana Exchange Program

Şolohov Moscow Human Sciences University Faculty of Law and Political Sciences

Adıyaman University and Şolohov Moscow Human Sciences University cooperated within the scope of Mevlana Lecturing Mobility. Faculty of Law and Political Sciences of the said university was visited on 13-19 September 2013. It was passed from here to Şolohov Moscow Human Sciences University Perspective Research Institute dormitory. A budget amounting to 20 Million Euros was assigned by Russia Ministry of Education for the related university for research. Announcements were made for ones who want to make research at certain periods of the year and ones from different countries of the world whose projects are accepted in range of 3 months and 1 year are placed into dormitory of Perspective Research Institute. There are single rooms where researchers are able to conduct their projects and rest in these buildings which served as a sanatorium previously. Meals are served at three square in dining hall of the dormitory and guest researchers do not pay for meals. There are project offices and guest researchers are able to enter into international database for conducting research. There are volleyball and basketball courts in garden of dormitory for allow researchers to do exercise. Also, a Russia bath is available within health center located at side of dormitory.

Mevlana Exchange Program Sample Activity Plan

- As a result of interviews and correspondence with related university prior to visiting, 8 hours of independent seminar program was opened under the name of "Modern Entrepreneurship and Productivity" by executive board of Sholohov Moscow Human Sciences University Faculty of Law and Political Sciences. This seminar program was included into academic education program of related university.
- It was passed from Zaveti Ilicha station of Puskina city to Moscow where university presidency is located for recognizing the university on 14 September 2013 (50 minutes of distance). It was interviewed with Head of International Relations Department Vichislav VALERYEVİCH and necessary enrollment transactions were conducted, again ideas were exchanged with Dean of Faculty of Law and Political Sciences Associate Professor Doctor Vladimir LEONİDOVİCH regarding how, in which language and where the course will be taught.
- University and dormitory were not visited on 15 September 2013 since that day coincided with festive holiday.
- Seminars were given on 16-17-18 September 2013 at 09.00-12.00.
- 1 week of lecturing mobility was completed after seminar was given to researchers in dormitory of Sholohov Moscow Human Sciences University Perspective research Institute on 18 September 2013.

Observations and Acquirements related with Mevlana Lecturing Mobility

Personal Acquirements

- Primarily, this course given under the name of "Entrepreneurship" was explained in intensified way (in such way which will contain Turkish entrepreneurship and productivity).
- Course planning and lecturing experience were acquired within the scope of mobility.
- English articles and business texts related with the subject were supplied for teaching students during the course; a presentation consisting of 150 slides was prepared, course document was distributed to students. Thus, experience was obtained in regard to prepare course presentation in foreign language.
- English speaking, understanding and narration practices were increased with dialogues made during course process and interviews made with work friends.
- Opportunity of comparing Turkish and Russia entrepreneurs and businesses with Russian students emerged during the course process.
- Close friendship was established with instructors working in field of "Entrepreneurship and Productivity" and project preliminary interviews intended for collaboration in academic field in future were made.

Corporate Acquirements

- A faculty and an institute located at Russia were examined from various angles and observations were stored.
- Opinions were exchanged with Head of University International Relations Department Viçislav VALERYEVICH for conducting studies which will contain students and for developing Mevlana Mobility.
- Speculative information related with Turkey were explained more correctly as well as introduction of modern Turkish entrepreneurship.
- Promotions were performed in Turkey, Adıyaman, Komogene Civilization, Urfa and Diyarbakır and notably Adıyaman University. Introduction film of our university was distributed to different units.

Observations for Faculty of Law and Political Sciences

- There is a library in the faculty where students make use of.
- Library of faculty is open between 08:00 am and 18:00 pm. Students photocopy their documents by paid photocopy machines.
- In departments of instructors, they are entitled to photocopy and make use of library without limit.
- There are projectors and audio system in all of classes and seminar classes. Classrooms are closed out of course hours. Instructor having lesson requests key from security and locks at the end of lesson and delivers the key. Use of offices is limited and used until 22:00 pm.
- There are at least 3 persons in rooms of instructors and administrative personnel.
- Students have notebooks named "zachotka" in which mid-term exams and final grades are filled by instructors manually.
- There is a book for following absence of students and absences are recorded in this book by head of class during 4 years of education period. Then, it is signed by head of department and dean of faculty.
- Mid-term exams and final exam questions are separate for each student. 50-100 questions are given to students prior to exams by the course, 2 of these questions are taken by student within envelope at exam day (paper on which there are 2 questions is called as ticket). Student firstly answers this question on paper in written and explains orally by going up to instructor respectively. Additional question is asked by instructor for the student who wants to take high grade.

- Grades are assessed out of 5.
- A canteen and a dining hall for 40 persons are available at university for lunch meal. Here, both students and employees eat their meals respectively.
- There are two fixed computers at building entrance and internet access is always available for accessing to any kind of information related with faculty.

Administrative and Academic Activities Apart from Planned Lecturing within Mobility Process

Project Interviews with Perspective Research Institute Manager

Project interviews were made with Rustem GIBADULIN, Manager of Perspective Research Institute established within the body of Sholohov Moscow Human Sciences University. Institute manager stated that they expect project particularly from Adıyaman University and they will support researchers within the scope of this interview. He addressed that Mevlana Mobility Program will create a basis for new projects.

Interview with Moscow State University

Presentation was made for İrina GENNADIYEVNA, New manager of International relations department Moscow State University, and two employees concerning Mevlana Exchange Program on 17 September 2013 in the process of Mobility. 3 Turkish students are doing Master Degree at Philology (Russian Language) department. İrina GENNADIYEVNA gave order to employees for putting Mevlana Program into effect immediately.

Collaboration Interview with Petigorks State Language University

A meeting lasting about one hour was held with Associate Prof. Dr. Liudmila PRAVIKOVA who is researcher coming from Petigorks city (in south of Russia) for collaboration on 18 September 2013 in the process of mobility. Departments were introduced with Adıyaman University mutually in the meeting; it was interviewed about opportunities and problems which students who will be subjected to exchange in form of collaboration may encounter in terms of social and education and how possible obstacles will be solved was addressed.

Eventually, the meeting ended with the opinion regarding that collaboration of two institutions will be beneficial for increasing quality and productivity in the education. Instructors of Adıyaman University were informed about this interview in turn of mobility. Also, presentation about subject was made for members of Adıyaman University Senate.

Observations related with Russia and Moscow State University

Russia Federation that is the biggest country in the world in terms of surface area has 11,5% part of world surface area with 17.098.242 square meters of area. Population of such a country having such broad lands is about 145 millions and it is a surprising fact. Number of child per family is one or none. While families cover all needs of child they have at maximum level, state mobilizes all opportunities in education field. Children start to engage in any sport, art or science branches as from early ages. A three year old child can skate, perform ballet, play guitar, play chess or count numbers from one to one hundred by twos. This nation which broke Olympiad records in different fields such as skate, ski, swimming, ballet, chess makes its name in scientific Olympiads. Mendelev Dmitriy İVANOVICH who is inventor of periodical table in chemistry, Çebışev Pavnutiy LIVOVICH who describes standard deviation in statistical science, mathematicians Grigori PERELMAN who clarifies Poincare assumption which is problem of century in mathematics and Manturov Oleg VASILYEVICH who is dealing with node theory on which small numbers of professor work in the world are among Russian scientists (Aşkın, 2012:39).

Russia Higher-education System

While higher-education in Russia is similar to German System in terms of academic structuring in Communist regime period, there are great differences in line with objectives. The essential aim of higher-education in that period is to strengthen and spread communist regime on one hand and to increase production under statism structure on the other hand. There are courses themed "Marxism - Fundamentals of Leninism", "Scientific Communism", "Fundamentals of Scientific Atheism" among compulsory courses taught in

universities. Higher-education model in communist Russia period which impressed a broad world geography and many states may be called as model centered "Ideological - State - Production". Today, university models affecting contemporary universities are as follows (Köksoy, 1998:6-7);

1. "Ideological- State-Production Centered University" *(Russia Ideological)*
2. "Society-Market Centered University" *(American Liberal)*
3. "Culture-Information Centered University" *(British Newmanian)*
4. "Science-Scientists Centered University" *(German Humboldtian)*
5. "State-Bureaucracy Centered University" *(French Napolyonik)*

Higher-education institutions in today's Russia maintain their education activities in 4 groups as universities, pedagogy institutes, technical colleges and social sciences colleges, as in Soviet Unions. Education periods of universities and institutes range from 4 and 6 years. Education period of colleges is 2 years. Although higher-education institutions are associated with different places partially, they are connected with Supreme Academic Commission which is called as VAK whose headquarter is located in Moscow corresponding to YOK in Turkey. While there are differences between Higher-education Institutions in Russia, didactics remained from former system are still continuing in our present day. While scientific searches are conducted in Higher-education institutions or occupational education is taken, philosophy and economics are among basic courses in all departments without exception on behalf of giving Marxist and Leninism opinions. While teaching philosophy course which is accepted as basis of science, a long time is assigned for life philosophy, works and activities of Lenin. In the same way, Marxism philosophy is explained in detail in Economics. Also, physical education, foreign language and pedagogy courses are among compulsory common courses of all faculties (Aşkın, 2012: 39).

University Libraries

Libraries are divided into two parts as student library and academic library at universities. Students have the chance of finding any books here. There are thousands of book which they can read apart from course as sports, culture, art, literature, science, etc..[1] It is compulsory to teach books determined by state in courses of Russia universities. Textbooks of every period are available in student library by number of students enrolled in the university. Textbooks of courses are taken from the library by the courses determined in curriculum before semester starts. These textbooks are followed with instructor of course. When semester is completed, these textbooks are returned to library. Students pay a penalty fine per textbook which is never returned or not returned in time. In the next semester, that student cannot take textbook from university library. Student has to purchase textbooks from book stores. Mathematics and language teaching play very important role in secondary education. Student whose both courses are unsuccessful fails. For the student whose mathematics and Russia Language courses are very successful to pass the class, make-up exam is held in other unsuccessful courses. Mathematics and Russia Language that are compulsory courses of secondary education are among courses taught as a basic course in all institutions without exemption. We can conclude from here that it is impossible for an individual who does not know Mathematics and Russia Language to study at university (Aşkın, 2012:39).

4. Conclusion and Suggestions

The best sense of quality is based on determination of how much users of a product produced or service offered are pleased with this product and services in recent years. Accordingly, quality is shortly defined as "*customer satisfaction*". The same definition is valid for higher-education institutions. It is possible to primarily and mainly define customers of today's higher-education institutions for whom they offer service and product as follows;

- Student and student parents,
- Supreme education and research institutions,
- Various public and private sectors,
- National society and national state,

[1] Rsearchers went to Aröl city whose population is about 200.000. Libraries were examined in Aröl State University in the city having ten universities. Library manager stated that there are about 600.000 book types in the academic library. Also, there are tens of books in every book type.

- Global society and global science.

Thus, it is an inevitable obligation to give importance for opinions of customers primarily and mainly in order to determine quality of a higher-education institution and services it gives (Köksoy, 1998:215).

Mevlana Exchange Program developed as a result and requirement of different demands, collaborations. However, sense of quality of customers is a concept which is ever changing in parallel to today's conditions, needs and developing technology. It is required to see what changes are expected in near future and consider and foresee what customer type and demands will be in near future not only current customers of higher-education in order to adapt to rapidly changing and developing conditions in the world.

The following were concluded in line with opinion and ideas of instructors of Adıyaman University participated into Mevlana Exchange Program and of foreign instructors participated into international project bazaar in practice part of the research:

- Lecturing mobility and student exchange is an activity which will provide very important experiences and acquirements in terms of instructors and students. Instructors and students should be encouraged for making use of this program and all Higher-education institutions should provide opportunity for all instructors to make use of this program as much as possible.
- Instructor mobility realized in the first stage should be absolutely continued with student exchange in the next stage for consolidating collaboration and make Mevlana mobility effective and productive.
- University legislation infrastructure should be prepared in order to open independent elective course or seminar on behalf of foreign instructors to be hosted under Mevlana lecturing mobility.
- Web addresses and other communication channels should be more easy accessible in departments of every faculty for providing Mevlana collaborations in time and in place more easily. Also, responsible person from Mevlana coordinatorship and contact details should be given clearly on web site of every department.
- Departments should be ready for hosting Mevlana students at any time. Particularly, adequate English and Russian documents should be prepared regarding the courses, English and Russian program should be offered to students who will prefer Adıyaman University as departments.
- Adıyaman University signed Mevlana protocol with 6 Russia Universities. Therefore, Russian elective course should be opened within the scope of "Occupational foreign language" elective discipline in course catalogues for our own students. Thus, our students will be able to make use of this program more easily.
- Eurasia universities are highly open for change collaborations. There are different opportunities for Turkish students to feel comfortable and to engage in social activities. It is important for students to see a broad geography, meet with people being present in Europe and Asia continents like Turkey and engage in culture interaction and education activity. Instructors and students may go to Eurasia Universities without any hesitation.
- Since languages being close to Turkish are spoken in some regions in this geography, serious problems are not experienced in taking course and lecturing.
- Russia is not a cheap country on contrary to what is supposed. On contrary, it is among the most expensive countries in the world. Therefore, folding grant amounts determined by YOK in two for Russia (for instructors and students) is important for increasing quality and productivity of mobility and not making ones going to Russia suffered financially.
- Rapid collaboration of all higher-education institutions with universities of 194 countries included into this scope is of importance for increasing international education quality and productivity of "Mevlana" program which is a national brand.

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LEARNING AND TEACHING IN THE EUROPEAN STRATEGIC NETWORK

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Abstract: The purpose of this study is to describe the educational development of the European strategic network of higher education institutions. The Consortium on Applied Research and Professional Education was established to promote the collaboration of five universities of applied sciences. The study analyses the learning and teaching modes using blended learning and innovation pedagogy and describes their usability in the strategic network of higher education institutions. The strategic network promotes student and staff exchange, conferences and joint research and development projects. There are also emerging joint educational programmes and ideas to expand the educational programmes to achieve joint degrees. The findings of this study are useful to those who aim to improve collaboration in international networks and strengthen institutional performance.

Key words: Learning and teaching, higher education, strategic network, pedagogical development.

Introduction

Online learning, distance learning and the expectations on higher education institutions confront learning and teaching in higher education institutions. Among other things, information and communication technology, part-time study and internationalization are transforming the modes of delivering education. Distance education is changing the traditional face-to-face teaching modes. There are demands for higher education institutions to accelerate economic growth, employment and welfare in their external environment, provide opportunities for lifelong learning and include technology-based practices in the curriculum.

Regional development is an important responsibility of the universities of applied sciences. There must be institution-wide commitment to address and emphasize the external impact of the institution in the strategic plan. Outreach can be defined as an activity in which academic staff engages with external environment and communicates in reciprocal learning and teaching that increases both the capacity of external partners and the academic staff to produce scholarship that reflects realities outside the institution (Church, 2002). The outreach and engagement in international activities underscore the importance for the social and virtual networks and distance learning.

The international perspective is integrated into all the activities, including teaching, research and development and service to society. The purpose of this integration is for graduates to have the international skills that they will need in the workplace. This integration will also ensure the high international quality in education and applied research and development. Learning and teaching in international networks require traditional face-to-face instruction but also distance learning using information and communication technology. New pedagogical outlines and careful planning of course-delivery modalities are essential in international networks.

This study analyses learning and teaching in the strategic partnerships of higher education institutions. The study analyses the blended learning and innovation pedagogy and presents the Consortium on Applied Research and Professional Education (CARPE), consisting of five European universities of applied sciences to promote student and staff exchange, research and development and joint educational programmes. By establishing a strong European reputation, the strategic alliance increases the amount of external funding to its member universities.

The Turku University of Applied Sciences and the HU University of Applied Sciences began planning its strategic partnerships in 2008. After many meetings and negotiations the Hamburg University of Applied Sciences and the Polytechnic University Valencia joined the collaboration and signed an agreement with the other institutions in 2011. Shortly thereafter, in 2012, Manchester Metropolitan University joined the network. The promotion of international activities in the strategic network is important for the European economic and social cohesion in the Common Market. The network improves the international skills that students will need in their working life.

This study is organised as follows. Section 2 describes blended learning and innovation pedagogy, both of which offer valuable pedagogical outlines for the learning and teaching in international strategic networks.

Section 3 presents the European strategic network, which provides an environment for distance learning. Section 4 describes many tools and practices of distance learning in international networks. Finally, the results of the study are summarized in the concluding section.

Literature review

Blended learning

Blended learning combines traditional face-to-face and technology-mediated instruction encouraging the adoption of platforms such as online learning, mobile technologies and resources that exist in the cloud (Moskal, Dziuban and Hartman, 2013). Blended learning can also be adopted in distance learning and with new information and communication technology its will come 'the new normal model' (Norberg, Dziuban and Moskal, 2011). Blended learning has emerged from advances in information and communication technology but very few studies provide educational guidance for institutions (Halverson, Graham, Spring and Drysdale, 2012).

Littlejohn and Pegler (2007) expanded the types of blends to include the 'space blend' (face-to-face or online), 'time blend' (geography and availability), 'media blend' (tools, technologies and resources), and 'activity blend' (learning and teaching activities, individual or group). It is essential that a higher education institution defines and supports policies and course design processes that ensure all students access to learning regardless their time of study and geographical location. Many higher education institutions teach in multiple modes which includes on campus, at a distance, online or a blend of several modes (Taylor and Newton, 2013).

During the development of blended learning, a spectrum has appeared on course-delivery modalities, ranging from traditional face-to-face instruction to comprehensive online teaching. The first step is technology-enhanced education. Thereafter, blended learning is followed by learning mostly and finally completely online instruction (Graham, Woodfield and Harrison, 2013). The latter phases of the spectrum are useful in distance learning. There are virtually unlimited combinations of face-to-face and technology-mediated education, none of which is more or less valid than the others.

Higher education institutions began by blended learning in part-time adult education, where students are also employed, but the new techniques have also become more common for full-time students. Blended learning has become more popular among young full-time students in Finland, most of whom divide their time between their jobs and their studies. The experience has shown that many students find fully online courses very demanding. Institutions need to solve the technical and pedagogical obstacles in face-to-face education. The development has led to technology-enhanced education, blended learning and mostly online learning. Blended learning presumes the increased capacity of tutoring and electronic libraries (Kettunen, 2007).

According to the research evidence, there is no single best one-size-fits-all model for blended learning. The mode of delivery has a very weak statistical correlation with student success or persistence (Dziuban and Moskal, 2011). Each institution has to select the success factors for the mode of delivery to fit for the purpose and improve them continuously over a span of several years to achieve high quality. It is typical that at the beginning of a course there is face-to-face class to meet and build community, but discussing a complex matter that requires reflection may be better accomplished through an asynchronous Internet discussion forum (Garrison and Kanuka, 2004).

The key issue in the literature on blended learning is the combination of face-to-face and technology-mediated instruction. Even though it has been expanded to geographical, technological and activity dimensions there is still room to add new perspectives to blended learning. Blended learning has a decades-long tradition in Finland. It has evolved to include, among other things, distance learning, which includes essays from literature with practical applications and criticism, service to society, practical training, student exchange, entrepreneurship and development tasks. The integration of research and development into education is a new innovation in higher education and creates capabilities for students to participate in development work after graduation.

Innovation pedagogy

Innovation pedagogy was developed to improve the external impact of the universities of applied sciences and support regional development (Kettunen, 2011). The institutions respond to the development needs of the enterprises and other organisations in the region. These development needs are typically multidisciplinary. The universities of applied sciences apply for project funding and integrate the projects into education. Students are offered project studies and they are able to learn innovation competencies in the research and development projects (Kettunen, Penttilä and Kairisto-Mertanen, 2013). Innovation competencies are gained in international collaboration and they are valuable to promote entrepreneurship and the export of education (Kantola and Kettunen, 2013).

The positive external impact of the universities of applied sciences is created with incremental or radical innovations (Tidd, Bessant and Pavitt, 2001). Incremental innovations are created by continuous improvement of products, services or processes. Radical innovations create new products, services or processes. Successful innovation pedagogy promotes the economic growth, employment and welfare in the regions of the universities of applied sciences. The curriculum is designed to reach out to and engage with regional development activities.

Individual learning is extended to collaborative and networked learning, which are the modes of delivering education in projects and distance education. The students are offered project studies where learning emerges as learners interact (Vygotsky, 1978). Students work together and improve their problem-solving skills to achieve practical learning goals (Puntambekar, 2006). Advanced learning takes place in professional education when learners are well-connected to their environment. The networks raise the ability of students and staff to participate and interact when they resolve their shared problems (Cross and Parker, 2014). Networked learning can be supported not only by information and communication technology but also by social and international networks.

International strategic network

Consortium on Applied Research and Professional Education

The CARPE network was established to support the economic and social cohesion in the European Common Market and create benefits for the universities of applied sciences in member countries. The following higher education institutions signed an agreement on the strategic network:

- HU University of Applied Sciences Utrecht (Hogeschool Utrecht)
- Turku University of Applied Sciences (Turun ammattikorkeakoulu)
- Polytechnic University of Valencia (Universitat Politècnica de València)
- Hamburg University of Applied Sciences (Hochschule für Angewandte Wissenschaften Hamburg)
- Manchester Metropolitan University

Trust is an essential element in social networks (Anderson, Steinerte and Russell, 2010). The purpose of the network is to benefit from the trustworthy and close collaboration of the higher education institutions. A formidable challenge is to know the knowledge areas of each institution, research groups and individuals in a changing environment. Therefore CARPE wants to keep the network relatively small to maximize its benefits. The European network is eligible for funding from the European Union. From the viewpoint of economic development, the purpose is to support the enterprises and other organisations, because for many European countries the continent is the most important export area.

The key activities of the CARPE network include student and staff exchanges and research and development projects. These activities are financed by Erasmus and project funding. There are also joint study programmes which support the exchange. The objectives of the CARPE network are as follows:

- Exchange and collaboration in European research programmes
- Development of joint study programmes
- Exchange of students and staff (also non-academic staff)
- Establishment of a strong European reputation

All institutions in the network are universities of applied sciences, which have professional education and applied research. There are no traditional research universities in the network, but the Polytechnic University of Valencia and Manchester Metropolitan University offer degree programs from the undergraduate to the doctoral level. Another criterion is that the members of the network are in similar fields of education, which enable student and staff exchange and joint degree programmes. The institutions aim to increase their external impact on the region by innovations, which means the creation of new or the improvement of existing products and services (Bessant, Lamming, Noke and Phillips, 2005). New or improved products and services require improved or reengineered processes (Hammer and Champy, 1993). All the member institutions are regionally oriented in order to support the economic growth, employment and welfare in the region.

Figure 1 depicts the CARPE network on the European map. One of the key ideas was the geographical coverage in Europe. At the first phase, the network is located in Western Europe. The network has planned to call partners from Eastern Europe to extend the geographical spread to better cover European markets. The Steering Committee accepted the University of Debrecen in Hungary as an associate member in November 2014 and it can be considered for full membership in the future.

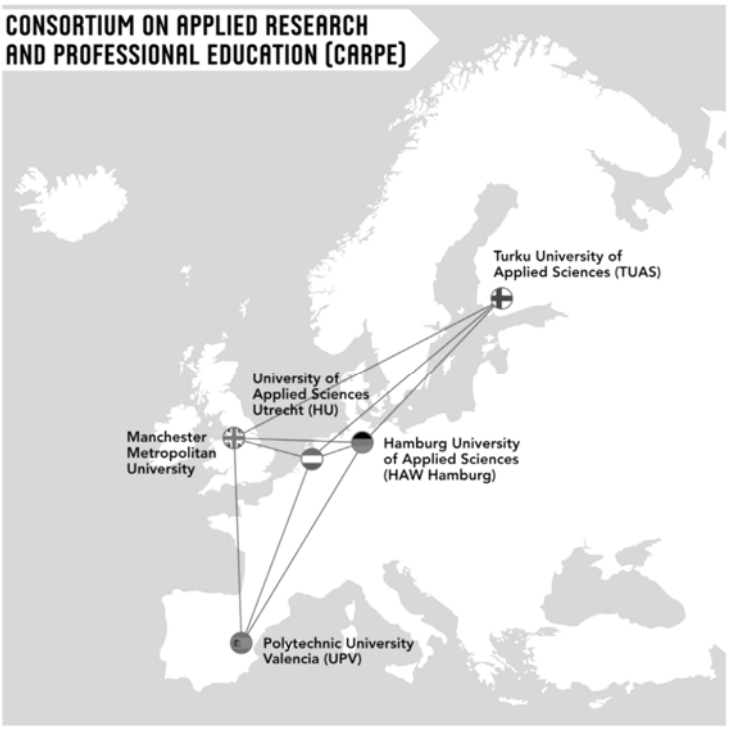

Figure 1. The CARPE network on the European map

CARPE is an open network, meaning that other higher education institutions and partners can join its activities. They can start the student and staff exchange, joint educational programmes or research and development projects whenever it suits both the parties. The active collaboration opens possibilities for associate membership. After a trial period, associate members can be accepted as full members if they fulfil the convergence criteria. It is necessary to avoid unnecessary bureaucracy and accept only those partners which are ready to pursue the common interests of network members.

The highest decision-making body is the Steering Committee, which meets twice a year. The plans and decisions are prepared by the support group. The communication group prepares the webpages and other communication. There are also working groups and theme groups responsible for the themes of the CARPE Conferences. Student associations also participate in the conferences and meet each other.

Results of collaboration in the CARPE network

Erasmus funding of student and staff exchanges has increased possibilities to plan research and development projects and to apply for funding from the European Union and other sources. The network has also arranged biennale conferences. The first CARPE Conference was in Utrecht in 2011 and the second in Manchester in 2013. The purpose of the conferences is not only the presentation of papers; experts attend to collaborate on joint projects. The number of student and staff exchange was 38 in November 2014, but many of the exchanges included several people.

There have been many project meetings and five larger workshops where researchers and teachers have shared their knowledge and presented new ideas for collaboration. A new idea is that the institutions offer joint degrees which lead to one or more degree certificates. International Semesters and student exchanges provide opportunities for internationally oriented students to study for at least one year at a host university. The number of educational and research projects has increased. In November, 22 project plans or projects were listed.

The network has also been useful from the viewpoint of other stakeholders. Enterprises and other organisations participated in research and development projects and benefited from the latest knowledge of the projects. Employers also benefit from the skilled graduates who have participated in international collaboration. The experience gained from practical training has become the most important reason for hiring graduates for enterprises and other organisations. The student associations have met at the conferences and planned future collaboration.

Distance learning in international networks

This section of the study describes the international collaboration of the Turku University of Applied Sciences (TUAS). It is one of the largest universities of applied sciences in Finland. It has four fields of education and 32 degree programmes leading to the bachelor's degree. Three of them are taught in English. TUAS has 14 master's degree programmes, two of which are taught in English. TUAS has four faculties: the Faculty of Arts Academy, the Faculty of Health and Wellbeing, the Faculty of Technology, Environment and Business and the Faculty of Business, ICT and Life Sciences.

International Semesters

TUAS has arranged International Semesters in nearly every Finnish degree programme. International Semesters are taught in English and they are at least three months and 30 European Credit Transfer System (ECTS) credits. Most of them are at the bachelor's level but some programmes are at the master's level. Several of the International Semesters have been developed with international partners; they combine contact and distance learning. An individual study plan is prepared for an international exchange student based on the discussions between the teacher tutors and students.

International degree programmes taught in English

TUAS offers three bachelor's and two master's degree programme taught in English to students who are interested in conducting studying in an international atmosphere:

- Degree Programme in International Business (Bachelor of Business Administration)
- Degree Programme in Information Technology (Bachelor of Engineering)
- Degree Programme in Nursing (Bachelor of Health Care)
- Degree Programme in International Business Management (Master of Business Administration)
- Degree Programme in Leadership and Service Design (Master of Culture and Arts)

The Degree Programme of International Business leading to the Bachelor of Business Administration is targeted to students who are interested in working in international small and medium-sized enterprises or for a global corporation. The Degree Programme in Information Technology leading to the degree of Bachelor of Engineering emphasizes the technologies, methods and tools for the computerized analysis and exchange of data. The Degree Programme in Nursing leads to the degree of Bachelor of Health Care. The mission of the degree programme is to educate students to work in international and multicultural nursing environments.

The Degree Programme in International Business Management leads to the prestigious Master of Business Administration. The degree programme is designed for those who work in development and management positions in international business. The Degree Programme in Leadership and Service Design includes design thinking, business and society and the focus of service design. The students have different professional and cultural backgrounds which enable them to find jobs in a variety of design positions in interdisciplinary environments and development work. The master's thesis is completed during the studies as the evidence of gained competence. According to the Finnish stipulations, three years of work experience are required after a bachelor's degree to be accepted for the master's programme.

Student exchange

International students can choose from a wide selection of courses taught in English. Studies at Finnish universities of applied sciences are professionally oriented and include a great deal of group work and project studies. International incoming students are assisted by a Finnish student tutor during the exchange studies. Student tutors meet incoming students at the beginning of their stay, introduce TUAS and help them take care of the practicalities such as accommodation and other practical matters. An exchange period is also a good opportunity to make friends and explore different cultures.

Practical training abroad

Practical training is a good alternative for internationalisation abroad. In return students gain

- good language skills
- international contacts
- new experiences

A degree student at TUAS can obtain financial support for international practical training from Erasmus scholarships and supplementary support from the funds of TUAS for three to five months. The students will earn typically 60 ECTS credits from the practical training but in some of the degree programmes the number of credits is higher. The students at the exchange must draw up a report on the period abroad and submit it within a month of returning to the home country.

Joint degrees

A joint degree is offered by a degree programme which is developed and provided by more than one higher education institution and which leads to one or more degree certificates. The term "joint degree" also covers the double degree agreed upon between two institutions. The double degree means that the student typically studies at least one year at the partner university. Normally, the student studies abroad at the host university during the third year of studies. Upon graduation, the student receives degrees from both from the home and host university. This can be quite an advantage in the labour market.

Institutions must agree on what is considered an accepted study completion. For instance, distance education, a jointly guided thesis or a practical training should be agreed. Practical training is compulsory for the bachelor's degree at the Finnish universities of applied sciences, but not every country has a practical training period included in the degree. Typically, the thesis is elaborated according to the criteria of the home institution, but the supervision and assessment may be realized by both institutions.

TUAS has signed double degree agreements with the higher education institutions located in the most important countries of international trade for Finland. It is important that the graduates from TUAS have necessary knowledge and skills and become employed in jobs where good knowledge about the trade partners is essential. TUAS has the following double degree programmes and partners:

Degree Programme in Information Technology

- Hamburg University of Applied Sciences (Hochschule für Angewandte Wissenschaften Hamburg)
- Polytechnic Institute of Coimbra (Politecnico de Coimbra)
- University of Tours (Université François-Rabelais de Tours)
- Ca' Foscari University of Venice (Università Ca' Foscari Venezia)
- University of Burgos (Universidad de Burgos)
- University of Lorraine (Université de Lorraine)

Degree Programme in Electronics

- Hamburg University of Applied Sciences (Hochschule für Angewandte Wissenschaften Hamburg)
- University of Zaragoza (Universidad de Zaragoza)
- Polytechnic Institute of Coimbra (Politecnico de Coimbra)

Degree Programmes in Business Adminstration, Business Information Systems and International Business

- Groupe ESC Troyes
- Regensburg University of Applied Sciences (Ostbayerische Technische Hochschule Regensburg)
- St. Petersburg University of Management and Economics

Degree Programmes in Energy and Environmental Engineering and Industrial Management

- Orenburg State University

Recognition and accreditation of previous studies and knowledge

The identification and recognition of students' previously acquired competence is based on the competence-based descriptions, which explain the learning objectives of studies. The way in which these objectives have been achieved is irrelevant. Learning can occur in formal education, distance learning and working life. The competence can be included in the degree or the studies can be replaced with previously acquired competence. Inclusion means integrating such higher education level competence to the degree that has no equivalent in the existing curriculum. Substitutability refers to replacing studies included in the curriculum of the degree programme with proven competence.

Students who return from exchange should ensure that the credit transfer to their degree is done correctly. They return the transcript of record obtained from the host institution to their home institution. If the higher

education institution does not belong to the ECTS, the credits must be transferred to the European system. For example, the credits achieved in the United States must be multiplied by two to achieve the ECTS credits.

Conclusions

Emerging information and communication technologies can be considered disruptive so that they require a careful consideration of the educational goals, contents, structures and processes. The elements of blended learning, innovation pedagogy and distance learning are becoming more popular in higher education. Educational development demands careful policy development and implantation. Administrators must consider strategic management, pedagogical outlines, program development and infrastructure requirements. Faculty members have the opportunity to use the new technologies and pedagogical outlines to facilitate learning more effectively. Students must re-examine their assumptions and learn what will be required of them in the labour market after graduation.

This study presented the CARPE network, which was formed by five European universities of applied sciences. The strategic network of the universities of applied sciences provides a trustworthy learning environment for students who want to strengthen their international competencies. The network has had positive results on the student and staff exchange and research and development projects. The common fields of education of the institutions help students and staff increase exchange. The trustworthy relationships between institutions help the research staff to plan research and development projects and apply external funding. The study also presented empirical evidence of the distance learning in international networks. International Semesters and degree programmes at the home university are first steps, followed by student exchange and practical training abroad.

The results of the CARPE network are positive. The number of student and staff exchanges has increased. The network has arranged conferences, workshops and project meetings to share knowledge and present new ideas for research and development projects and other collaboration. The number of research and development projects and the funding from the European Union has increased. The network has also benefited enterprises, other organisations and strengthened the economic and social cohesion in the European Common Market.

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PROFESSIONAL LEARNING COMMUNITY IN EDUCATION: LITERATURE REVIEW

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Abstract: Professional learning communities enable teachers to collaborate and upgrade their skills to enhance student learning. Nevertheless, professional learning communities vary widely in practice, especially between the developed and developing countries. This review paper discusses the background and development of professional learning communities. It begins with the various definitions of professional learning communities. It then goes into developments and practices in Britain and the United States of America. It then focuses on three models of PLCs: the Senge model, the DuFour model and the Hord model. The similarities and differences in aspects of the three major models are discussed. This paper also covers some differences in practice of PLCs in developed and developing countries, with particular reference to the Asian experience. Finally the role of technology in developing professional learning communities is discussed, and some suggestions for future consideration are given.
Keywords: Professional Learning Community, Literature Review, Professional Learning Development, Three models, Common Core Curriculum Standards

1.0 Introduction

With the development of professional learning communities (PLCs) of teachers, scholars have studied the formation, function, system, positive effect related with this area. Bryk, Camburn, and Louis(1999) raise their view "The classroom is the fixed place in which teachers deal with regular work that is paid close attention to, but their work also have other contents" (Bulkley & Hicks, 2005). The interactions of teacher peers are very necessary and very important to perfect the process and outcomes of teaching and learning. In this situation, the PLCs become the important tool to meet teachers' new knowledge and other requirements continually to help teachers adapt and improve their visual field which is helpful for both the teachers and the whole organization. Professional learning communities have the positive function of joint professional learning and fulfilling teachers' immediate needs (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006).

1.1 Definition of Professional Learning Communities

Following the development of professional learning communities, many researchers and scholars give their definitions on the topic of professional learning communities in different periods.

In 1983, after the publication of "A Nation at Risk", teacher professionalization and teacher development have become significant issues to discuss in the school development field(Scribner, Cockrell, Cockrell, & Valentine, 1999). Barth described learning communities as "a place where students and adults alike are engaged as active learners in matters of special importance to them and where everyone is thereby encouraging everyone else's learning" (Roberts & Pruitt, 2008). Newmann (1996) gave his conception of professional learning community which including five main elements. The professional learning community is a team, in which teachers have universal views on collaborating, sharing, reflecting, and the needs of their teaching and learning practice (Hord, Roussin, & Sommers, 2009). Hord (1997) indicated the conception of professional learning communities in schools that refers to teachers and staff following the five dimensions steadily: supportive and shared leadership; shared values and vision; collective learning and application of learning; supportive conditions, and shared personal practice.

Myers and Simpson(1998) represented learning communities as a cultural system for learners to learn as an entirety that is helpful for learning and other good aspects to interact with other participants (Roberts & Pruitt, 2008). Collay et al. (Collay, Dunlap, Enloe, & Gagnon, 1998) posited that all the learners, the ensemble development of learning communities and the procedures are significant.

In 1999, Speck explained that the school learning community is a continuous procedure of collaborative interactions among teachers, students, leaders, staff, parents by the way of conversation to develop learning and life in school. The community helps individuals in learning and makes them contribute to the learning community (Roberts & Pruitt, 2008). Cochran-Smith and Lytle in 1999 suggested that professional learning communities make teachers get more formal knowledge combining with practice knowledge. Professional learning communities provide the conversation and writing to establish close relationship between the contextualized knowledge and application. According to Fernandez (2002), PLCs are defined by two aspects:

teachers have frequent interactions between their teaching and learning. They can plan and discuss the contents, forms, teaching methods and all the activities of peers' observation; teachers should do research to explore new knowledge and publish (Cochran-Smith & Lytle, 1999).

Seashore Louis and colleagues (2003) developed their view of professional learning community to help teachers to expand their sights and goals from sharing individuals' actions to build a common culture which develop continued collaboration in more substantiated, knowledgeable ways. In PLCs, teachers pay more attention to students' outcomes by testing and examining their own ideas. Moreover, going into depth on topic of teachers' performance connections with others outside classrooms is very important; as important as ensuring their performance and actions in their classrooms by the evaluation and measurement of students' results and teacher professional learning (McLaughlin & Talbert, 2006).

In 2007, Stoll and Seashore Louis published their conception of Professional Learning Community of schools which had four key points: professional learning; the paradigmatic group or team; collective knowledge; create the atmosphere with moral caring on leaders, teachers, and students. In the opinion of Speck, the school learning community needs leaders, teachers, students, parents and other community members together to establish and develop. They should apply appropriate dialogues and conversations on topics related to school community improvement (Roberts & Pruitt, 2008). Many other researchers described the PLC as a positive environment where teachers work and interact with others to achieve the common goal of student accomplishments under the powerful system led by an effective school leader (Hord et al., 2009). But are professional learning communities sustainable in the long run? Stoll et al. (2006) concluded that changes in senior leadership ofschools appear to be a factor, so increasing attention is being paid to thepotential of leadership succession planning to help promote PLC sustainability.

This paper will discuss the emergence of Professional Learning Communities in the US and the UK and then consider in detail three teacher professional learning models: Senge's Model, DuFour's Model and Hord's model.

1.2 Studies of the Emergence of Professional Learning Community of UK and US

Traditionally teachers used to work in isolation much like independent contractors within a school. During the late 1980s the focus of reform within schools started to shift from this traditional approach to a modern approach focusing more on accountability, collaboration and teacher efficacy. Rosenholtz (1989) brought attention to this topic through her empirical research on workplace condition of the teachers. She identified that effective school workplace is an important prerequisite to encourage teacher collaboration – where teacher can share and analyze with each other their institutional practices and share ideas to improve the quality of instruction.

Rosenholtz also found that student achievement and success is positively correlated with the teachers' sharing ideas and improving institutional practices. She conducted the study on 78 schools to examine the teachers' workplace and found two types of schools based on the workplace conditions – learning enriched schools and learning impoverished schools. In learning impoverished schools, teachers used to work in isolation and their belief in their capability to bring meaningful change is greatly diminished. In learning enriched schools, the teachers work in collaboration through creating shared goals and focus on improving teaching and learning. The study found that this sort of collaboration among the teachers led to increased level of teacher efficacy and commitment which resulted in increased student achievement. Rosenholtz (1989, p. 430) also noted that in most traditional school settings*"..... teachers function as individuals in isolation who rarely share ideas; who don't seek or offer professional assistance; who insulate themselves from self-disclosure of inadequacies; and who convince themselves that their problems are particular only to them -- teachers avoid help seeking if they view it as potentially embarrassing or stigmatizing and if it again threatens their sense of professional adequacy."*(p. 430).

In contrast, Senge (1990) in the book "The Fifth Discipline" focused on systems thinking in a learning organization:*".....where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together...."* (p. 3). The book focused on the idea of engaging teachers in teams to create and develop a shared vision that will direct them to guide their work, and improve their teaching. The book became a driving force in the school districts and educational settings due to its focus on the development of professional learning community.

School administrators and teachers are the interconnected subsets of a larger system where each element of the system is supposed to work collectively to resolve problems and continually improve and utilize the expertise of other team members. This sort of system took shape in many forms across the USA. Later the practice became known by the term "learning communities". Astuto et al. (1993) named this process of the teachers coming together to share knowledge and bring improvements to their practice as Professional

Community of Learners. Hord (1997) later coined the practice as professional learning communities and positioned it as a focal point of education discussions.

The professional learning community (PLC) approach to teaching shifted the focus from an isolated teacher-centered approach to instruction to a student-centered approach where teachers work interdependently and collaboratively and focus on a shared mission of collective capacity building, identify learning gaps and develop effective institutional practices to fulfill the needs of all students. The school administrators began to understand the effectiveness of PLCs and started to invest resources and time into it by restructuring institutional systems so that teachers can gather and discuss on enhancing curriculum knowledge, share ideas and develop local standards and assessments (Darling-Hammond, 1996).

At the Center of Organization and Restructuring of Schools at the University of Wisconsin-Madison researchers identified the most effective way to restructure schools to improve student achievement. The data were collected over the period 1990 to 1995, and from over 1500 elementary, middle and high schools throughout the United States, as well as field research in 44 schools in 16 states. They found no unique simple way of improvement that could be implemented nationwide consistently (Newmann&Wehlage, 1995). However, they showed that the most successful schools were those which introduced professional learning communities and concentrated on higher level collaboration among teachers and enhanced student achievement. They also identified that building these PLCs require certain specific workplace conditions and a well-defined mission.

In 1995, Lee et al., working for the Center on Organization and Restructuring of Schools released a report on successful school restructuring efforts which spread over 11,000 students from 820 schools across the United States. They found that the schools characterized as PLCs showed increased student achievement, and both their teachers and students are more committed to the school goals and mission and the administrators work in unison with the teachers and students to improve classroom instruction.

DuFour et al. (2006) defined the term professional learning communities as – "Educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve" (p. 217). They also explained that effective professional learning communities are structured under the assumption that: A structure of ongoing, job-embedded learning for educators needs to be ensured to achieve sustained improved learning for students; This approach focuses on results-oriented goal setting for each member of the organization in order to achieve high levels of learning for all students; Members of the PLC are expected to work inter-dependently to achieve agreed upon common goals that are focused primarily on student learning.

From this perspective teacher collaboration is not the only key to success of PLCs; rather the key is that the collaboration is focused on classroom practices which will lead to improved student learning. The success of PLC largely depends on collective enquiry, reducing isolation among teachers, reflection on current institutional practices, sharing responsibility for the learning of all students and creating a capacity for learning. Student success becomes the only institutional priority and the focus moves away from excuses and blame, to an approach focused on learner individual needs (DuFour et al., 2006).

Reeves (2010) analyzed the effects of professional development on student achievement gains. He found that student achievement gains were significant when schools come together in PLCs to engage in deep discussions about planning, implementing instructional strategies, and monitoring student results. His analysis of schools implementing PLCs from the United States and Canada unearthed that the deeper the implementation, the more dramatic the student achievement. Yet too often schools fail to develop a process to adequately support teacher professional growth. Given the importance of a collaborative culture with a focus on learning for all (DuFour et al., 2006) it would seem that teachers can no longer work in a completely autonomous classroom, using concepts and principles of the 20th century factory model but instead must have a systematic way to collaborate with peers to share proven effective practices (DuFour &Eaker, 1998).Teachers are not only expected to develop a list of strategies, they also need to monitor the growth and development of each individual student and adjust their teaching to the individual needs of each. DuFour et al. (2004) argued that a school truly committed to the concept of learning for each student will develop consistent, systematic procedures for responding when students do not learn. Schools and classrooms should be results-focused and develop a plan for continuous improvement through aligned assessment and data analysis. This use of data emphasizes a collaborative approach to continual improvement and research into best practices.

2.0 Senge's Model

Peter Senge is a very famous scholar who contributed in the two areas of business world and the education community. In the field of education, he proposed his significant visions of the learning organization. He wrote the book The Fifth Discipline, and another one is "Schools that Learn: A Fifth Discipline Field book for Educators, Parents, and Everyone Who Cares about Education" for explaining and improving the important conceptions.

Senge et al. (1990) published The Fifth Discipline Field book that offers a simple dynamic set of structures and useful material five disciplines for leaders to set up the effective school learning organizations. The five disciplines are personal mastery, systems thinking, mental models, shared vision, and team learning. Each discipline includes the principles that can guide us to learn, master, practice, and test in our lives to get success of work (Cochran-Smith & Lytle, 1999).

In his view, the five disciplines make the members in the organization add new elements in their minds. The change of minds arouses the members to improve their knowledge and abilities through the learning process (Hughes & Kritsonis, 2006). In these five disciplines, the first one is personal mastery. On the basis of Senge's view (1990), personal mastery''…is a procedure. It is a discipline for long time to learn and practice. "When people have high level of personal mastery, they will have the ability of understanding their ignorance, incompetence" (p.142). "Only individuals learn that can stimulate the whole organizational learning .If the organizational members do not learn, organizational learning will not happen (Senge, 1990, p. 139). Personal mastery is the discipline which needs the long sustained time to realize and go deep into personal vision which stress on individuals' vigours, patience, the realistic conceptions, the abilities and skills. Moreover, it means that personal mastery is the process of spiritual growth (ibid.141).

The discipline of personal mastery builds the forms of self-development and individual learning (Caldwell, 2012).It is the theory on individual development which help distinguish the significant things for individuals and focus on the interrelation and mutual responsibilities of individuals and their organizations. When workers consider that their organization has positive influence on their individual development, they will try their best to make contribution to the organization by working hard (Wells &Feun, 2007). Personal mastery application brings the way in which we go access our life as the creative work process with the perceptions of innovation and continuation. This is the practice process including we should discriminate the important tentative ideas and how to achieve the goals from the realistic circumstances following the steps in practices of growing progressing with the development of related actions (Lloyd Raines,2009).

In Sage's five disciplines, systems thinking is the conceptual cornerstone.Systems thinking refers to the way we see interrelationship links, and connections existing in things. It is unique because it combines other disciplines, and coalesces them into the entirety of theory and practice (ibid.: 12).According to Senge, systems thinking conjoins the other four supporting disciplines for seeing the wholes. Systems thinking focus on revealing interrelationships and change patterns (Senge 1990a, p. 23).

Not only seeing parts and pieces, systems thinking indicates the process of observe the whole, but also studying the relationship of each main element of the system such as how make decision, the perceptions, the outcoming quality, hierarchical relationships and so on (Lioyd Raines,2009).The contents of systems thinking include two parts: one part emphasis on the whole entirety, the other part is focusing on the individuals.

The third discipline is mental models. According to Senge(1997), mental models are our views, mindsets, and assumptions even pictures and images which impact our comprehensions of the world effectively and how to do our behaviors. Mental models can use the learningful dialogues to maintain people's needs and requirements which relates to their effective thinking and their thinking impact on other people. In organizations, mental models have significance to guide members to decide new orientations and improve their work skills which bring the new changes. "Mental models should be strengthened and systems thinking can arrest changes sometimes". According to Senge (1997), the discipline of mental models need openness and honesty. Mental models emphasize understanding and learning others' feelings, thoughts and what they want to express. Openness is useful for people to know saying the appropriate words in different situations, and absorb more power information to build up their mental models.

Moreover, the practice of mental models can break people's inherent wrong perceptions including the areas of business and education. Sometimes people do not ask questions when they do not know the answers. To everything, people usually have their own certain views or predefinitions about how things work .In other words, mental models produce the effect on setting the way how people perceive reality (Senge, 1997).

The discipline of shared vision is important for people to expand and integrate their visions that can make organizations achieve. According to Senge (2000) the discipline of shared vision has the ability of aligning disparate aspirations among people (p.72). For organizations, shared visions bring the experimentation and innovation to improve the organizational quality. In organizations, every member has his or her own personal aims or goals which they want to achieve. However, all members belong to their organizations, and shared visions are useful to combine individuals' purposes to bring experimentation and creativity to the organizations to work for the same goals (Cochran-Smith & Lytle, 1999).

"Team learning" as discipline focuses on "the process of arranging and improving teams' abilities to attain the goals of members' and the whole organizations' (Senge, 1990, p. 236).According to Senge, the learning organization needs teams working together and argued that team learning can give members a set of resources, information, feedback, fundamental values, general thinking, and help members to solve their problems in

creative ways. With global changes, job pressures, fierce competition, new technological skills, we need new conceptions and behaviors as bases to set up and develop learning organizations (Hughes & Kritsonis, 2006).

2.1 DuFour's Model

According to DuFour's views, as an organization, the foundation of professional learning communities is the development of teachers' cooperative work which focuses on improving the abilities of dealing with complicated work of teachers although helping students narrows the gaps of learning to achieve their learning goals. DuFour argues that the PLC should pay more attention to learning not teaching, cooperative working only to get individuals' achievements (DuFour, 2004).

To DuFour, the learning community should contain the basic characteristics: shared vision, mission, values, and aims; learning is the primer of the cooperative teams; the cooperative team needs practical and realistic traits; the action orientation should be clear for members to achieve in application; duties for sustained development of learning teams; and the learning teams should have the outcome orientation.

"Shared mission" means that each school has its own tasks or missions related to educating students, developing the quality of school to attain their stated goals and so on. The premier issue of cooperative teams is learning. Schools should offer support to students that can meet their needs in regular sequence to reach the high level, not educational chaos (DuFour, 2004). The collaborative teams in schools emphasize on ensuring students learn. Every teacher should understand how to guide students to learn in the best way. The staff also need to be aware of how to create harmony to adjust learning phases and the support for students in learning. Hence collaborative teams need the best practice and current reality (Shipley, 2006) with the foundation of basic resource, universal standards, evolution systems of outcomes, students' performances and so on. In DuFour's view, although every member has their individual district work, they all work in coordination with each other to achieve the common goal in collaborative teams.

In order to get the same goals to gain outcomes, members in the collaborative team should have the orientation conducting their actions and behaviors (Shipley, 2006). As teachers, they must keep open minds to accept new ideas and conceptions which can help them achieve their aims. In collaborative teams, the evaluation measurements need to be applied for their outcomes. Dufour used six reasons for learning communities to need evaluation measurements: Efficiency, Fairness, Effective monitoring, Informs individual teacher practice, Team capacity, and Collective response (Shipley, 2006).

Richard DuFour raises the "Big Ideas" of stating the topic of "Professional Learning Community". DuFour (2004) proposed that "The key point of building is learning not teaching, working cooperatively for designed aims" (p.6).In schools, the prime task is to help students and to ensure they learn. This is the core conception of the first big idea. Form the conception of "teaching" to "learning", this is the great change in learning organizations. All members in learning communities should understand about student learning: communicating teachers' wants to students, the ways of knowing whether students learn or not, and the methods of solving students' difficulties in the learning process (DuFour, 2004).

According to DuFour, the second "Big Idea" is culture collaboration. In the PLCs, the members including teachers and staff need work cooperatively to build and develop the cultural systems in their organizations. When teachers are belonging to one entirety, they also want to need to work individually sometimes. In addition, some staff members have the limitations of understanding "collaboration" only exist the camaraderie in organization. Someone only focus on one aspect of school's operation such as discipline, technology, social climate, not the whole perception of professional learning community.

Professional learning community must have the strong organizational procure of improving the collaboration of culture system for teachers' working together to help students get more progress through the high levels of learning. In addition, in the process of collaborating school improvement, teachers should pay more attention to supervise each student's main outcomes. As teachers, they should make different beneficent standards or goals for different students to achieve. They also have the rules or benchmarks to evaluate qualities of students' work. By these useful methods, teachers can know the time to manage the measurements of students 'work.

The measurements of students' work are important for teachers in professional learning communities to analyze their students' advantages and disadvantages in the learning process and adopt suitable tactics to improve student learning. This is the best way for the ensemble to expand new minds and new ideas in building the professional learning community.

DuFour proposes that the third "Big Idea" is results focus. Effectiveness of the professional learning community or not depend on the results. In schools, the common work for teachers is teaching knowledge to students to make students get developments by working together. Usually, according to students' current learning situations, teacher groups should analyze the learning levels to formulate the specific plans to attain

their designed goal for make the progress periodically. Teachers in cooperative work groups must change their goals to raise students' percentage or decrease student failure.

Teachers in the professional learning communities need more useful information about their students' performances compared to other students. In PLCs, every teacher can get the materials, minds, and tactics with other colleagues (DuFour, 2004). The teachers should be required master the more useful data to analyze the students' successful performances overall not only by the average rates. Teachers and staff stress the important goals of students' learning, and share their information, thoughts, and tactics for working together to improve students' progress instead of working isolated. The PLC needs hard work to build and maintain progress. The members in PLCs should pay more attention to learning, and do everything which has relationships with learning to collaborative work for the sustainable progress.

2.2 Hord's Model

Hord (1997, 2004) describes the professional learning community by five characteristics or dimensions: supportive and shared leadership; collective creativity; shared values and vision; shared personal practices; and supportive conditions for sustaining the learning community (Feger & Arruda, 2008).

According to Hord, the first characteristic is shared beliefs, vision, and values. Hord (1997) argues that in the process of improving PLCs the key point is a shared mind, universal goals, and the same central value system for sustained learning. In the PLC, the main belief must be learned by students. The main values can be advanced to encourage teachers to share their visions to develop their students' learning (Cormier & Olivier, 2009). In professional learning communities, teachers have the responsibilities to build their value mechanism by working together to attain individual goals.

Hord (2004) states that school visions can connect school's tasks as vivid figure with the school's main direction and principles including decision-making, activities of guidance and management, and professional improvement. Hord (1997) argues that teaching methods must change that contain thoughts and professional practice for improving shared visions.

In professional learning communities, Isaacson and Bamburg (1992) suggest that vision is the old topic which means tasks, aims, goals, objectives, and the papers in the leader's office. For staff, the shared vision means it is the general conduction to make decisions in the procedure of teaching and learning. More important, staff should create positive surroundings and atmosphere to improve students' learning. DuFour and Eaker (2008) stated that an effective professional learning community should know the school's interest as the orientation that is related students' leaning and the aims of the whole organization.

According to Hord(1997), the second dimension is supportive and shared leadership. Hord (1997) raises her view that school principals and teachers share their specific duties and responsibilities have the positive effects on leadership in PLCs .She also says that leadership is the important content in professional learning community as it has the positive influence for leaders and teachers to share their authorities, ideas and determines for attaining the school's vision (Cormier & Olivier, 2009). The positive leadership ability should be built in professional learning community has six main advantages pertinent to stressing on leadership for interactions; relations of teachers' supports and involvements; taking the school's visions as the regular actions; arousing goal professional culture developments; the methods of dealing with difficulties and clashes; and the entirety of organizations. According to Kleine-Kracht (1993) the leaders, the teachers and the staff must learn how to find questions, how to do surveys, and how to find the suitable ways to overcome the difficulties to develop the good quality of school (Hord, 1997).

As Hoerr (1996, p.381) says, the leaders and teachers should develop shared and collegial leadership which help them to know they are a whole for working to achieve their universal goal. Leithwood and his team's researches (1997) reveal that the leaders should give teachers high respect to work together with them as professionals, peers, and colleagues.

Louis and Kruse (1995) indicate that leaders or principals need supportive leadership because it is the basic element of human resources for professional communities with school-based which make the leaders understand they have the responsibilities to construct their effective schools(p. 234).According to Prestine, in order to build more effective professional learning communities of schools, three main factors are needed that include the capabilities of sharing authority, the capabilities of offering convenience to their teachers and staff, and the capabilities of attending actives without privilege (Hord,1997).

In Hord's views, leaders should decentralize their authority that stimulates the successfulness of shared leadership, but it is decided by the leaders' perceptions and minds. The point is explained by Hord and Sommers (2008) "Professional learning Communities must have the important and necessary factors including authority, power, and decision making to be shared and inspired"(p.10). However, Hord admits leaders change their minds or conceptions of sharing leadership exists many difficulties, and some teachers also think it is more difficult. Huffman puts forward the view that the faculty should play the function of advocating and applying the teachers' suggestions when they are considered significant. In conclusion, the leaders of schools need to develop their

democratic conceptions and behaviors to share power, make decisions, and adopt the valuable suggestions form their teachers and staffs which are contributed for the effective leadership (Cormier & Olivier, 2009).

In Hord's five dimensions, the third one is "collective learning and the application of that learning". It refers to how leaders and teachers need the way of inquiring to build up the community (Hord, 1997).She thinks the forming of professional community is a process of ongoing and collective learning in school faculty (Hord&Sommers, 2008). In addition, she adds the implementations; the collective learning is very significant to the professional learning communities because it includes getting new knowledge and the process of practicing knowledge in classroom which has the close relation with the school's perceptive of students' learning goals (Hord, 1997).

In the PLC, applying of systemic model which guide the ongoing and cyclic process to form the abilities to explore new knowledge and get the professional reflection for schools. Six elements are comprised: study, select, plan, implement, analyze and adjust (Cormier & Olivier, 2009), Hord also provided the evidence to prove the professional Learning Cycle by her views of collective learning.

Actually, collective learning is an ongoing process including leading student learning and dealing with the school's specific problems (R. P. Dufour, 1999).The collective learning process can help teachers develop their subject matter knowledge and teaching skills and practice these in classroom in order to improve students' learning results and the professional qualities of schools as the regular activities and interactions (Cormier & Olivier, 2009).

The fourth dimension of Hord's (1997) is supportive conditions contains specific organizational structural and relational supports (Pitman, 2008). According to Hord(1997), supportive conditions means interpersonal relationships and physical resources (Cormier & Olivier, 2009). In fact, the supportive conditions contain the two main parts: human capacities and structural resources. In addition, in order to maintain and develop the PLC, structural supports have the different dimensions of meeting times, sizes of schools, the necessary resources, money for supporting schools and teachers' activities.

In Hord's thoughts, the physical conditions and human abilities have the positive influences to school's running. Human capacities should play the effective role in the professional learning social procedure as a contributing member. The human capacities include the contents of collective learning, shared leadership, and shared professional practices.

In the supports of structures, Hord (1997) thinks communication structures are very important with the foundation of school size and constructions. Communication structures need the depth of feedback and reflection. The range of communication structures is wide including staff meetings, email, information boards, and mailboxes. These tools are helpful for effective schools. Usually, Email is very important for teachers and leaders to share available resources, inquiring questions, and shared practices (Pitman, 2008).
Huffman(2003)argues that the faculty or subareas are fit for developing and applying shared leadership containing small groups, grade gradations, and partition teams how to set up and develop the abilities of settling the problems in students' learning.

The last dimension of Hord's (1997) model is shared personal practice. Hord(1997)says that the individuals' behaviors have the direct influences for setting up group capacities which are important for professional learning community (Cormier & Olivier, 2009).Shared practice is the hinge element of classroom pedagogy used that can develop schools' qualities. Louis and Kruse (1995) state their views that in professional learning community, teacher's actions are formed through the process of peers' helping and cooperative influences (Hord, 1997).Midgley and Wood (1993, p.25) proposed that teachers need the suitable and encouraging environment to provide the support for their specific and complex tasks, risks and challenges to improve the PLC.

Shared practice is the process of teachers' reciprocal actions comprehension including teacher peer's observation, peer's coaching, peer supporting, encouragements, peer's trust, and shared feedback and results from students' work and explore the best ways to help them. Leaders must emphasize the formal classroom observations which help teachers build their individual perceptions for developing professional abilities that foster the collective capabilities. According to Hord (1997), schools should create the norm of school culture which means the helps among teacher peer's work-doing, judgments and effective reflections of their tasks. Huffman and Hipp(2003) think that the foundation of building the culture of shared practices which need the procure of experience repeating many times and this is the necessary stages (Cormier & Olivier, 2009).

2.3. Antecedents of Professional Learning community

We will now discuss briefly the antecedents of the Professional Learning community, among them leadership and culture.

2.3.1. Leadership

The goal of building a professional learning community is student learning. In the process of building and sustaining professional learning, much of the literature from many researchers and scholars consider that leadership is very important to set up and support the professional learning community. Good leadership has the positive effects on students learning performances and make for great progress in student learning(Bryk et al., 1999).According to Beck and Murphy (1994), the leadership styles which have the characteristics of "principal as follower" or "the leader-centered" are helpful.

According to Louis and Kruse (1995), the school leadership plays the key part to improve and strength the professional learning community defining the six main features: Leaders put themselves in the center of teachers and staff not the top of the team; teacher's classroom supports help PLCs because one teacher's problem can bring out all teachers' group discussion and solutions and develop teaching cooperation, and duties for mutual help; good leaders are aware of creating the culture of inquiring and absorbing the new knowledge, new ideas and the reflections of teaching practices; Leader build the form of actions and make the culture more easily recognized; Leaders have the abilities to deal with conflict including querying and discussing in schools; leaders should build school as more wide PLCs which shows solicitude for all teachers in the ensemble.

Good leadership is the significant catalyzer for developing PLCs to attain the goals by shared knowledge and developing the qualities of every aspect of the PLC(Shipley, 2006). According to Harris (2008), distributed leadership has the ability of enhancing the professional learning communities of schools (Harris & Jones, 2010). In addition, Harris (2009) states that the main trait of distributed leadership is that teachers have cooperative working with shared equipment. Valentine,Clark, Hackmann, and Petzko (2004) suggested that good leadership must ensure leaders and teachers share common values, goals of their programs and practices to lead all students to success in their coherent curriculum with the student-centered guidance; school leaders need to provide more opportunities for attending more teaching activities with their teachers; leaders play various roles in making decisions, coordinating and guiding the whole classroom teaching; leaders should create and maintain the school systems which service the teachers' and students' learning and set up healthy relationships of teachers to teacher, students to teachers, and students to students (Valentine, 2006). According to Dantow (2005), schools maintain the systems due to the good persistence leadership. Valentine considered that if the school does not have good leadership, the good school does not exist (Valentine, 2006). In other words, the positive school leadership can develop the professional learning community.

2.3.2. Culture

School culture encompasses institutions including norms, values and beliefs, rituals and ceremonies, symbols and stories which build up the school's "persona" (Peterson, 2002). The school culture impacts on the members' thoughts, perceptions, feelings, behaviors, and the ways to solve problems that can lead to school success because the good culture needs all the leaders, teachers, and staff to shape, identify, and follow to carry out improvements. In good culture, the characteristics can be strengthened to reinforce school members to learn together, get commitment and motivation. According to Deal and Peterson (1998), good school culture has direct positive effects on the improvement of schools with the members' conceptions and attitudes (Boyd, 1992, p.1). Fullan (1992) stated that many researchers considered that school culture is always ignored because it is easy to change. Schein (1985) said that we always depict the contents of school culture as the organizational members' common assumptions and beliefs, but school culture is determined by the school's perception, goals, and surroundings.

As Schein (1985) articulated, school leaders must have the abilities responsibilities, and skills to create, manage, and maintain school culture and make all the school members work in common. They should learn the history of their school, and make the comparison to the prior schools' development plans to learn the merits and study the experiences to get real ways to help the whole school members to improve. School leaders must adopt some effective ways to shape the good school culture.

Good culture should emphasize learning, and it refers to make the balance between interests and stakeholders, pay more attention to people not only the school system, help school members to build up confidence to change the surroundings, provide more time for members to learn and communicate, arouse their enthusiasm for teamwork, and create effective ways to solve problems. It can facilitate the learning at all levels. In the PLC, learning is the most significant issue. Learning is not only referring to the students' learning, but also the leaders, teachers, and staff in the whole organization, in short, community learning. Good culture has positive influence on PLCs when teachers agree with professional development is very important, valued, and the set of rules for leading school members do all the things to accord. When school culture has the effective professional learning, the professional development is being perfected and improved. Teachers with the good culture conceptions must be focused on: collaboration, a focus on student learning, teacher authority, and continuous

teacher learning that belong to the professional learning community. Newman and Wehlage (1995) argued that teachers with the good culture seek the clear shared aim to work cooperatively and undertake the universal responsibilities for students' learning. Teachers' culture includes the tasks and missions. Teachers' strong universal value can construct the safe and stable surroundings for teachers and can form the powerful leadership (Peterson, 1990). Fullan (1993) stated that the good school culture can inspire power for teacher learning through the process of teaching students' learning and the cooperation of working with other teachers and managers (Valentine, 2006). Gruenert (2005) concluded that good school culture has positive influence on students' achievements. In conclusion, the positive school culture promotes the professional learning community.

2.4 Motivation

2.4.1 Motivation Theory

According to Beltman (2005), motivation means people have guarantee, attendance, and sustainment of their activities. People must have motivation to help them to insist on their continuous professional learning in their daily life. To the perceptions of learning and motivation, individuals have the conviction that the self and learning activities must match. People also have the clear awareness of their conceptions, behaviors and practices which should be harmonious in the working environment. There are two main motivation theories applied to guide the continuous study. One is the expectancy value theory which emphasized on the self and the learning actions to people; the other theory is goal theory which focuses on motivation beliefs of the social context.Many dominant theoretical approaches to motivation pay more attention to students' learning and school performance which including Expectancy- value, Achievement Goals, Interest, and cost relating to the Emotional filed. However, we focus on the relationship between teacher motivation and professional learning community.

2.4.2 Expectancy-Value Theory

Richardson and Watt (2006) and Watt and Richardson (2007) gave the framework of expectancy-value theory to prove the relations of teachers 'motivation, their grantee, commitment and the continual teaching in professional development. Motivation has many influences on teacher efficacy including their self-perceptions abilities interfering with their achievements. To students, teachers' efficacy and skeptical consciousness have impacts on students' in enthusiasm, work guarantee, and conductive actions (e g. Tachannen Moran& Woolfolk Hoy, 2001).

Teacher efficacy use teachers' conductive actions to influence student achievement (Ashton & Webb, 1986; Tschannen-Moran et al., 1998; Turner et al., in press; Woolfolk Hoy & Davis, 2006). Teacher's confidences are also very important to apply in instructional strategies. Four elements make up the values (Wigfield& Eccles, 2000) which are interest value, utility value, attainment value and cost.

Interest value means that people can attain happiness from performing the mission; utility value refers to how the mission build up the relationship with their goals; attainment value emphasizes on significance of completing work well with teacher identity, and cost means work also has negative respects concluding anticipated emotions and the great efforts leading to success in missions. Watt and Richardson (2006, 2007, 2008) investigated teachers' work as related to intrinsic value, personal utility value and social utility value. They also paid attention to professional learning community and gave the frameworks for evaluating value to efficacy and how teachers integrate the PLCs to get motivation and benefits.

2.4.3 Achievement Goal Theory

In conclusion, we can understand that students' achievements and their self-regulation and accomplishment must be coordinated. Teachers' activities, their structures of success have great impacts on students' achievements. Teachers use the structures to manage their students and classes, get the feedback to students' good or bad results, and put the key point to systematic performance and the comparative capacities of developments and undertaking hazard in study. In these years, more and more researchers began to attach importance to teachers' emotions and students' emotions in academic learning. Pekrun's control-value theory is applied to sort out emotions by the two dimensional system. Teacher emotions contain anger and frustration that have the close relation with their identities, conceptions, and aims in the classroom. They also have the influences on teachers' professional learning community.

2.4.4 How motivation affects professional learning community

Motivation affects students' learning and behavior in a number of ways. First of all, motivation can influence students' behavior towards specific goals. It helps students to identify the specific goals and strive for it, and thus affecting the students' choices.

Theoretical literature on teachers' motivation in context of developing countries is sparse, but certain psychological theories offer relevant applications for the developing country context. According to Maslow's Need Hierarchy Theory (1943), individual's lower order needs (i.e., basic needs e.g. food, clothing, shelter etc., safety and security, belonging and self-esteem needs) are to be fulfilled prior to motivate to fulfill the higher-order need of self-actualization. In the context of teaching, self-actualization need can be depicted as personal achievement of a teacher, which is also a key component in teacher motivation. As basic needs of the people are always neglected in the developing countries, Maslow's need hierarchy theory is pertinent to an investigation of teacher motivation in developing countries.

According to Maslow fulfillment of basic needs is necessary to lay the foundation for teachers to motivate them to improve their professional behavior and achievement, whereas other theories indicate fulfillment of basic needs as a mere extrinsic incentive. Benabou and Tirole (2000) noted that these extrinsic incentives are weak reinforcers of motivation in the short run and negative reinforcers in the long run. According to Herzberg (1966), achievement, recognition, the work itself, responsibility and advancement are more effective long-run motivators than interpersonal relations, working conditions, and pay. Most of the incentives to teachers' motivation are related to job satisfaction rather than teachers' classroom practices (Chapman et al. 1993). Thus, it appears that while teachers need housing, food, safety, belonging, and so forth to be professionally motivated, providing these needs is not considered to be a sustainable driver of teacher motivation. Instead intrinsic motivation such as achievement, recognition, career development are considered to be important drivers in teachers' motivation.

The relationship between extrinsic and intrinsic motivation and their relative effectiveness is an important issue in teacher motivation in the context of developing countries, where literature is very scarce on teachers' motivation through extrinsic incentives. Identifying specific goals, teachers' participation and self-efficacy may be considered as source of intrinsic motivation for the teachers. Goals that are specific, challenging, formed through teachers' participation and reinforced by feedback are the most effective in motivating employees (Locke, 1966). In developing countries, goals are mostly not so clearly defined and often determined through a participatory process incorporating teacher feedback.

Self-efficacy or belief in one's ability to realize goals is also an important determinant of motivation according to Social Cognitive theory (Bandura, 1966). According to Bandura (1966), self-efficacy is the combination of four components: physiological and emotional well-being, verbal encouragement from others, learning from one's own experience, and learning from others' experiences. These four components are strongly related to Maslow's Need Hierarchy model and the relationship between intrinsic and extrinsic sources of motivation as discussed earlier.

Several other studies found that teachers' motivation in developing countries mostly depend on incorporating new teaching methods into their strategies to help students learn. In Egypt, it was found that teachers are struggling to implement new learning techniques due to unsupportive school administration, lack of resources, and a mechanical curriculum (Johnson et al., 2000). Johnson et al. (2000) also draw from Beeby's (1966) hierarchy of teacher development and suggest that teachers will be demotivated and uninterested in applying new techniques in the classroom unless their environment is supportive of more advanced teaching styles. Moreover, teachers' different levels of professional development may require different levels of support. It is evident that teachers' self-efficacy and personal achievement can only be attained by ensuring appropriate training and resolving the constraints of the school environment.

Empirical studies on teacher motivation in developing countries shows that level of motivation is considerably low among formal public school teachers. This situation varies from country to country. For example, a study on the teachers of Burkina Faso, Cameroon, Cote d'Ivoire, Madagascar, and Senegal shows that more than 50 percent of the fifth grade teachers seems to prefer any other profession than teaching; over 40 percent of them liked their profession and do not want to change (Michaelowa, 2002). On the other hand, Ethiopia exhibits nearly all of the causes and symptoms of low teacher motivation.

Teachers play a very important role in the learning process of students who idealize teachers and try to copy them. So teachers' motivation is very important as it directly affects the students. Teacher motivation is affected by many factors. Amongst them are: Personal/social factors; Classroom environment ; Socio economic status; student's behavior; Examination stress; Rewards/incentives; Self-confidence/personality of the teacher and so forth

A study conducted on the factors affecting the motivational level of teachers at secondary school level in Rawalpindi shows that (Alam & Farid, 2011) most teachers were not satisfied with their salaries and it was

concluded that low salaries of the teachers affected their teaching; Most teachers were not fully satisfied with their economic states. They wanted to upgrade the standard of life but they could not manage to do so; A good number of teachers felt that they had more capabilities than others; most of teachers were opined that students should be held responsible for their low results and not teachers; A number of teachers suggested that teachers should be given incentives and rewarded on showing good results.

In short, development of PLCs in developing countries is still a work in progress. For more robust PLCs in such countries teacher working conditions and motivation have to improve first.

3.0 Suggestions for Future Research

In recent two years, many studies continued to explore the essences and positive effects of Professional Learning Community (PLCs). Some researchers paid attention to the educational framework application to lead meetings, the implantation of Common Core Curriculum Standards (CCCS) which gave the common understanding of what students are expected to learn. The standards help in arranging the contents of textbooks or educational materials to help teachers notice disparity between their students' performance and the new standards. It requires the new changes of instruction. In fact, the obstacle for meeting students' CCCS is that teachers lack enough opportunities to work collaboratively and consistently to narrow the gap between the existing long established curriculum and the new standards.

According to Fisher, Frey, and Uline (2013), educators should face the challenges of making the changes of instruction and culture in applying to make the CCCS progress (p. x). The Professional Learning Communities provide the ideal structure to meet the demands of professional development with implementation of the standards requiring daily practices in schools (DuFour & Marzano, 2011). As the model of Professional Learning community, CCCS can make teachers work in collaborate and coordinate environment fitting for the educational changes to build consummate plans in order to make great progress

When CCCS application became the essential requirements in teaching, some researches indicated that students achieved learning success from more effective instruction (DuFour & Marzano, 2011). PLCs offer the container to make learning development through understanding the adequate subject knowledge to make the lessons significant and challenging. The latest reform of PLCs involve new programs application such as reading programs or chemistry programs for colleagues to partake which is regarded as the positive school plan to make PLCs attain progress. The teachers from the PLCs discuss and inquire into some new programs to build the new plan for implementation, and then the feedback is discussed in PLCs again. Teachers can maintain high quality instruction which is the most important advantage of the program.

Technology developments have led to the rise of massive open online courses or MOOCs offering teacher education programs. Some online offerings, for example those on coursera.org, edx.org, Open2Study.com have active virtual discussion boards where teachers can pose problems for discussion. Other MOOCs such as Stanford Online offer academic writing courses where teachers have made substantial contributions to the online interaction and some have continued discussion in other virtual spaces. These are equivalent to transient PLCs and deserve further research to determine their effectiveness.

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RELIABILITY AND VALIDITY OF THE MULTICULTURAL EDUCATION AND DEMOCRACY PERCEPTION SCALE: A SCALE DEVELOPMENT STUDY[2]

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Abstract: The importance of education on social transformation, on modernization, and on realization of the values democracy conveys on individuals which cannot be ignored. As part of equality of opportunity, the role of the realization of the purposes of multicultural education on individuals, that emphasizes people of different cultures benefit from education coequally, will also certainly be assumed by education. To fulfill this duty that needs to be carried out by education, the attitudes, perceptions and interpretations of individuals towards democracy should be known. This required information will ensure that educational activities and it will be carried out more consciously and deliberately. In this vein, the purpose of this study is to develop Turkish Culture specific "Multicultural Education and Democracy Perception Scale" (MEDPS). It is predicted that this scale will help data collection on multicultural education, and with the results it provides, it will also contribute to the planning of education. In consequence of the exploratory and confirmatory factor analysis, it was determined that MEDPS has a five-factor structure. Through to the Cronbach Alpha internal consistency and reliability coefficient, it proves to be a reliable scale.

Keywords: Multiculturalism, multicultural education, democracy, perception, scale development

INTRODUCTION

Multicultural education is an important phenomenon which has recently attracted more attention in academic community (Aydin, 2013). Banks (2009) defines multiculturalism as social and cultural diversity structured by people of different ethnicity, culture, language, and religion. Similarly, one other definition by Parekh (2002) is that multiculturalism is simply the existence of different cultures living together. In a broader sense, "it represents that in a society other cultures have the opportunity to grow by themselves and protects their entity" (Aydin, 2013 p.3). In addition, Banks and Banks (2004) emphasizes that multiculturalism aims to build a society where nobody has any advantages or disadvantages because of their differences, and everybody lives in peace having equal rights without any discrimination. Aydin (2013) also argues that the essence of multiculturalism lays the purpose of reducing discrimination and increasing open-mindedness.

Multicultural education, it is the awareness of cultural, religious, educational, social class, being disabled, age, gender, sexual orientation, lingual, ethnic and racial dimensions (APA, 2002). In addition, several researchers, including Gay (2004) defines multicultural education as an educational philosophy that provides equal opportunities for all students in the path of success and enables to live with diversity and cultural differences. By setting equal opportunities, Castagno (2009) stresses, the process of education will be based on preparing the environment according to pluralistic values. Moreover, multiculturalist underline that multicultural education develops social justice principles. For instance, Banks (2002), Bennett (2001), and Gay (1994), argue

[2] This article is composed from Süleyman Çelik's thesis study titled "Multicultural Education And Democracy Perceptions of Undergraduate Students in Turkey", in 2014 at Yildiz Technical University, Institute of Educational Science, Curriculum and Instructional Studies Department by Süleyman Çelik with Assistant Professor Hasan Aydin (The thesis advisor) and Çetin Toraman

that the basic principles of teaching and learning in multicultural education are the end of prejudice, gender discrimination and any type of discrimination; allowing different cultures in to learning environment; the integration of different cultures, inheritance, experience and perspective; setting connections between school life and real life experiences for culturally different students (as cited in Cirik, 2008).

Furthermore, Nieto (1996) indicates that multicultural education accepts and supports positive ethnic characteristics in the class environment. She suggests that multicultural education is a comprehensive school reform and fundamental education process. Thus, it objects and declines any sort of discrimination in schools and societies and develops social justice principles. Nieto (1996) mentions 7 basic principles of multicultural education:

1. Multicultural education is an *anti-racist education.*
2. Multicultural education is *basic education.*
3. Multicultural education is *vital for all students.*
4. Multicultural education is *common.*
5. Multicultural education is *the education for social justice.*
6. Multicultural education is a *process*
7. Multicultural education is *critical pedagogy.*

Nieto further argues that multicultural education is against the idea that one race is superior or interior to others while supporting equal opportunities for all individuals. Besides, multicultural education incorporates humanistic initiatives for understanding different cultures (Banks, 2008), providing learning of differences for students (Gay, 1994), and stressing freedom, justice, equality and human honor (Aydin, 2013).

As diversity in the world grows, it becomes increasingly important for students all over the world to acquire the knowledge, skills, and values essential for functioning in cross-racial, cross-ethnic, and cross-cultural situations (Salili & Hoosain, 2001). For democracy to function in a pluralistic nation-state, its citizens must be able to transcend their ethnic and cultural boundaries in order to participate in public discussions and actions (NCSS, 1991). Researchers define democracy in a different perspective. For example, Zimmermann (2012) define democracy as "rule by the people" while Becker and Raveloson (2008), as “government by majority, and Erturk (1981) as “not just being a type of governing, is a philosophy and life style. From the definitions, it is clear that democracy is in relation with education and in turn with multicultural education.

According to Halvorsen and Wilson (2010), and Schugurensky (2010), multicultural education is an area of study with the goals of helping all students develop knowledge and skills, and participate effectively in a democratic society. Parker (2003) states, all entities of a society such as the media, corporations, social forces or educators are responsible for helping to create a democratic living, but educators are “the primary stewards of democracy”. In this context, Dewey (1916) stresses that ‘‘Democracy cannot merely ‘tolerate’ diversity; it alone of all forms of civilization requires diversity’’ (p. 76). In addition, Seltzer-Kelly et al. (2010) stresses that without the variety offered by pluralism, human experience would be bereft of the consciousness of that variety and the opportunity to encounter and consider it critically—a prerequisite for democratic citizenship (p.444).

Many studies conducted on the effects of multicultural education on democracy indicate that employing multicultural components in the education program helps students develop more democratic attitudes, and in turn, create a more democratic society. A study by Shirley (1988) concludes that multicultural activities added in the curriculum made white skinned students have more positive attitudes towards non-white skinned students. Lee’s (1993) study on African-American students also showed positive results as to the effects of culturally responsive teaching on student learning. Furthermore, in their study on African-American students studying at a culturally different school, Fleming, Guo, Mahmood, and Gooden of Texas Southern University (2004) found that presenting culturally-relevant materials to African-American students proved 112% more effective in improving their reading performance. In short, it seems plausible to think that the creators of a democratic living in the society are educators themselves.

There are diverse studies to measure the perceptions and attitudes (of teachers, teacher candidates, students and academicians) towards multicultural education and democracy. Among these are *The Multicultural Attitudes and Competencies Among Student Scale* by Guyton and Weshe (2005) measuring knowledge, attitudes and behaviors towards multicultural efficacy*, Multicultural Beliefs Scale* by Reiff and Carnella (1992) measuring beliefs and attitudes towards multiculturalism and *Teacher Multicultural Attitude Survey* by Ponterotto, Baluch,

Greid ve Rivere (1998) measuring teachers attitude towards multiculturalism. Besides, Multicultural Personality Questionnaire by Van der Zee & Van Oudenhoven (2002) measures cultural empathy, openness, social initiation, emotional balance and flexibility. Likewise, *Multicultural Attitude Scale* by Damgaci (2013) investigates the attitudes of academicians in Turkey towards the necessity and application of multicultural education in Turkey. In addition, Basbay and Kagnici (2011) developed *Multicultural Efficacy Perception Scale* to indicate academicians' perceptions towards the issue of multiculturalism. *The Multicultural Education and Democracy Perception Scale*, on the other hand, aims to indicate Democratic perception towards culture, multicultural education and democracy perception in educational environment, negative perception toward multicultural education and education's presenting opportunities for multicultural education.

Research has shown that there are several scale development studies on multicultural education and democracy. However, it has been found out that these studies are mostly towards teachers and academicians. There is no scale developed for undergraduate students' perception on multicultural education and democracy. In this vein, the purpose of this study is to develop a scale (Multicultural Education and Democracy Perception Scale [MEDPS]) to determine undergraduate students' perceptions of multicultural education and democracy. Throughout, the following research questions are sought to answer:

1. What are the exploratory factor analysis results of MEDPS?
2. What are the confirmatory factor analysis results of MEDPS?
3. What are the internal consistency reliability analysis results of MEDPS?

METHOD

Research Design

This research is a descriptive research. In the study, it was aimed that Multicultural Education and Democracy Perception Scale (MEDPS) determining undergraduate students' perceptions of multicultural education and democracy be developed. A trial application was carried out, and the technical features (reliability and validity) of the scale were described.

Scale Development Group

MEDPS is a scale developed towards undergraduate students. In the development of MEDPS, inquiries were made from two different groups. These groups can be defined as:

Data Collection Group for Exploratory Factor Analysis and Reliability: This group is the one that was formed to determine the technical features of the scale: the construct validity (exploratory factor analysis) and reliability (Cronbach Alpha reliability coefficient in the meaning of internal consistency). In this group, there were undergraduate students studying in two universities from the cities of Anatolian Center and from one of the largest metropolitan city in the Marmara region. These were undergraduate students that were registered in their universities and studied in the Fall semester of 2013-2014. Applications were made in November 2013. The scale was applied to 143 students of different grade levels (32 first year, 41 second year, 48 third year, and 22 fourth year), and different genders (78 females, 65 males).

Data Collection Group for Confirmatory Factor Analysis: This group is the one that was formed to determine whether the structure acquired in the construct validity (exploratory factor analysis) is confirmed with data obtained from another group. In this group, there were undergraduate students studying in two universities from the cities of Anatolian Center and from one of the largest metropolitan city in the Marmara region. These were undergraduate students that were registered in their universities and studied in the Fall semester of 2013-2014. Applications were made in December 2013. The scale was applied to 186 students of different grade levels (48 first year, 42 second year, 56 third year, and 40 fourth year), and different genders (97 females, 89 males).

Scale Development Procedure

In the development of MEDPS, the steps listed below have been followed:

1. Determining the aim of the scale (determining the perception of multicultural education and democracy)
2. Defining the target group to apply the scale on (undergraduate students)
3. Determining the nature and scope of the features (perception) intended to be specified in the scale (In this process, literature review has been taken as a reference)
4. Deciding on the types of items in the scale in the context of the features intended to be determined (perception)
5. Writing test items in the type of items decided
6. Revision of the items and forming a questionnaire

7. Asking domain experts' opinions about the legibility of the scale to measure the intended features
8. In accordance with the domain experts' opinions, giving the scale its final form before the trial application
9. Determining how to grade the items
10. Presentation of the technical features of the scale (reliability and validity) at the end of the trial application
11. Presentation of the scale in line with the acquired results

Multicultural Education and Democracy Perception Scale and Its Features

MEDPS, before the determination of its technical features (reliability and validity), was developed as a 5-scale likert type scale (strongly disagree, disagree, partially agree, agree, strongly agree) consisting 25 items. Before the development of the scale, the researchers reviewed the literature on multicultural education and democracy. The scale developed in accordance with the reference from the literature was presented to domain experts' opinions before being used in a trial application. Domain experts consisted of four educational sciences academicians that studied on multicultural education and one doctorate student in the field of assessment and evaluation. In accordance with the feedback from domain experts, the scale was given its final form and the trial application was carried out.

At the end of the trial application, it was found out that 8 items in the scale (items 3, 6, 8, 9, 14, 15, 18 and 25) showed a load on multiple factors. These items that showed a load on multiple factors were eliminated from the scale. As a result of these operations, there remained 17 items in the scale. The remaining 17 items were renumbered.

The remaining 17 items in the scale were grouped under four factors (components). Names of these factors and their sub-items are listed as the following:

- *Democratic Perception towards Culture (DPTC)*: This is the factor that analyzes whether the participants look at/perceive different cultures from a democratic point of view. Items of this sub-component are 3, 4, 5, 6, 7, and 13. The highest possible score is 30. A high score indicates a positive and democratic perception towards different cultures.
- *Multicultural Education and Democracy Perception in an Educational Environment (MEDPEE)*: This is the factor that analyzes the perception towards the consideration of multicultural education in the education environment. In this sub-component, the items are 8, 9, 10, 12 and 14. The highest possible score is 25. A high score indicates the perception towards the consideration of multicultural education in the education environment.
- *Negative Perception towards Multicultural Education (NPTME):* This is the factor based on the perception that inclusion of multicultural education in the education environment causes conflicts and some states of distress. In this sub-component, items are 15, 16, and 17. The highest possible score is 15. Items in this sub-component should be scored by coding reversely since they are of negative meaning. A high score indicates the perception that multicultural education will bear negative results.
- *Perception of Education's Presenting Opportunities for Multicultural Education (PEPOME)*: This is the factor that analyzes the perception that education should focus on various cultures. In this sub-component, items are 1, 2, and 11. The highest possible score is 15. A high score indicates the perception that education gives opportunity to various cultures.

FINDINGS

Exploratory Factor Analysis

Data were converted to IBM-SPSS 21 package program. Exploratory Factor Analysis (EFA) is an analysis applied to uncover how the construction of a scale is, and to reveal the factorial construction of a scale, developed to find the characteristics/relations between measured variables. Within the scope of EFA, principle components analysis (PCA) was applied to data set from 143 individuals. In the content of this analysis, before starting the analysis whether it is proper for the data set to be subjected to factor analysis, in short, for the compliance of the data set Kaiser Meyer Olkin (KMO) and Bartlett's Test should be applied (Büyüköztürk, 2003; Özdamar, 2013). In the analysis, KMO value was found 0.852. This rate being more that 0.50 showed that the data set was appropriate for factor analysis application. Likewise, the result of Bartlett's Test was (X^2= 962.290; df=136, p<0.01). This rate's being significant showed that factor analysis could be applied.

MEDPS's 3, 6, 8, 9, 14, 15, 18 and 25 items, after exploratory factor analysis, showed high correlation in diverse factors. These items, showing load under more than one factor, were extracted from the scale. The remaining 17 items showed a four factor structure. The load value of the remaining 17 items, items total

correlations, how much the four factor scale explained the variance of significant characteristics and reliability values are in Table 1.

Table 1:Factor analysis initial factor load values and item total correlation results

Item No	Initial Factor Load Value	Item Total Correlation	If Item Deleted	Item No	Initial Factor Load Value	Item Total Correlation	If Item Deleted
1	0.692	0.444	0.877	I16	0.582	0.566	0.870
2	0.683	0.652	0.867	I17	0.632	0.643	0.867
4	0.444	0.467	0.874	I19	0.491	0.513	0.872
5	0.630	0.519	0.873	I20	0.347	0.421	0.876
7	0.584	0.467	0.875	I21	0.685	0.597	0.869
10	0.374	0.397	0.877	I22	0.845	0.617	0.868
11	0.602	0.556	0.872	I23	0.853	0.567	0.870
12	0.478	0.489	0.873	I24	0.632	0.543	0.871
13	0.580	0.431	0.876				
	Four Factors' Variance = % 59.604						
	Cronbach Alpha = 0.879						

As seen from the Table 1, items initial load values vary between 0.374 and 0.853. Besides, item total correlations vary between 0.397 and 0.652. With the remaining items, the scale explains %59.604 the variance in the perception for multi cultural education and democracy under four factors. When taken as a whole, the scale's Cronbach-Alpha internal consistency coefficient for reliability is found 0.879. In the Cronbach-Alfa reliability analysis in "Cronbach's Alpha if Item Deleted" division, if any item is extracted from the scale the Cronbach-Alpha falls below 0.879. In this situation, it can be said that all items coefficients of reliability is high (Büyüköztürk, 2003; Özdamar, 2013).

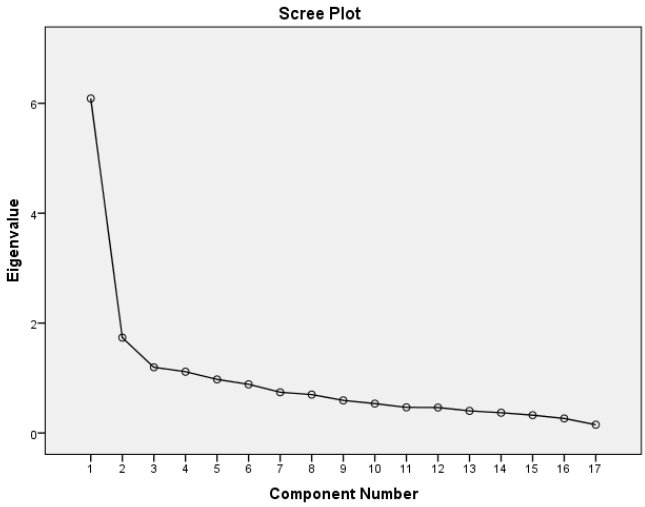
Principal components analysis shows whether there are sub-components in the develepod scale. In order to indicate sub-components in a proper way, "Varimax" rotation method was applied to the data collected from 143 individuals (Büyüköztürk, 2003; Özdamar, 2013). The results of the Varimax rotation application are shown in Table 2

Table 2: factors after varimax rotation and items under the factors

	Component			
	1	**2**	**3**	**4**
I7	,743			
I11	,712			
I5	,670			
I10	,580			
I4	,494			
I20	,481			
I13		,673		
I16		,655		
I21		,636		
I19		,633		
I12		,627		
I23			,878	
I22			,868	
I24			,664	
I1				,813
I2				,680
I17				,592

Table 2 shows that items 4, 5, 7, 10, 11, and 20 form a component. When items in this component are examined, it is decided that the component can be named as *"Democratic Perception towards Culture (DPTC)"*. In addition, it is determined that items 12, 13, 16, 19 and 21 form another component. This component is concluded to be named as *"Multicultural Education and Democracy Perception in an Educational Environment (MEDPEE)"*. One other component is named as *"Negative Perception towards Multicultural Education (NPTME)"*, consisting of items 22, 23 and 24. The last component is named "*Perception of Education's Presenting Opportunities for Multicultural Education* (*PEPOME)",* consisting of items 1, 2 and 17.

The components can be followed visually in figure 1 within Scree Plot.



Figur 1. Sub-components of MEDPS as Scree Plot

In the Scree Plot, after the four components, it is viewed that factors go plain. This vision can be evidence for the fact that the scale is composed of four components.

The reliability of the scale is calculated over the whole scale in Table 1. Besides, reliability is examined through the four components of severally. The results are summarized in Table 4.

Confirmatory Factor Analysis

So as to determine whether the structure of MEDPS as a result of exploratory factor analysis could be confirmed or not, confirmatory factor analysis was applied via IBM–AMOS 21 program to the data set gathered from 186 individuals. The model emerged as a result of the analysis is shown in figure 2.

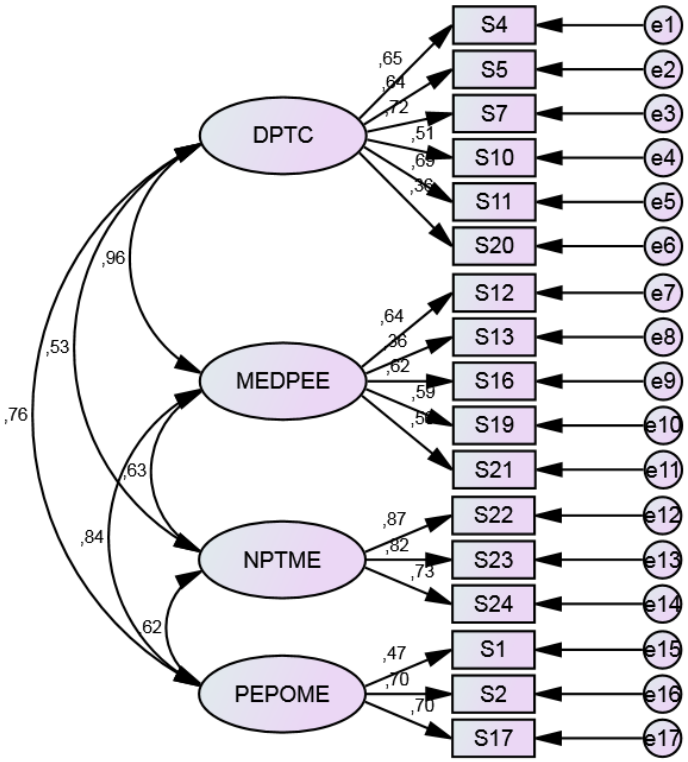


Figure 2. Diagram of confirmatory factor analysis of sub-components of MEDPS

Fit indices obtained as a result of confirmatory factor analysis are summarized in Table 3

Table 3: Confirmatory factor analysis fit indices

Fit index	Value
Chi-Square (X^2)	223.825
Degree of Fredoom (df)	113
X^2/sd	1.98
Goodness of Fit Index (GFI)	0.879
Adjusted Goodness of Fit Index (AGFI)	0.836
Root Mean Square Error of Approximation (RMSEA)	0.073
Root Mean Square Residual (RMR)	0.066

The chi-square and degree of fredoom values as a result of confirmatory factor analysis were X^2 = 223.825, (df = 113, p<.01) and X^2/df = 1.98 value was obtained. This value obtained from the selected sample being below 3 indicates perfect consistency (Jöreskog ve Sörbom, 1993; Kline, 2005; Sümer, 2000). In this study, the concistancy between the model and the data obtained via confirmatory factor analysis can be said to match the perfect fit.

GFI values' being such close to 1 shows that the factor model explains the data observed to a high extent, that the model is proper. GFI's being above 0.70 shows that the factor model explains original variance sufficiently well, that the model can be used and that the model can be mentioned as a good model. With a 0.90 GFI or a higher value, perfect fit can be mentioned (Özdamar, 2013). The GFI value obtained from the analysis is close to perfect level.

AGFI value's being over 0.80 means that the model is acceptable for consistency with authentic data (Şimşek, 2007). AGFI value obtained from the analysis is at an acceptable level.

RMSEA value between 0 and 0.05 indicates ideal consistency level. Yet, a value between 0.05 and 0.09 shows an acceptable consistency level (Özdamar, 2013). RMSEA value obtaine from the analysis is at an acceptable level.

RMR value's being below 0.10 shows that the model is acceptable for consistency with authentic data (Şimşek, 2007). RMR value obtained from the analysis is at an acceptable level.

According to the confirmatory factor analyses results summarized above, it can be said that "MEDPS"s four component structure is confirmed with fit statistics.

Reliability Analysis

Cronbach Alpha analysis was made to indicate the degree of reliability in the meaning of internal consistency with data gathered from 143 individuals for exploratory factor analysis. The cronbach-alpha value calculated for the whole scale is given in Table 1 and it is interpreted.

Table 4: Cronbach-alpha reliability test results for sub-components

Items	Cronbach Alpha
4, 5, 7, 10, 11 and 20 (DPTC sub-component)	0.740
12, 13, 16, 19 and 21 (MEDPEE sub-component)	0.752
22, 23 and 24 (NPTME sub-component)	0.838
1, 2 and 17 (PEPOME sub-component)	0.742

Table 4 showes;

- Reliability coefficient of the first sub component (Democratic Perception towards Culture [DPTC]) is 0.740,
- Reliability coefficient of the second sub component (Multicultural Education and Democracy Perception in an Educational Environment [MEDPEE])" is 0.752,
- Reliability coefficient of the third sub component (Negative Perception towards Multicultural Education [NPTME]) is 0.838,
- Reliability coefficient of the fourth sub component (Perception of Education's Presenting Opportunities for Multicultural Education [PEPOME]) is 0.742.

For scales, reliability coefficiencies between 0.70 and 0,90 are accepted to be highly reliable (Özdamar, 2013). These sub-scales are highly reliable scales.

RESULTS AND RECOMMENDATIONS

At the end of these operations, sub-scales of MEDPS and the remaining items in the scale were renumbered and the scale was given its final form with the following titles and item numbers below:

- *Democratic Perception towards Culture (DPTC):* In its renumbered form, this sub-component consists of the items 3, 4, 5, 6, 7 and 13.
- *Multicultural Education and Democracy Perception in an Educational Environment (MEDPEE)*: In its renumbered form, this sub-component consists of items 8, 9, 10, 12 and 14.
- *Negative Perception towards Multicultural Education (NPTME):* In its renumbered form, this sub-component consists of items 15, 16 and 17.

- *Perception of Education's Presenting Opportunities for Multicultural Education (PEPOME)*: In its renumbered form, this sub-component consists of items 1, 2 and 11.

Supporting the findings of this research with other studies carried out with the use of these scales, and calculating the technical features (reliability and validity) again with other samples will increase the reliability and validity of the scale.

Employment of MEDPS in the future research studies along with other data collection instruments of multicultural education and interpretation of the findings together are suggested both to increase the strength of the study and contribute to the development process of the MEDPS.

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Ek 1

LİSANS ÖĞRENCİLERİ İÇİN ÇOKKÜLTÜRLÜ EĞİTİM VE DEMOKRASİ ALGISI ÖLÇEĞİ

Bu ölçek çokkültürlü eğitimle ilgili algıları belirlemeye yöneliktir. Bu ölçekle ulaşılacak sonuçlar, Eğitim Bilimlerinde yapılacak çalışmalara yardımcı olacak; program geliştirme çalışmalarında referans görevi üstlenecektir. Lütfen görüşlerinizi aşağıda verilen her bir maddeyi dikkatle okuyarak, kendinize en uygun olan durumun, diğer bir deyişle, sizin düşüncenizi en iyi yansıtan kutunun içine **X** işareti koyarak belirtiniz. Lütfen, **hiç bir maddeyi boş bırakmayınız ve her madde için yalnızca bir tek kutuyu işaretleyiniz.**

Vereceğiniz cevaplar kesinlikle gizli tutulacak ve bu çalışmadan elde edilen verilerle yapılacak yayınlarda kimliğinizi belirten bir bilgi kullanılmayacaktır.

Size verilen bu ölçek toplam 17 sorudan oluşmaktadır. Sorulara vereceğiniz içten cevaplar, araştırma sonuçlarının doğruluğu ve araştırmanın amacına ulaşması için son derece önemlidir. Katkılarınız ve ayıracağınız zaman için şimdiden teşekkür ederiz**.**

Örnek Yanıtlama

	Kesinlikle Katılıyorum	**Katılıyorum**	**Kısmen Katılıyorum**	**Katılmıyorm**	**Kesinlikle Katılmıyorum**
	5)	**(4)**	**(3)**	**(2)**	**(1)**
"Demokrasi Eğitimi" demokratik yaşam için önemlidir.					

Çokkültürlü eğitim, tüm öğrenciler için temel eğitimi hedefleyen kapsamlı bir okul reformu sürecidir. Bu eğitim türü, okullarda ve toplumda ırkçılık ve ayrımcılığın her türlü biçimini reddederken, toplumun üyelerinin çeşitliliğini destekler (Aydın, 2012). Bu tür bir eğitimde hedef; eğitimde fırsat eşitliği sağlamak, kültürel çatışmalardan doğan sorunları çözmek, öğrencilerin birbirlerine karşı empati kurmalarını desteklemek, birbirlerinin kültürlerini tanımak ve içerisinde çalışarak akademik başarılarını artırmaktır (Banks, 2013).

	Maddeler	Kesinlikle katılıyorum	Katılıyorum	Kısmen Katılıyorum	Katılmıyorum	Kesinlikle katılmıyorum
		5)	(4)	(3)	(2)	(1)
1	Eğitim kültürel farklılıklara odaklanmalıdır.					
2	Farklı kültürlerin eğitim programında yer almasını yararlı buluyorum.					
3	Öğretmenler farklı etnik kökenden olan öğrencilerine saygı göstermelidir.					
4	Etnik kökeni ne olursa olsun, bütün öğrenciler eşit muamele görmelidir.					
5	İnsanların birbirlerinin kültürlerine saygı duyması gerekir.					
6	Hiç bir kültür diğerinden üstün değildir.					
7	İnsanların yetiştiği bölge ya da yörelerden dolayı farklı kültürlere sahip olması doğaldır.					
8	Öğretmenlerin toplumdaki farklı kültürler hakkında bilgi sahibi olması demokrasiye hizmet eder.					
9	Eğitim programı farklı kültürdeki öğrencilerin eğitim ihtiyaçlarına cevap verecek şekilde düzenlenmesi demokrasinin gereğidir.					
10	Farklı kültürlere sahip olan insanlara eğitim ortamında empati ile yaklaşılmalıdır.					
11	Kültürel farklılıklara odaklanmış bir eğitim akademik başarıyı olumlu yönde etkiler.					
12	Ülkemizdeki eğitim sistemi farklı dil ve kültürdeki etnik gruplara eşit imkân sağlamalıdır.					
13	Her birey kültürünü ve etnik kökenini çekinmeden ifade edebilmelidir.					
14	Demokrasinin getirdiği değerlerin toplumda yaşanabilmesi için demokratik bir sınıf ortamı şarttır.					
15	Çokkültürlü eğitim toplumda bölünmelere neden olur.					
16	Çokkültürlü eğitim sınıf içi çatışmalara sebep olur.					
17	Çokkültürlü eğitimin önemi abartılmaktadır.					

SUPER-EGO AN INHIBITION OF STUDENTS TO SPEAK ENGLISH IN COLLEGES IN KERALA

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Abstract: This paper analyses few factors that leads to inhibition of college students to speak English in Kerala, India. In this paper a field study is done to show how Freud's "superego" can lead to inhibition in the mind of the students to speak English in colleges in Kerala. Data collected through field analysis is done to show that spoken English training can overcome the "superego" which creates the inhibition to speak English .In this project, I advocate that if we can overcome negative impact of "superego" then we can overcome the inhibition to speak English. I justify my project with the help of statistics and data collected through random interviews among the college students in Kerala. The aim of the project is to help Government Organizations and Parent Teacher Associations to promote speaking of English in college campuses, so inhibition among students can be removed to speak English.
Keywords: *English, Higher Education, Kerala, Inhibition, Communication*

Introduction

"Education should bring to light the ideal of the individual." J.P Richter.

Inhibition to speak in English stands as an obstacle for the development of personality among college students in Kerala. Kerala is hailed as the second highest literary state in India with 93.91% (Times of India, Sep 8,2013). Kerala is an educational hub for higher education in India. In Kerala high importance is usually given for reading and writing, but the speech form in English medium of instruction is often neglected and often the mother tongue Malayalam is used as a medium of instruction by the instructors. If we analyse from Francis Bacon's point of view and if we neglect reading or conference (speaking) or writing, then a person cannot be perfect or complete (Bacon).

The main objective of the Collegiate Education Department, Govt. of Kerala is to impart best quality higher education to the eligible students of the State who complete their higher secondary level education. (Collegiateedu.kerala.gov.in) If proper "spoken form" of training is not given to College students when the medium of instruction is English then how can the objective of Collegiate Education Department, Kerala be full filled? If there is no proper training on spoken form then it will be one of the factors responsible for inhibition from student's part to speak in English.

To master the spoken form of English Language, one must have exposure to the Language. As the old adage says practice makes perfect, inhibition to speak in English can create a sense of fear and is one of the major factors that leads towards hatred in speaking English, without speaking English, we cannot master the spoken form.

Exposure to English can reduce inhibition to speak English up to a certain extend. In Kerala, usually students in colleges prefer to speak in native language Malayalam rather than in English. If their classmates speak in English, then there is a general tendency to mock at the person who speaks in English. The famous psychologist Sigmund Freud coined the term "Super Ego" (Freud, 1932).

Merriam Webster dictionary defines super ego as "a part of a person's mind that relates to attitudes about what is right and wrong and to feelings of guilt" (Merriam-Webster Dictionary). In colleges when classmates mock their friends when they speak in English, in the mind of the speaker a sense of barricade develops and he feels that he is going against the norms of his classmate, even though the medium of education is in English and even it can have a positive impact in his life, the fear of "others" (friends) develops a guilt in the mind of the speaker and super ego a moralizing agent develops an inhibition in the mind of the speaker (student) and it can prevent him in speaking English and later the inhibition can lead to fear in speaking and hatred towards spoken English .

Method

In this paper the method of data collection is done through field study and personal interviews. Data collected through interviews and questionnaire shows that there is inhibition among college students to speak in English.

Field Analysis

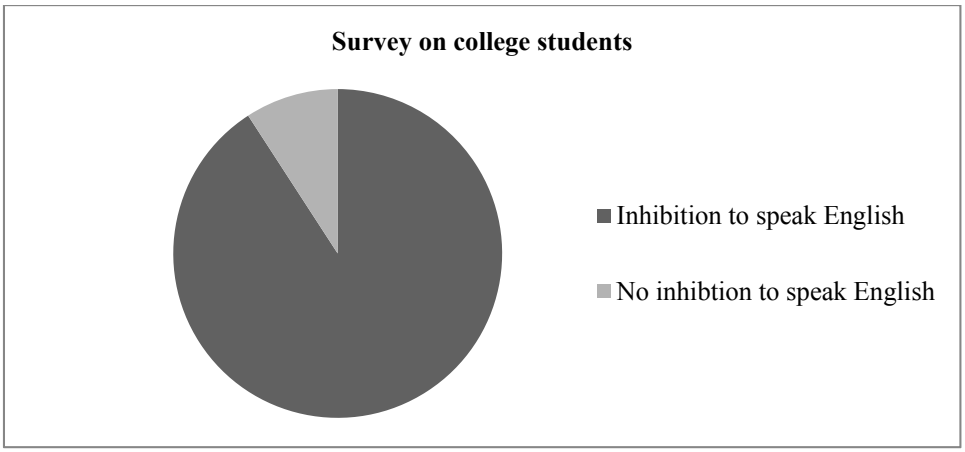

Figure 1.

In Figure 1, after rigorous survey we got the information that 80% of the students felt that there is inhibition among college students to speak English. Only 20% were of the opinion that there was no inhibition among college students to speak English.

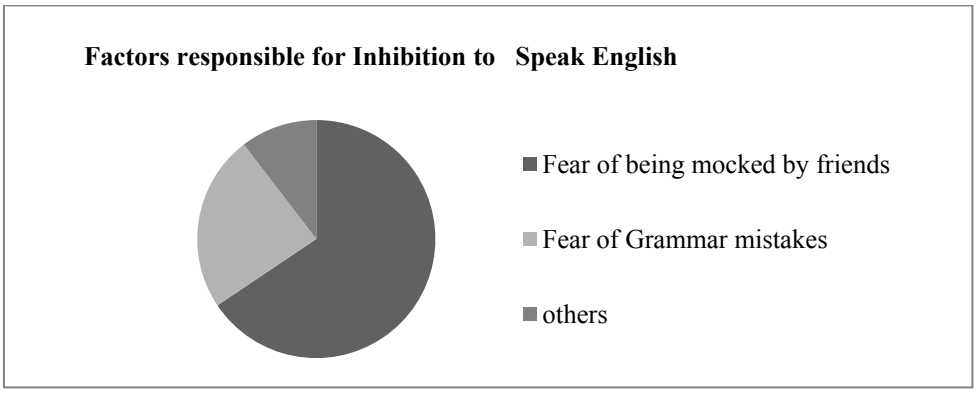

Figure 2.

In Figure 2, through field analysis we come to a conclusion that 60% of the students had fear of being mocked by classmates if they communicated in English.

30% of students had fear of grammar mistakes if they communicated in English and others who had lack of fluency in speaking English because of various other factors.

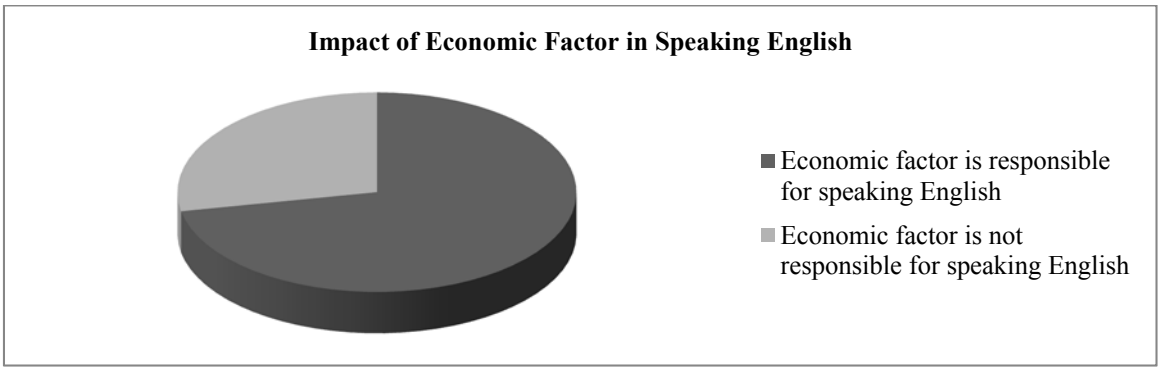

Figure 3.

In the Figure 3, we come to an argument that Economic factor is also one of the responsible factors for speaking English among college students (75%). Students hailing from rich families speak English fluently than those from other backgrounds, because most of the rich students get their primary education from private English medium schools have more exposure to English language and they also speak to their parents in English. Speaking English is considered as a status symbol in Kerala. Those with less economic background might not speak English frequently at home and in colleges and prefer to use mother tongue Malayalam, they mostly develop an inhibition to speak in English.

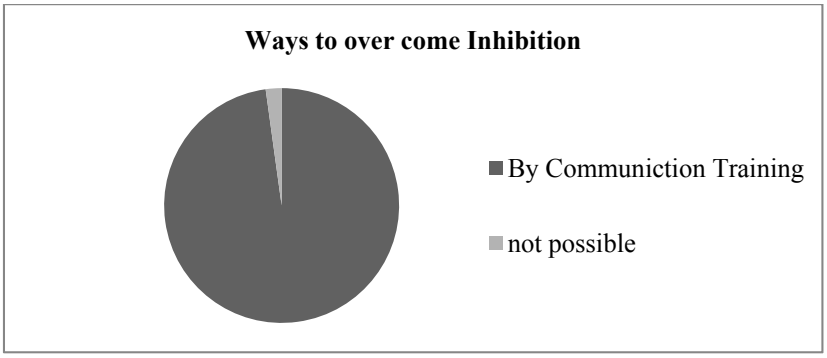

Figure 4.

In figure 4, through field analysis we got the information that 97% of the students felt that through Communication Training they can overcome the inhibition to speak in English.

Result

According to the survey in Figure 1, 80 % of the students had inhibition to speak English in colleges in Kerala. In Figure 2, 60% of the students had fear of being mocked by classmates if they communicated in English. In Figure 3, 75% of students felt that economic factor is responsible for speaking of English among students. In Figure 4, 97% of students had the view that by communication training can overcome inhibition to speak English.

Various Factors Leading to Inhibition as Recorded from the Survey

- Shyness among students is one of the factors that lead to inhibition among college students to speak in English.
- Fear of grammar mistakes.
- Inferiority complex.
- Lack of fluency.
- Lack of exposure.

- Fear of alienation - The students usually prefer to use mother tongue Malayalam in colleges , when they hear some one speaking in English, they try to alienate that person, this is one of the factors that leads to inhibition among students to speak English.
- Preference for Malayalam.
- Suppression and lack of encouragement by teachers / professors is one of the factors that lead to inhibition. The teachers / professors might not be well versed in spoken English; they naturally try to suppress the one who speaks English well.
- Fear of being mocked.
- Professors / teachers advise students that speaking English is necessary, but they (teachers/professors) themselves are comfortable with their mother tongue Malayalam, and do not act as a role model in speaking English. The students imitate the teachers / professors and will naturally show inhibition towards speaking English.

Suggestions from the Students

Grace marks must be given to those students who speak English well; this can create an urge in the mind of the students to speak English. Introduce scholarships to promote English language and conduct training programmes for students to speak in English.

Conclusion:

One of the biggest drawbacks is that in English medium schools and colleges in Kerala, even though the medium of instruction is in English, the explanation of subjects such as English, Science, Mathematics and History are in the mother tongue Malayalam. The diversion of teacher's medium of instruction from English to Malayalam is one of the factors that can lead to inhibition of students to speak English. Even as teachers prefer to speak Malayalam in schools and colleges, there is also a tendency for students to follow and imitate the teacher. The students cannot be blamed for the inhibition they have, it is the system of education that has to be reviewed.

As a result from this field study we come to a conclusion that the fear of the "others" can be considered the most important factor that leads to inhibition among students in Kerala, and the only way to overcome "Super Ego" which stands as an inhibition agent among college students to speak English is through good communication training and exposure to spoken English Language. Taking tests like IELTS and TOEFL etc can improve the confidence level of students and they can assess their own level of communication. Having gained international recognized certificates, it can boost students to overcome the fear of "others" (friends) and the fear of Super Ego can be removed. Parents must also encourage their kids to speak in English. The Education Department must ensure that for English medium schools and colleges, the medium of instruction by teachers / professors must be in English. If speaking of English is promoted, then the fear of the Super Ego and inhibition to speak English by students will be removed.

Having frequent debates in English, spoken English courses and training sessions taught by native English Speakers can have a positive impact on the students to speak English in colleges in Kerala.

Special thanks to the students who took part in this survey from various affiliated Colleges under Government Universities in Kerala.

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THE EFFECTS OF PROFICIENCY LEVEL ON THE COMMUNICATION STRATEGIES AMONG KOSOVAN AND BOSNIANS STUDENTS AT SAKARYA UNIVERSITY

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Abstract: This article reports the communication strategies employed by Kosovan and Bosnian speakers of English as their second language in oral communication tasks outside the classroom. The participants were 18 university students of different departments whose native languages were Albanian and Bosnian. The goal of the study was to determine the effects of English language proficiency (i.e., Elementary and Intermediate levels) on the use of communication strategies while performing the same oral tasks. The data of the oral discussions came from the audio and video-recordings of the tasks. In the current study we applied the taxonomy of communication strategies employed by Tarone (1977; 1981). We analyzed and compared the uses of communication strategies in different occasions. Analysis of the data revealed that the participants dominantly used two types of communication strategies: lower level students used L1 strategies more often and higher level students employed L2 strategies more commonly compared by their lower level peers regardless of the ethnic group.

Keywords: Communication strategies, language proficiency, linguistic background oral communication tasks

1. Introduction

One of the most important goals for most of the people is how to develop their communicative skills and to be able to communicate with their peers or interlocutors. It is now clear that no individual's linguistic repertoire is perfect. Many studies have proven that both, non-native and native speakers of any language sometimes struggle to find an appropriate grammatical construction or expression when trying to communicate or convey their meaning. Thus, there is a gap created among individuals of what they want to communicate and the directly available linguistic resources. So, the ways in which they are attempting to fill this gap and manage to compensate it are known as communication strategies (CS). However, many researchers are not on agreement about the exact definition of the communication strategies; in fact, there is one widely accepted definition pointed out by Kasper and Faerch (1983, 36) "Communication strategies are potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular goal". Another important issue regarding communication strategies is the development of learners' communicative competence. In this way, language proficiency plays an important role because learners stop speaking and hardly know what to say when they try to ask questions in English or discuss any topic. Generally, the concern of the early studies was to define, classify, and identify communication strategies. On the other side, later studies were more concentrated on empirical research to continue with data collections. In this study, we examined the use of the communication strategies in task base activities including: picture description, picture narration, and ten minutes of natural conversation employed by two groups of students (i.e., Elementary and Intermediate levels).

2. Communicative competence

Communicative competence is generally based on the rules of language use, appropriateness, and acceptability rather than on grammaticality itself, as is the case of cognitive explanation of competence. The first to introduce the term of communicative competence was Hymes (e.g. 1972; 1979). For a person to say he or she knows a language, therefore, s/he must know "when to speak, when not, …what to talk about with whom, where in what manner" (Hymes, 1972: 277). Communicative competence is also concerned with students' performances in real communication. Canale and Swain mentioned

Chomsky's competence arguing about the same communicative points, that is, the students' expressions in conveying ideas in real communicative situations. The four areas of communicative competence they defined are briefly categorized below:

> *Grammatical competence.* Mastering L2 phonological and lexicogrammatical rules of sentence formation; that is, to be able to express and interpret literal meaning of utterances (e.g., acquisition of pronunciation, vocabulary, word and sentence meaning, construction of grammatical sentences, correct spelling, etc).
>
> *Sociolinguistics competence*. Mastering L2 appropriately using sociocultural rules, that is, how utterance are produced and understood in different sociolinguistic contexts (e. g., understanding of speech act conventions, awareness of norms of stylistic appropriateness, the use of a language to signal social relationships, etc.)
>
> *Discourse competence.* Mastering L2 rules concerning coherence of various kinds of discourse in L2 (e.g., use of appropriate pronouns, synonyms, conjunctions, substitution, repetition, marking of congruity and continuity, topi-comment sequences, etc.)
>
> *Strategic competence.* Mastering L2 verbal and non-verbal communication strategies when attempting to compensate for deficiencies in the grammatical and sociolinguistic competence or to enhance the effectiveness of communication (e.g., paraphrasing, how to address others when uncertain of their relative social status, slow speech for rhetorical effect, etc.)
>
> (Canale and Swain, 1980)

Strategic competence has also been defined as a tool of repairing communicative problems and developing communication in general. Therefore, it is considered that communication strategy may also influence learning strategies. Communication strategies are based on students' communication command in the target language, that is, how to convey a meaning to peers or interlocutor, whereas, learning strategies are based on students' linguistic knowledge. Some researchers believe that communication strategies may influence learning strategies as well.

2.1 Communication strategies: definitions and classifications

The need to communicate an idea in the target language when learners face problems in conveying their intended meaning because of their insufficient linguistic command and the usage of various strategies to make the most of their potential for communicating in L2 (Second Language) including these strategies are called communication strategies (Vardi, 1983). The focus on the interaction between the speakers adopted by Tarone (1980) and it's interactional approach, defined communication strategies as "mutual attempts of two interlocutors to agree on a meaning in situations where requisite meaning structures are not share" (p. 288). According to coder (1983), communications strategies are transmitted to the relationship between ends and means. Likewise, students sometimes wish to convey messages to their peers but because of their limited linguistic resources do not consent them to express their messages successfully. In such cases, students have two ways, ether to modify their meanings with their resources in disposition, or to try to increase their resources in order to grasp their communicative intentions.

The effect of proficiency level on communication strategies is also a focus of this study. Here, Hyde (1982) investigated that lower level students make more frequent use of communications strategies than higher or more proficient ones. Here, they usually face more problems in conveying their messages to their interlocutors or peers due to their insufficient command of the target language. On the other hand, Bialystok and Frohlich (1980) and Bialystok (1983) confirmed verification of a relationship between the learner's choice of specific types of communication strategies and their proficiency level. In more details, the authors called these strategies as: L1-based and L2-based strategies. Thus, low level students in order to overcome their linguistic deficiencies they

usually borrow lexical items from their mother tongue more often than high level students who significantly make more use of L2 strategies based on their communicative manipulation and their linguistic command in the target langauge.

According to interactionists and psycholinguistics perspectives, most of the analysis of the communication strategies is concerned on a study of learner language. Therefore, these scholars relied on interlanguage data for the intentions of their investigations. Most of the studies according to these scholars are based on the identification of different types of communication strategies. The effects of proficiency level on specific types of communication strategies investigated by (Tarone 1977; Bialystok 1983; Jourdain 2000; Poulisse et al. 1990), investigation of communication strategies based on native language (Palmberg 1979; Si-Qing 1990), personality and learning or cognitive style (Haastrup and Phillipson 1983; Littlemore 2001), and task related features (Poulisse et al. 1990). Considering these objectives in mind, interactionist and psycholinguistics proponents have mainly focused on learner's language production.

According to interactionist approach Tarone (1997; 1981) identified communication strategies based on its Taxonomy. This taxonomy is considered to be one of the most widely used in the field of communication strategies. Another typology of communication strategy is that of Faerch and Kasper (1984), Coder's (1983), Bialystok's (1983), Paribakht's (1985), Oxford's (1990) and Dornyei and Scott's taxonomy (1995; 1997). Tarone's taxonomy seems to be simpler compared to Dornyei's because of the number of the categories.

The table below shows Tarone's categories of communication strategies.

Tarone's typology of communication strategies

(Tarone, 1977; 1981)

1. Avoidance
   a Topic avoidance
   b Message abandonment
2. Paraphrase
   a Approximation b
   Word coinage c
   Circumlocution
3. Conscious transfer a
   Literal translation b
   Language switch
4. Appeal for assistance
5. Mime

The following research questions guided the study:

1. What is the frequency use of the communication strategies employed by Kosovan and Bosnian speakers of English language as their second language in oral communication tasks?
2. Do higher and lower level students employ more L1 based or L2 based strategies?

3. Methodology

3.1. *Setting and participant*

The current study took place at the objects of the University of Sakarya. The participants in this study were Kosovan and Bosnians students whose native languages are Albanian and Bosnian. They come from different departments pursuing their undergraduate and graduate levels and use English language as their second language. The data of the participants comes from two groups based on their language proficiency (i.e. Elementary and Intermediate) levels. To summarize, 18 regular students from different departments participated in the present study and their ages ranged between 20 to 29 years old.

3.2. *Data collection procedure and tools*

In this study we examined the use of communication strategies of lower and higher level students and their preferences on the choice of the communication strategies according to their proficiency level. To examine, transcribe, and decode the data of the participants we used the audio and video-recorder as our data collection. The advantage of audio and video-recorder is that we analyzed students' performances in many perspectives by repeatedly playing back the video-recorder. In the current study we used task based activity to collect our data,

such tasks included: the picture narration, the photograph description and the ten minutes conversation between students and interlocutor, in this case me as a novice researcher. In the first two task students were asked to narrate and describe the pictures as much as possible arranged in the dyadic study. Here, most of the time we observed our students and took part in the interaction only when necessary, whereas in the last task we interacted with our participants as an active interlocutors throughout the conversation. Finally, the data collection instruments, in this case audio and video-recorder were examined in different perspectives, the audio and video effects of the camera, and the students' attitudes toward researcher were studied as well.

4. Findings

4.1 *Findings based on the qualitative data*

Table 1 presents the frequency of the communication strategies employed by Kosovan and Bosnian students during the task based activities including: oral discussion, picture narration, and picture description task. The data in table 1 presents the use of the communication strategies compared among two different groups of the students (i.e., Elementary and Intermediate levels), and the strategies were classified using the taxonomy applied by Tarone (1977; 1981). The present result make possible to answer our first question developed at the beginning of the study.

Question 1. What is the frequency use of the communication strategies employed by Kosovan and Bosnian speakers of English language as their second language in oral communication tasks?

The frequency of numbers counted on the use of communication strategies employed by two groups of the students was investigated. Here, the results verify the difference of the number of the communication strategies among two groups while trying to complete the oral tasks.

Table 1. PROFICIENCY LEVEL AND NUMBER OF CS

	Elementary Students	Intermediate Students
Number of CS	458	370

The results of the data shown in table 1 clearly meet the agreement of previous studies on the use of the communication strategies, that is, that low level group of students, elementary students will encounter a greater number of communication strategies compared to high level, Intermediate group of students. Moreover, the results also answer our first questions that, low level students because of their insufficient command of the target language vocabulary will come across greater language difficulties, in this case make more use of CS than their high level peers. On the other side, the nature of communicative tasks enables high level students to use more complex sentences and encounter greater lexical difficulties. Here, the proficiency students not only produced more language structures while trying to complete the given tasks, but they also used more accurate language instances to convey their messages or ideas.

Except the frequency of the communication strategies encountered among the two different levels of the students, this study also reveals the amount of the words students used to accomplish the given tasks. Table 2 shows that Intermediate level of the students used a large number of language instances than Elementary level of the students. Based on the ratio of CS to words, the amount of CS is less frequent in more proficient participants. The results shown on table 2 also confirm the difference of the amount of the language and the words used among the two levels of the students.

Table 2. NUMBER OF WORDS AND NUMBER OF CS

	Elementary Students	Intermediate Students
Number of Words	2, 846	3, 937
Number of CS	458	370
Ratio of CS to words	1:62	1:10

As we can see in the data revealed on table 2, more proficient students not only encountered greater use of the language utterances and the words but they also produced more accurate and more completed messages while interacting with their peers compared to less proficient ones. Thus, the amount of the words and the language used by more proficient students, also affected the use of communication strategies, that is, they encountered more complex sentences in order to convey their meanings, describe the actions and the objects given in the task base activity.

In an attempt to complete their tasks successfully, high and low level students used different strategies to describe and narrate the actions and the objects provided on the tasks. The tasks also made possible for more proficient students to use complex and accurate language structure, in this case, make more use of different referential explanations to name the particular action, object, and convey the meanings. Furthermore, in each task performance, more proficient students tried to narrate and make more reference to different objects and actions than less proficient students. In this point, we can argue that high level students were more successful and detailed in the completion of narrative and descriptive tasks.

Question 2. Do higher and lower level students employ more L1 based or L2 based strategies?

The second questions concerns whether elementary and intermediate levels of the students will use more L1 based strategies or L2 based strategies. We considered that the participants will be able to use all the categories of the strategies based on the given taxonomy. Table 3 clearly verifies the strategies two groups of the students employed.

Table 3. PROFICIENCY LEVEL AND THE CHOICE OF CS

	Elementary Students		Intermediate Students		Total CS
	NO	%	NO	%	Number of CS
Avoidance strategies	76	47%	84	52%	160
Paraphrase strategies	200	47%	224	52%	424
Conscious transfer strategies	182	74%	62	25%	244
TOTAL	**458**	**168%**	**370**	**129%**	**828**

Based on the present results, low-level students depended more on conscious transfer strategies (74%), whereas high-level students accounted avoidance (52%) and paraphrasing (52%) more often to convey their original meanings and appropriate language structures. Table 3 shows that high proficient students used avoidance and paraphrase strategies more often compared to low proficient students who made use of conscious transfer strategies because of their limited command of the target language, that is, they were not able to manipulate the language or develop different means to convey their intended information or ideas, as did the more proficient ones. Table 3, also answers our second questions that low level students make more frequents use of L1 based strategies compared to high level students who made use of L2 based strategies more frequently. Moreover, when using paraphrase strategies, students usually try to manipulate with their interlanguage without using any other languages but the target one. Thus, these strategies have a positive effect in interactions with other students because they convey original meanings and are not likely to mislead the communication. Paraphrase strategies are also more difficult strategies because students try to describe object or actions using their interlangauge resources, therefore they encountered more complex language structures. On the other side, low level students were more reluctant to use these strategies because they are more demanding and difficult, thus, avoidance and paraphrasing strategies are less frequent compared to conscious transfer strategies. The following extract presents the use of these strategies on three tasks, including: avoidance, paraphrase, and conscious strategies.

(1) EXTRACT: "football league around Europe"

INTERLANGAUGE SENTENCE: " so I::: try to read as much as possible to learn about the (.) a::: last weekend's result you know the (.) leagues (1) around Europe". CS ANALYSIS: topic avoidance: student wanted to say "league" but lacking the necessary vocabulary avoided it.

(2) EXTRACT: "University of Sakarya"

INTERLANGUAGE SENTENCE: " I stay in the dormitory of a::: of::: the Turkish government".

CS ANALYSIS: topic avoidance: student wanted to say "University of Sakarya" but lacking the necessary vocabulary avoided it.

(3) EXTRACT: "Plan"

INTERLANGAUGE SENTENCE: " like I said depents (.) what, I what I (.) mo(-) from my schedule.

CS ANALYSIS: topic avoidance: student wanted to say "plan", but lacking the necessary vocabulary avoided it.

(4) EXTRACT: "father or dad"

INTERLANGUAGE SENTENCE: well (.) the younger guy (.) how do I say (.) how can I say (.) is calling him for help or something like that (.) there is (.) grandparent or…

CS ANALYSIS: topic avoidance: student wanted to say "father or dad", but lacking the necessary vocabulary avoided it.

(5) EXTRACT: "the child was hit"

INTERLANGUAGE SENTENCE: " ok. In the very first picture (.) we see a man who is sitting in armchair (1) and a(.) the child who probably (.) it seems to be his grandson (1) is crying and going to call him (.) a:::: about the situation".

CS ANALYSIS: approximation: the student uses "situation" for "hit", this lexical item seems to be incorrect but shares enough semantic features to be selected as a correct one.

(6) EXTRACT: "baby-bed"

INTERLANGUAGE SENTENCE: "Right (.) here (1) there is like (.) a::: baby chair (1) not chair".

CS ANALYSIS: circumlocution: the student tried to describe "the baby-bed" in the lack of using the appropriate target item.

These extracts show that more and less proficient students try to avoid the topics when they lacked the necessary target language vocabulary. However, more proficient students used a large number of language structures when they tried to use paraphrasing strategies. Here, the present study substantiate that students used more communication strategies in oral task discussions than in the two other tasks, that is, because students had more freedom to use their natural talk among their participants. Here, less proficient students made us of a higher amount of conscious transfer strategies while trying to narrate and describe the items on the pictures. The following sample of extracts illustrates the instances less proficient students used in their task accomplishments.

(7) EXTRACT: "go on"
INTERLANGUAGE SENTENCE: "vazhdo, vazhdo"
CS ANALYSIS: language switch: the student In this case switched to his mother because he could not think of the English item "go on".

(8) EXTRACT: "noddy"
INTERLANGUAGE SENTECNE: "…and is klloshari (laughing)
CS ANALYSIS: language switch: the students switched in his mother tounge because he could not find the appropriate word in English for that item.

(9) EXTRACT: "explain"
INTERLANGUAGE SENTENCE: "how I telling (laughing)…
CS ANALYSIS: literal translation: the student wanted to convey more Original explanation, but used conscious transfer strategy, literal translation of the Albanian expression "si ta them".

(10) EXTRACT: "corpulent boy"
INTERLANGUE SENTENCE: "A:: the main object is:: this one was you are not the strongest man in the world (.) a:: you have more, a::: they have more powerful mass (.) before you".
CS ANALYSIS: literal translation: the student wanted to convey original exp -lanation, but used conscious transfer strategy, literal translation of the Albani -an expression as "Qellimi I tij kryesore ishte ky; ti nuk je njeriu me I fort ne bote, ne jemi me te fuqishem para jush".

(11) EXTRACT: "standing"
INTERLANGUAGE SENTENCE: "kako se kazhe stojat"?
CS ANALYSIS: appeal for assistance: the student asked his peer for help. In this case, he used the Bosnian expression "how do we say standing"?

(12) EXTRACT: "scared"
INTERLANGUAGE SENTENCE: "a:: he is knocking the door (1) and:: waiting for a somebody opened the door (.) and his child (.) is so (.) a::: preplasen?
CS ANALYSIS: appeal for assistance: the student not able to continue on conveying the original meaning asked his peer for help. In the example, he used the Bosnian expression referring to "scared".

(13) EXTRACT: "have fun"
INTERLANGAUE SENTENCE: "is, is ha(-) is::: the happy day::
CS ANALYSIS: word coinage: the student used "happy day" instead of "having fun" to create a description which he thought was appropriate for
the meaning he wanted to express. The student hesitated to continue speaking, therefore he looked at his peer to get the help, in this case appeal for assistance.

(14) EXTRACT: "No energy"
INTERLANGUAGE SENTECNE: "after the day you are like, hh".
CS ANALYSIS: mime: the student used gestures simultaneously with the use of words to emphasize what s/he wanted to convey. The student in this case performed the of act non-energized person.

As we can see from the extract samples, less proficient students made a greater use of conscious transfer strategies. It is also known from previous studies that low level students would make more use of these strategies because they feel unable to find other language means in their interlanguage to convey their messages successfully to their peers.

5. Conclusion

The present study validates that Albanian and Bosnian speakers of English as their second language make us of communication strategies based on their proficiency level, but in terms of the frequency and the types of the communication strategies they choose. The measurements of our data show that low proficient students greatly used more communication strategies compared to more proficient participants. However, the results also show that high level students in attempt to complete their natural communicative tasks such as; picture narration and picture description faced more lexical difficulties. Thus, the results of the previous studies validate that the types of the communication strategies used by low and high level students are also influenced by the types of oral tasks and their performances on these tasks. Therefore, students' proficiency level plays a great role in the task accomplishment. The results, also confirm that low level students used more L1 based strategies while high level students used more L2 based strategies. Further studies using a bigger population with different degrees of proficiency levels are needed to provide additional comprehensive understanding regarding the present examination. However, when conducting the study regarding CS, it is necessary to bear in mind the effects of proficiency levels and the types of communication strategies. Here, different factors should be considered such as: the types of the tasks provided to students, the arrangement of the settings, and the qualitative and quantitative measurements of the communication strategies.

Acknowledgements

I would like to thank Prof. Dr. Firdevs Karahan and Doc. Dr. Dogan Yuksel for their contribution throughout the study. And, finally I would like to thank all the Kosovan and Bosnian students who participated in the present study.

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THE EXPERIMENT OF UNIVERSITY OF SCIENCE AND TECHNOLOGY IN THE FIELD OF QUALITY ASSURANCE FOR ACADEMIC PERFORMANCE

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Abstract: During the last 10 years, University of Science and Technology (UST) in Yemen has developed a special model for quality which has been inspired from the international experiments in the field quality in higher education taking into consideration the privacy and the culture of the zone. This paper presents this model which involves several tools, procedures, quality measures, and Key Performance Indicators (KPIs). The model was developed based on the organizational model so that it involves 4 dimensions of the UST educational system: inputs, processes, outcomes, and feedback. This model is implemented since the academic year 2003/2004 until now and it has subjected to continuous developing and enhancement. As a result of applying this model, a remarkable quality of service has achieved and the UST has grown dramatically in terms of number of students, colleges, programs and international partnerships.
Keywords*: Quality Assurance, Academic Accreditation, University of Science and Technology, UST, Quality Model, KPIs, CAQA*

1. INTRODUCTION

University of Science and Technology (UST) is considered the first private university in the Republic of Yemen. UST was established in 1994 in the capital of the country (Sana'a). Currently, UST has about 20,000 students divided between regular (about 8000 students) and open learning (about 12,000). Most of UST students come from the Arab Gulf countries, Yemen, and the neighbour African countries. UST consists of 7 regular colleges, a college for open learning and distance learning, a branch for girls, 6 branches in the main 6 governorates of the country, and tens of coordination offices in all Yemeni governorates, Arab Gulf countries, Jordan, Syria, and the neighbor African countries. The concept of quality has been addressed early by UST since the year 1999 when the unit of quality was established in UST and it was the first unit in the country concerning academic quality (now it is called Quality Assurance and Accreditation Management (QAAM)). The aim of QAAM in UST is to enhance the educational service quality and develop the service delivery procedures including all components of the educational system in UST such as teaching, curricula, staff, students, infrastructure, equipment, regulations, operations, and administration. Currently, QAAM consists of 4 units in the main office and 9 units in 8 colleges and the Girls Branch. In 2004, the Steering Council of Quality has been established in UST to figure out the strategies and polices of the UST quality. During the last 10 years, QAAM in UST has developed a special model of academic quality assurance which has been inspired from the international experiments in the field quality in higher education taking into consideration the privacy and the culture of the zone. This paper presents this model which involves several tools, procedures, and quality measures, and Key Performance Indicators (KPIs). The model was developed based on the organizational model so that it involves 4 dimensions of the UST educational system: Inputs, Processes, Outcomes, and Feedback. This model is implemented since the academic year 2003/2004 until now and it has subjected to continuous developing and enhancement. As a result of applying this model, a remarkable quality of service has achieved and the UST has grown dramatically in terms of number of students (from thousands to 20000), colleges (from 3 to 8), programs (from less than 20 to 40) and the international partnerships. In the field of accreditation, UST recently launched the project of international accreditation and three pilot programs are ready to register for the international accreditation on 2014. These programs are Pharmacy, Computer Science and Business Administration. When these three pilot programs are accredited, the rest of programs in UST should follow the same process to be accredited in couple of years. This paper presents the experiment of UST in the field of academic quality assurance especially, the structure of UST quality model in details, KPIs, assessment procedure, and the enhancements during the last 10 years.

2. QUALITY ASSURANCE AND ACCREDITATION IN YEMENI HIGHER EDUCATION

This section reports the efforts of the Ministry of Higher Education and Sscientific Research in Yemen concerning quality assurance and academic accreditation. Since the last two decades, the ministry has developed the official manuals and regulations for the "opening license" that is required for new universities to open. However, the first significant effort regarding quality assurance and academic accreditation in the Yemeni higher education was addressed in 2008 during the second scientific conference of the ministry of higher education and sscientific research. The conference has issued many recommendations to the Yemeni universities with regard to developing procedures of periodic review for the academic programs and updating the courses periodically to fulfil the labour market needs taking into account quality standards (Hamza A. A., 2012) . In 2009, the third scientific conference of the ministry of higher education and sscientific research has issued new recommendations to the Yemeni Government to provide a sort of support to the universities to enable them developing their individual quality systems (Kweeran A. A. et al., 2010) . The third conference has also issued a very important recommendation to the government concerning the establishment of the Council of Academic Accreditation and Quality Assurance (CAQA) as a high steering council within the the Ministry of Higher Education and Sscientific Research in Yemen. In 2010, CAQA was established by the gevernmet to take place in the near future with crises in the Arab Spring Countries. In 2012, a director has been appointed to CAQA and many regulations and manuals have been issued during the last two years regarding quality assurance and academic accreditation in the Yemeni higher education (MHESR. 2009). Additionally, CAQA has executed extensive workshops sponsored by the World Bank to achieve a good level of training for quality team works and awareness for the top managers of the Yemeni universities concerning quality assurance and academic accreditation.

During the year 2013 and as a pilot experiment, UST has been chosen by CAQA along with other 3 universities to apply the first stage of academic accreditation which is called "Beginning" which should be followed by other 3 stages: "Foundation", "Accomplished", and "Distinguished". Each stage of them has different requirements that should be fulfilled to get the accreditation. As shown by the brief history of quality assurance and academic accreditation in the Yemeni higher education, we can remark that the experiment of quality assurance and academic accreditation in UST is older than the experiment of all other universities in the country and even the experiment of the Ministry of Higher Education. While the first unit of quality assurance in UST has been established during 1999, the UST model of quality is applied since 2003, and the procedure of international accreditation is followed up since 2010 for 3 pilot programs in UST, we can remark that CAQA has been established on 2010 and activated on 2012 which is too late experiment compared to the UST experiment. Even though the Ministry of Higher Education in Yemen has early developed manuals and regulations for the "opening license", however quality assurance and academic accreditation standards were not taken into consideration in that old regulations.

Regarding the other universities in Yemen, most of them have recently joined the project of CAQA for local accreditation because they have realized that the big challenge for a university in the future is not just the course delivery and the teaching process but how it can provide an educational service with high quality so that it can fulfill the requirements of community and labour market. Additionally, many factors have affected and cause a direction to adopt the systems of quality assurance and academic accreditation in the higher education institutes. These factors can be summarized as follows (Albelawy H.H. et al., 2008):

1. The variation of objectives in higher education institutes.
2. Increasing the request on higher education services.
3. New models of higher education institutes have been created.
4. The numerous of education environments.
5. Decreasing of governmental funding for the higher education and the increasing of private institutions.
6. The social responsibility of the universities toward the community (Khanfer E. A. et al., 2011).
7. The need for enhancing an academic culture regarding the development and modernization (Qawi B. et al., 2011).

3. UST MODEL FOR ACADEMIC QUALITY

As per the mission of UST, the university looks forward to be a pioneer on the level of the zone as it has achieved that on the level of the country. To achieve that mission, QAAM in UST has developed its own model of academic quality assurance by inspiration of the international experiments in quality assurance of higher education such as the requirements of Quality Assurance Agency (QAA) in UK and the standards of ISO 9001/2000 taking into account the privacy and culture of the zone (UST, 2010). This section presents this model involving several tools, procedures, quality measures and KPIs based on the latest enhancement in the model which has been accomplished during the academic year 2009/2010. The model is usually achieved using an assessment manual that consists of different tools with standard KPIs which has been developed by QAAM such as the following (QAAM, 2010):

1. Figuring out relative weights for all assessment types, fields and aspects.
2. Involving a field of assessment for the Action Plan of the faculties and Academic Departments.
3. Involving an assessment tool for the Head of Department (HoD), dean and deputy dean of the faculty within the assessment of the faculty.
4. Involving a field of assessment for the examination system and course assessment in Academic Department.
5. Involving descriptive standards for the assessment of Program Specification Document (PSD) of each
1. program in the department.
6. Involving descriptive standards for the Course Portfolio of each program in the department.
7. Involving assessment tools for staff member performance assessment which is assessed by students (teaching and assessment performance), HoD (teaching, research, administrative performance), peer-review (teaching performance), and self-assessment (teaching and research performance). Students are involved in the assessment of staff with a relative weight of 40% and the 60% is distributed between the other assessors.
8. Involving standards for the assessment of the curricula by students in order to allow them to somehow contribute in the development of curricula.

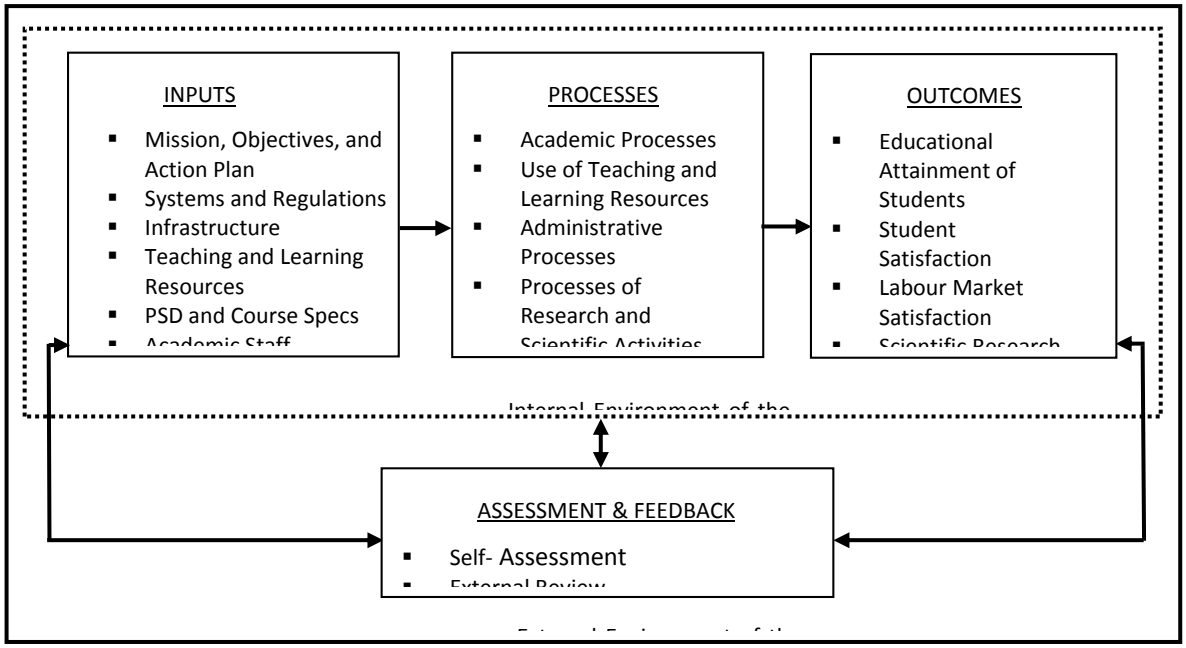

Figure 1. UST model for academic quality assurance

As shown by Figure 1, the model was developed based on the organizational model so that it involves 4 *Components* of the UST educational system: *Inputs, Processes, Outcomes, and Assessment & Feedback*. Each *Component* consists of a set of *Fields* and each *Field* has a set of *KPIs*. This model is implemented since the academic year 2003/2004 until now and it has subjected to continuous developing and enhancement. In the following, we present the Fields of each component within the model. KPIs will be presented later in the next section. As shown by Figure 1, the model is usually affected by the internal and external environment of the system.

3.1 Inputs Component

As shown by Figure 1, *Inputs Component* consists of 6 *Fields* as follows:

- Mission, Objectives, and Action Plan
- Systems and Regulations
- Infrastructure
- Teaching and Learning Resources
- PSD and Course Specifications
- Academic Staff
- Students

3.2 Processes Component

Figure 1 also shows the aspects of *Processes Component* which consists of 4 *Fields* as follows:

- Academic Processes
- Use of Teaching and Learning Resources
- Administrative Processes
- Processes of Research and Scientific Activities

3.3 Outcomes Component

As shown by Figure 1, the *Component* of *Outcomes* consists of 5 *Fields* as follows:

- Educational Attainment of Students
- Student Satisfaction
- Labour Market Satisfaction
- Scientific Research
- Community Service

3.4 Assessment & Feedback Component

As shown by Figure 1, the *Component* of *Assessment & Feedback* consists of 3 *Fields* as follows:

- Self- Assessment
- External Review
- Correction Procedures

4. UST MANUAL FOR PERIODIC ACADEMIC ASSESSMENT

As mentioned in the previous section, UST model of academic quality assurance is implemented since the academic year 2003/2004 until now and it has subjected to continuous developing and enhancement. QAAM in UST has developed a manual that includes a periodic academic assessment which is a comprehensive institutional assessment. UST has another assessment for programs self-assessment which is out of scope of this paper and it will be introduced in a future paper. The comprehensive institutional assessment was carried out annually since 2003 to 2009, then it has become carried out each 3 years while some KPIs still carried out annually to monitor the progress and the achievement of short-term objectives. This manual has become a reference for quality assurance and it consists of a set of tools (forms) as follows (Al-Shargabi A. et al., 2013):

4.1 Field Assessment of Academic Departments Performance (Assessor: Field Assessment Committee)

The first tool (form) in the manual is concerning the field assessment of Academic Departments performance and it is almost derived from the quality model mentioned early in this paper. As shown by Table 1, the 4 components of the model are still found in this form. Also, most fields of the model are still found in this form while other fields have been merged or measured by other tools (will be presented letter). As shown by Table 1, this form consists of 125 KPIs distributed on 13 Fields that belongs to the 4 Components of UST Quality Model.

Table 1: The form of the field assessment of Academic Departments performance

Component	No.	Field	KPIs/Field	KPIs/Component
Inputs	1	Mission, Objectives, and Action Plan	14	59
	2	Organizational Structure, Systems, and Regulations	5	
	3	Teaching and Learning Resources	13	
	4	PSD and Course Specifications	9	
	5	Academic Staff	13	
	6	Students and Registration	5	
Processes	1	Academic Processes in the Department	31	49
	2	Use of Teaching and Learning Resources	6	
	3	Administration Processes	8	
	4	Processes of Research and Scientific Activities	4	
Outcomes	1	Academic Outcomes	12	14
	2	Finance Outcomes and Community Service	2	
Feedback	1	Correction Procedures	3	3
Total number of KPIs				125

4.2 Assessment of Library Service Quality (Assessor: Student)

The second tool (form) in the manual is concerning the assessment of library service quality and it consists of 17 KPIs distributed on 3 Aspects related to some Fields of Inputs, Processes, and Outcomes Components in the UST quality model as shown by Table 2. The first Aspect is Administration Services (related to the Field of Systems and Regulations in the Inputs Component, the Field of Administrative Processes in the Processes Component, and the Field of Student Satisfaction in the Outcomes Component) with 8 KPIs. The second Aspect is Educational Resources (related to the Field of Teaching and Learning Resources in the Inputs Component, and the Field of Use Teaching and Learning Resources in the Processes Component) with 5 KPIs, and the third Aspect includes Environment, Furniture, and Equipment (related to the Field of Infrastructure in the Inputs Component and the Field of Student Satisfaction in the Outcomes Component) with 4 KPIs.

Table 2: The form of the library service quality assessment

Field/Component	Aspect	KPIs/Aspect
Systems and Regulations/Input Administrative Processes/Processes Student Satisfaction/Outcomes	Administrative Services	8
Teaching and Learning Resources/Input Use of Teaching and Learning Resources/Processes	Educational Resources	5
Infrastructure/Inputs Student Satisfaction/Outcomes	Environment, Furniture, and Equipment	4
Total number of KPIs		17

4.3 Assessment of Academic Staff Satisfaction (Assessor: Staff Member)

The third tool (form) in the manual is concerning the assessment of Academic Staff Satisfaction (and the assistant staff) and it consists of 35 KPIs distributed on 7 Aspects related to some Fields of Inputs and Processes Components in the UST quality model as shown by Table 3. The first Aspect is Salary and Bonus (related to the Fields of Systems and Regulations and Academic Staff in the Inputs Component, Administrative Processes in the Processes Component) with 5 KPIs. The second Aspect is Training and Qualifying (related to the Fields of Systems and Regulations and Academic Staff in the Inputs Component, Administrative Processes and Processes of Research and Scientific Activities in the Processes Component) with 5 KPIs. The third Aspect is the Work Circumstances (related to the Fields of Systems and Regulations and Academic Staff in the Inputs Component, Administrative Processes in the Processes Component) with 6 KPIs. The fourth Aspect is the Direct and The Top Managers (related to the Fields of Systems and Regulations and Academic Staff in the Inputs Component, Administrative Processes in the Processes Component) with 6 KPIs. The fifth Aspect is Policies and Procedures (related to the Fields of Systems and Regulations and Academic Staff in the Inputs Component, Administrative Processes and Processes of Research and Scientific Activities in the Processes Component) with 4 KPIs. The sixth Aspect is Services and Facilities (related to the Fields of Systems and Regulations, Academic Staff, and Teaching and Learning Resources in the Inputs Component, Administrative Processes and Processes of Research and Scientific Activities in the Processes Component) with 3 KPIs. The seventh Aspect is the General Environment (related to the Fields of Systems and Regulations, Academic Staff, and Teaching and Learning Resources in the Inputs Component, Administrative Processes and Processes of Research and Scientific Activities in the Processes Component) with 6 KPIs.

Table 3: The form of academic staff satisfaction assessment

Field/Component	Aspect	KPIs/Aspect
Systems and Regulations/Inputs Academic Staff/Inputs Administrative Processes/Processes	Salary and Bonus	5
Systems and Regulations/Inputs Academic Staff/Inputs Administrative Processes/Processes Processes of Research and Scientific Activities/Processes	Training and Qualifying	5
Systems and Regulations/Inputs Academic Staff/Inputs Administrative Processes/Processes	Work Circumstances	6
Systems and Regulations/Inputs Academic Staff/Inputs Administrative Processes/Processes	Direct and Top Managers	6
Systems and Regulations/Inputs Academic Staff/Inputs Administrative Processes/Processes Processes of Research and Scientific Activities/Processes	Policies and Procedures	4
Systems and Regulations/Inputs Academic Staff/Inputs Teaching and Learning Resources/Inputs Administrative Processes/Processes Processes of Research and Scientific Activities/Processes	Services and Facilities	3
Systems and Regulations/Inputs Academic Staff/Inputs Teaching and Learning Resources/Inputs Administrative Processes/Processes Processes of Research and Scientific Activities/Processes	General Environment	6
Total number of KPIs		35

4.4 Assessment of Academic Leaderships (Assessor: Student)

The fourth tool (form) in the manual is concerning the assessment of Academic Leaderships (Faculty Dean, Deputy Dean, Head of Department) and it consists of 50 to 65 KPIs (depends on the position type and level) distributed on 5 Aspects related to some Fields of Inputs and Processes Components in the UST quality model as shown by Table 4. The first Aspect is Position Occupying Requirements (related to the Fields of Systems and Regulations and Academic Staff in the Inputs Component, Administrative Processes in the Processes Component) with 17-22 KPIs. The second Aspect is Administration Skills (related to the Fields of Systems and Regulations and Academic Staff in the Inputs Component, Administrative Processes in the Processes Component) with 19-24 KPIs. The third Aspect is Professional Skills (related to the Fields of Systems and Regulations and Academic Staff in the Inputs Component, Administrative Processes in the Processes Component) with 4-7 KPIs. The fourth Aspect is Research Skills (related to the Fields of Systems and Regulations and Academic Staff in the Inputs Component, Academic Processes and Processes of Research and Scientific Activities in the Processes Component) with 3-4 KPIs. The fifth Aspect is Personal Skills (related to the Fields of Systems and Regulations and Academic Staff in the Inputs Component, Administrative Processes in the Processes Component) with 7-8 KPIs.

Table 4: The form of academic leaderships assessment

Field/Component	Aspect	KPIs/Aspect	
		From	To
Systems and Regulations/Inputs Academic Staff/Inputs Administrative Processes/Processes	Position Occupying Requirements	17	22
Systems and Regulations/Inputs Academic Staff/Inputs Administrative Processes/Processes	Administration Skills	19	24
Systems and Regulations/Inputs Academic Staff/Inputs Administrative Processes/Processes	Professional Skills	4	7
Systems and Regulations/Inputs Academic Staff/Inputs Academic Processes/Processes Processes of Research and Scientific Activities/Processes	Research Skills	3	4
Systems and Regulations/Inputs Academic Staff/Inputs Administrative Processes/Processes	Personal Skills	7	8

4.5 Assessment of Staff Teaching Performance (Assessor: Student)

The fifth tool (form) in the manual is concerning the assessment of staff teaching performance (and assistant staff). This tool is used by students to assess a staff member in term of his/her teaching performance. There are other tools have been developed to assess a staff member by HoD, Peer-review, and Self-assessment. The assessment grade of a staff member performance is distributed between the four parts mentioned above. The form shown by Table 5 is concerning student assessment for the staff member and it will be presented here as a sample and the details of the other three parts will presented in a future paper. Student assessment for the staff member weights 40% of the total assessment and the 60% is distributed between the other three parts. The form shown by Table 5 consists of 39 KPIs distributed on 5 Aspects related to some Fields of Inputs, Processes, and Outcomes Components in the UST quality model as shown by Table 5. The first Aspect is Teaching Preparation (related to the Fields of Teaching and Learning Resources, and PSD and Course Specifications in the Inputs Component, Student Satisfaction in the Outcomes Component) with 5 KPIs. The second Aspect is Teaching Skills (related to the Fields of PSD and Course Specifications in the Inputs Component, Student Satisfaction in the Outcomes Component) with 13 KPIs. The third Aspect is Assessment Skills (related to the Fields of Teaching and Learning Resources in the Inputs Component, Academic Processes in the Processes Component, Educational Attainment of Students and Student Satisfaction in the Outcomes Component) with 6 KPIs. The fourth Aspect is Academic Support (related to the Fields of Mission, Objectives, and Action Plan, Teaching and Learning Resources in the Inputs Component, Academic Processes in the Processes Component, Student Satisfaction in the Outcomes Component) with 6 KPIs. The fifth Aspect is The Course (related to the Fields of PSD and Course Specifications in the Inputs Component, Academic Processes in the Processes Component) with 9 KPIs.

Table 5: The form of staff teaching performance assessment

Field/Component	Aspect	KPIs/Aspect
Teaching and Learning Resources/Inputs PSD and Course Specifications/Inputs Student Satisfaction/Outcomes	Teaching Preparation	5
PSD and Course Specification/Inputs Student Satisfaction/Outcomes	Teaching Skills	13
PSD and Course Specifications/Inputs Academic Processes/Processes Educational Attainment of Students/Outcomes Student Satisfaction/Outcomes	Assessment Skills	6
Mission, Objectives, and Action Plan/Inputs Systems and Regulations/Inputs Academic Process/Processes Student Satisfaction/Outcomes	Academic Support	6
PSD and Course Specifications/Inputs Academic Processes/Processes	The Course	9
Total number of KPIs		39

4.6 Assessment of Academic Supervisors Performance in the College of Open Learning (Assessor: Student, HoD, Self-assessment)

The sixth tool (form) in the manual is concerning the assessment of Academic Supervisors Performance in the College of Open Learning and it consists of 37 KPIs distributed on 5 Aspects related to some Fields of Inputs, Processes, and Outcomes Components in the UST quality model as shown by Table 6. The first Aspect is Teaching (related to the Fields of Teaching and Learning Resources, and PSD and Course Specifications in the Inputs Component) with 9 KPIs. The second Aspect is Administration and Supervision (related to the Fields of PSD and Course Specifications and Academic Staff in the Inputs Component, Use of Teaching and Learning Resources, Academic Processes in the Processes Component, Student Satisfaction in the Outcomes Component) with 15 KPIs. The third Aspect is Research (related to the Fields of Academic Processes, Processes of Research and Scientific Activities in the Processes Component, and Scientific Research in the Outcomes Component) with 2 KPIs. The fourth Aspect is Scientific (related to the Fields of Teaching and Learning Resources, PSD and Course Specifications in the Inputs Component, and Processes of Research and Scientific Activities in the Processes Component) with 7 KPIs. The fifth Aspect is Marketing, Finance, and Community Service (related to the Fields of Mission, Objectives, and Action Plan in the Inputs Component, Academic Processes in the Processes Component, Labour Market Satisfaction and Community service in Outcomes Component) with 4 KPIs.

Table 6: The form of academic supervisors performance assessment in the college of open learning

Field/Component	Aspect	KPIs/Aspect
Teaching and Learning Resources/Inputs PSD and Course Specifications/Inputs	Teaching Aspect	9
PSD and Course Specifications/Inputs Academic Staff/Inputs Use of Teaching and Learning Resources/Processes Academic Processes/ Processes Student Satisfaction/Outcomes	Administration and Supervision Aspect	15
Academic Processes/Processes Processes of Research and Scientific Activities/Processes Scientific Research/Outcomes	Research Aspect	2
Teaching and Learning Resources/Inputs PSD and Course Specifications/Inputs Processes of Research and Scientific Activities/Processes	Scientific Aspect	7
Mission, Objectives, and Action Plan/Inputs Academic Processes/Processes Labour Market Satisfaction/Outcomes Community Service/Outcomes	Marketing, Finance, and Community Service Aspect	4
Total number of KPIs		37

4.7 Assessment of Academic Service Quality Provided to Students (Assessor: Student)

The seventh tool (form) in the manual is concerning the assessment of academic service quality provided to students and it consists of 45 KPIs distributed on 8 Aspects related to some Fields of Inputs, Processes, and Outcomes Components in the UST quality model as shown by Table 7. the first Aspect is Infrastructure (related to the Field of Infrastructure in the Inputs Component) with 4 KPIs. The second Aspect is Library (related to the Fields of Teaching and Learning Resources in the Inputs Component, Use of Teaching and Learning Resources in the Processes Component, Student Satisfaction in the Outcomes Component) with 4 KPIs. The third Aspect is Employees in: a) Admission, registration, and Student Affairs, b) Colleges and Departments with 10 KPIs, 5 for each one of the two parts. This Aspect is related to the Fields of Students in the Inputs Component, Academic Processes, Administrative Processes in the Processes Component, and Student Satisfaction in the Outcomes Component. The fourth Aspect is Admission and Registration Services (related to the Fields of Students in the Inputs Component, Academic Processes, Administrative Processes in the Processes Component, and Student Satisfaction in the Outcomes Component) with 4 KPIs. The fifth Aspect is General services (related to the Fields of Mission, Objectives, and Action Plan, Teaching and Learning Resources in the Inputs Component, Administrative Processes in the Processes Component, Student Satisfaction in Outcomes Component) with 8 KPIs. The sixth Aspect is Students Activities (related to the Fields of Students in the Inputs Component, Academic Processes, Administrative Processes in the Processes Component, and Student Satisfaction in the Outcomes Component) with 6 KPIs. The Seventh Aspect is Intellectual Image of the University (related to the Fields of Mission, Objectives, and Action Plan, Students in the Inputs Component, Academic Processes, Administrative Processes in the Processes Component, Student Satisfaction in Outcomes Component) with 5 KPIs. The eighth Aspect is Personal Development (related to the Fields of Teaching and Learning Resources, Students in the Inputs Component, Academic Processes and Use of Teaching and Learning Resources in the Processes Component, and Student Satisfaction in the Outcomes Component) with 4 KPIs.

Table 7: The form of the assessment of academic service quality provided to students

Field/Component	Aspect	KPIs/Aspect
Infrastructure/Inputs	Infrastructure	4
Teaching and Learning Resources/Inputs Use of Teaching and Learning Resources/Processes Student Satisfaction/Outcomes	Library	4
Student/Inputs Academic Processes/Processes Administrative Processes/Processes Student Satisfaction/Outcomes	Employees in: - Admission, registration, and student affairs - Colleges and departments	5 5
Student/Inputs Academic Processes/Processes Administrative Processes/Processes Student Satisfaction/Outcomes	Admission and Registration Services	4
Mission, Objectives, and Action Plan/Inputs Teaching and Learning Resources/Inputs Administrative Processes/Processes Student Satisfaction/Outcomes	General Services	8
Student/Inputs Administrative Processes/Processes Student Satisfaction/Outcomes	Students Activities	6
Mission, Objectives, and Action Plan/Inputs Student/Inputs Academic Processes/Processes Administrative Processes/Processes Student Satisfaction/Outcomes Labour Market Satisfaction/Outcomes	Intellectual Image of the University	5
Teaching and Learning Resources/Inputs Students/Inputs Use of Teaching and Learning Resources/Processes Academic Processes/Processes Student Satisfaction/Outcomes	Personal Development	4
Total number of KPIs		45

5. GRADING SCALE AND PROCEDURE OF ASSESSMENT

This section presents the grading system of assessment tools that are mentioned earlier in the previous section. The section also presents the procedure and mechanism of the assessment.

5.1 Grading Scale of UST Assessment System

QAAM in UST approved the Likert Scale. A Likert scale is commonly involved in the research employing questionnaire (with 5 grades from 1 to 5) (UNI., 2013). This scale is used in the field assessment of Departments Colleges of UST and the other assessments mentioned in the previous section. The team of assessment write up a grade of quality for each KPI based on proofs and evidences provided to the team during the assessment session. Table 8 illustrates the assessment grades of UST.

Table 8: The assessment grades of UST

Grade	Grade Expression	Grade Level
5	Excellent	90% or more
4	Very Good	80% to less than 90%
3	Good	65% to less than 80%
2	Pass	50% to less than 65%
1	Weak	Less than 50%

Regarding the whole assessment of the faculties and departments, the assessment system of UST has given a relative weight for 7 assessments based on the assessment structure that is mentioned above in the previous section. Table 9 shows the assessments and the individual relative weights.

Table 8: The assessments and the individual relative weights in UST

Assessment of the Faculty Performance		Assessment of Academic Department Performance	
Assessment	Weight	Assessment	Weight
The Performance of Academic Departments Belongs to the Faculty	60%	Field Assessment of Academic Department	45%
Quality of Library Service	8%	Student Academic performance	15%
Staff Satisfaction	10%	Academic Service Quality Provided to Students	10%
Deanship	5%	Performance of Staff/Academic Supervisors	10%
Academic Service Quality Provided to Students	5%	Head of the Department	5%
Reports of Action Plans	7%	PSD	9%
Quality of Examinations and Course Assessment	5%	Course Portfolio	6%
Total	100%	Total	100%

5.2 Procedure and Mechanism of UST Assessment System

The assessment undertaken in this paper is regarding to the comprehensive institutional assessment which focuses mainly on the academic performance of the departments and faculties of the university. UST has another assessment for programs which is out of scope of this paper and it will be introduced in a future paper. As mentioned earlier in this paper, the institutional assessment was carried out annually until the year 2009, then it has become carried out each 3 years. However, some KPIs still carried out annually to monitor the progress and the achievement of the short-term objectives.. Here we present the procedure and mechanism of the assessment as follows (QAAM. 2010):

1. The president of UST issues a decision of the Field Assessment Committee that should involve internal and external reviewers.
2. The field assessment tools are sent to all Academic Departments within the faculties in order to prepare and get ready for the assessment session with the committee.
3. A time plan for field assessment should be prepared by the committee and then the plan is sent to all departments.
4. The committee starts applying the process of field assessment based on the time plan and using the assessment tools mentioned in Table 8. The committee follow up the forms and asks for the proofs and evidences, then it write up the grades individually by each member, then it writes up the comments, shortcomings, and the best practices that could be found applied by the department.
5. HoD then starts the process of staff performance assessment which is done by the HoD himself/herself, students, peer-review, and self-assessment by the staff member himself/herself especially for the research activities.
6. The next step is the assessment of the examinations and course assessment in each department.
7. Then, the process of academic leadership assessment starts for the dean, deputy dean, and heads of departments in each faculty. This assessment is done for each leadership by the staff and at the direct managers of each one.
8. All documents of all assessment types mentioned in Table 8 should be processed statistically.
9. The results then should be analyzed.
10. Finally, the periodic report of the academic performance for the whole university is prepared by QAAM and submitted to the university president.

6. CONCLUSION

The UST leadership has being interested in quality issues since 1999 through establishing special unit for quality assurance and enhancement in academic and administrative dimensions. Supporting this unit came from its vision and responsibility towards excellence. The unit totally assessed the whole academic process in 2003/2004 within the quality model adopted in the university. This model was periodically developed after every assessment process specially the part of the KPIs. As a result of applying this model, a remarkable quality of service has achieved and the UST has grown dramatically in terms of number of students (from thousands to 20000), colleges (from 3 to 8), programs (from less than 20 to 40) and also the international partnerships. Nowadays, the assessment process is directed toward program self-assessment and all the university units either academic or administrative. The UST vision was being translated through many actions in the strategic plan for the university 2009/2010 – 2014/2015. For example, UST started offering and equipping the educational process based on the national accreditation KPIs and, with the end of the strategy, the programs should be accredited by

the CAQA, and international accreditation agencies. These actions are rephrased as 4 projects out of 36 stated in the strategic plan 2009/2010 – 2014/2015. These projects are quality manual for academic system, quality manual for administrative system, program accreditation, and institutional accreditation. These projects are in their way of accomplishment such as many agreements between the UST and CAQA as well as UST and different accreditation agencies such as ABET and AACSB.

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INVESTIGATING UNIVERSITY STUDENTS' LEVEL OF SERVICE QUALITY IN HIGHER EDUCATION

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ABSTRACT: The present study aimed to investigate whether university students' level of service quality in higher education makes a difference or not in their education process in accordance with gender, department, and class level variables. As a data collection tool, "Higher Education Service Quality Scale" was used. The sample was composed of 239 students studying at Sakarya University. Collected data was analyzed via t-test, and ANOVA. According to findings, there was no significant difference between university students' level of service quality in higher education in terms of gender. On the other hand, there was a significant difference in university students' level of service quality in higher education in terms of department, and class level.
Keywords: Service quality, higher education, gender.

INTRODUCTION

Nowadays quality service, quality in education, and service quality in higher education terms have been considered important by relevant institutions in order to meet the expectation of people who benefit from these service, and to increase their satisfaction level. Thus, quality assessment studies become important at universities. Universities have great responsibility in terms of strengthening the social structure, and contributing to the national economy. Hence, it can be suggested that the offered service at universities should be qualified in order to give qualified education to individuals. There are several different definitions of the service concept. Some common points of these different definitions are as follows: service is abstract, beneficial for those who buy it, customers can participate in production process of the service, service cannot be stored, they are consumed as soon as they are produced, service quality assessment is subjective, quality control is limited to process control basically, labor is intensive in service production (Özçalık, 2007). There may be some problems in determining quality in service industry because of different features. Therefore, different methods and assessment tools are developing and applying in order to determine service quality. Two factors gain importance in those different methods. Those factors are determining quality according to customer opinions and to employer/ manager opinions or to employee opinions (Bektaş and Ulutürk-Akman, 2013). According to the definition of The Banks Association of Turkey (1994), service quality means that meeting expectations and request of individuals who benefit from this service. At this point, quality perceived by individuals is important. Quality is determined with factors such as how much it meets the expectations of individuals/ customers at the service and how individuals perceive availability of qualifications that take place at the service (Cengiz, 2008). In other words, offering service in accordance with the request, needs, and expectations of the individuals is an indicator of service quality. Institutions which offering service in this way can increase individuals' perception about service quality as much as they can meet the expectations of individuals. Thus, the dimensions of service quality should be determined by institutions that offer service. Those dimensions are as follows: reliability (offering accurate and consistent service), giving feedback (giving accurate and explicit feedback to customers in time), guarantee (employees should establish environment of confidence with their behaviors), empathy (employees should put themselves in customers' shoes and serve necessary communication to the customers), physical assets (visuality of the institutions, physical environment, offered materials, and employees) (Okumuş and Duygun, 2008).

Education and quality concepts are closely related to each other. Producing qualified products in labor market corresponds to educating people qualitatively in education service (Karahan, 2013). In order to educate people qualitatively, qualified education is necessary. Qualified education can be achieved by applying accurate education programs effectively to individuals in right time and place (Devebakan, Koçdor, Musal and Güner, 2003). Quality in education is a concept that is used in different meanings. In general, quality in education means reaching education purposes and success in terms of bringing individuals in intended knowledge, skills, and abilities (Karslı, 1997). Like all other institutions that offer service, higher education institutions also aim to offer qualified service. In order to offer qualified service, it is important to provide products and service that aim to fulfill customers' needs. The important thing here is defining the customer concept accurately in higher education (Açan and Saydan, 2009). According to Madu, Aheto, Kuei and Winokur (1994), students, families, personnel, and all individual in the society constitute customers in educational institutions. Students, families, and personnel are internal customer, whereas companies and the society is foreign customer (Yılmaz, Filiz and Yaprak, 2007). Within those customer groups, students are considered as important in terms of increasing service quality in education. As Taylor (1995) stated that effective factors in determining service quality is

customer expectations, and customer satisfaction. Therefore, the most important factor that affects the quality in education is student satisfaction. It is necessary to give education in accordance with students' request, need, expectation, and interest by offering service in educational institutions, and even to meet students' expectations by giving education that goes beyond those features (Güzel-Şahin, 2011). Owlia and Aspinwall (1996) approached to quality features in higher education in six headings. Those features, in which students are considered as customers, are as follows: concrete factors, competence, attitude, content, presentation, and reliability. Concrete factors include providing university students with adequate physical environment and opportunities, and creating an interesting visuality. Competence covers having sufficient number of well-equipped instructors, good communication of those instructors with students, and efficient teaching- learning process. Attitude includes caring students one to one, determining students' needs, and giving adequate consultancy to students. Content comprises interdisciplinary curriculums, supporting students in terms of their professions, and providing an opportunity for group works. Presentation includes preparing effective presentations, making objective assessment and evaluation, giving feedback to students, and improving students' self- confidence. Reliability covers fulfilling commitments, considering complains, requests, and suggestions, and solving determined problems. There have been various studies that investigate the service quality that is offered to students at universities. In order to determine the effectiveness of those studies, mostly students' self-reports are used.

Aim of the Study

In the present study, university students' perception levels about service quality in higher education during their education process was determined and also whether or not their scores in Higher Education Service Quality Scale differed in terms of gender, department, and class level was investigated. Within the scope of this purpose following questions were sought an answer.

Research Problems

- Do students' scores of service quality in higher education differ in terms of gender?
- Do students' scores of service quality in higher education differ in terms of class level?
- Do students' scores of service quality in higher education differ in terms of department?
- In which level students' perception about service quality in higher education?

METHOD

Research Design

The current study was conducted with relational screening model. Within the scope of this model, "Higher Education Service Quality Scale" was applied to students.

Participants

The sample of the present study was composed of 239 students in Sakarya University Faculty of Education: 133 (58.1%) female, 96 (41.9%) male. The distribution of students according to gender and department was shown in Table 1.

Table 1. The Distribution of Students According To Gender and Department

Department	Gender	N	%	Total	Grand Total
SST	Female	30	13.1	91	239
	Male	61	26.6		
ST	Female	60	26.2	71	
	Male	11	4.8		
MDT	Female	43	18.8	67	
	Male	24	10.5		

SST:Social Science Teacher Education
ST: Science Teacher Education
MDT: Mentally Disabled Teacher Education

Data Collection Tools

Higher Education Service Quality Scale: Higher Education Service Quality Scale includes 22 items and four sub dimensions. The Turkish adaptation of the scale was done by Eskicumalı, Arslan and Demirtaş (2013). Confirmatory factor analysis results show that 22 items were loaded in four sub dimensions as it was in original scale, and four dimensional model showed a good fit (X^2=337.86, sd=186, RMSEA=.043, IFI=.98, CFI=.98, GFI=.93, AGFI=.91, SRMR=.056). The internal consistency reliability coefficient was calculated as .92.

Analysis of Data

The ANOVA and T test were conducted in order to investigate whether students' perceived Higher Education Service Quality Scale points differed in accordance with gender, department, and class level or not.

FINDINGS

The current study was conducted in order to determine university students' perceived service quality in higher education and also to investigate whether or not their scores in Higher Education Service Quality Scale differ in terms of gender, department, and class level. Obtained data was analyzed according to research questions and interpreted.

Whether or not the difference between students' scores in service quality in higher education was significant in terms of gender variable was analyzed via t- Test and results were shown in Table 2.

Table 2. T- Test Results of Students' Mean Scores of Service Quality in Higher Education in Accordance with Gender

	Gender	N	$\bar{X}$	Ss	Sd	t	p
Service Quality in Higher Education	Male	96	62.17	15.7	227	-.72	.46
	Female	133	63.53	12,4			

As it was seen in Table 2, students' scores of service quality in higher education did not significantly differ in terms of gender variable (t_{227}=-.72, p<.05).

Whether or not the difference between students' perceived scores in service quality in higher education was significant in terms of class level was analyzed via t- Test and results were shown in Table 3.

Table 3. T- Test Results of Students' Mean Scores of Service Quality in Higher Education in Accordance with Class Level

	Class Level	N	$\bar{X}$	Ss	Sd	t	p
Service Quality in Higher Education	1st grade	98	60.2	13.9	227	-2,54	.01
	4th grade	131	64.9	13.6			

As Table 3 shows that students' scores of service quality in higher education significantly differs in terms of class level (t_{227}=-2.54, p<.05). Indeed, mean scores of seniors in terms of service quality in higher education was higher ($\bar{X}$=64.9) as compared to the freshmen ($\bar{X}$=60.2).

Whether or not the difference between students' perceived scores in service quality in higher education was significant in terms of department variable was analyzed via ANOVA-Post Hoc comparison and results were shown in Table 4.

Table 4. ANOVA Results of Students' Mean Scores of Service Quality in Higher Education in Accordance with Department

Source of Variation	Sum of Squares	Degree of Freedom	Mean Square	F	P	Significance
Between groups	2592,12	2	1296,06	7,03		1-3
Within Groups	41651,60	226	184,29		,001*	2-3
Total	44243,7	228				

1: Social Sciences T.., 2: Science T.., 3: T. of Mentally Disabled

As Table 4 indicates that students' scores of service quality in higher education significantly differs in terms of department (F=7,03, p<.05). In fact, mean scores of students in Social Science Teacher Education ($\overline{X}$ =64.5) in terms of service quality in higher education was higher as compared to students in Teacher Education of Mentally Disabled ($\overline{X}$=57.7). Moreover, mean scores of students in Science Teacher Education ($\overline{X}$=65,7) in terms of service quality in higher education was higher than those of students in Teacher Education of Mentally Disabled ($\overline{X}$=57.7).

Furthermore, as Table 2, 3, and 4 show that students' mean scores in terms of service quality in higher education was at medium- level. In other words, students are satisfied with the service quality of their university's education at medium level.

RESULTS AND DISCUSSION

The present study was conducted in order to determine university students' perceived service quality in higher education and also to investigate whether or not their scores in Higher Education Service Quality Scale differ in terms of gender, department, and class level. According to findings, students' perceived service quality in higher education was at medium level. Researches, conducted in different universities and in departments, found that students were satisfied with their university service at medium level (Çavdar, 2009; Taşkın, Demireli, Cingöz, 2008; Eren, Özgül and Çullu-Kaygısız, 2013) and at low level (Eti-İçli and Vural, 2010; Yüce, 2013; Güzel-Şahin, 2011). Moreover, Tayyar and Dilşeker (2012) carried out a study at both foundation and state universities in terms of service quality and found that students' perceived service quality at foundation universities was higher as compared to state universities. Furthermore, when two different state universities were compared, students' perceived service quality was higher in long- established university than that of the developing one. Şahin (2009) carried out a longitudinal study for three years with students in Faculty of Education, and tried to determine students' satisfaction level in six sub dimensions. Students' satisfaction level with university service showed an increase generally for the following three years. Nevertheless, for academic year in which the last application took place, students' satisfaction about especially the management, resources, and computer opportunities sub dimensions were at relatively low levels, on the other hand, students' satisfaction about instructors, consultancy, and lesson plan sub dimensions were at medium levels.

The present study indicated that students' perceived service quality in higher education scores were not significantly different in terms of gender, on the contrary, they were significantly different in terms of department and class level. Perceived service quality in higher education scores of seniors were higher than those of freshmen. In addition, perceived service quality in higher education scores of students in Social Science Teacher Education and Science Teacher Education were higher than those of Mentally Disabled Teacher Education. Similarly, according to the study of Okumuş and Duygun (2008) which aimed to investigate the relationship between students' perceived service quality in higher education and student satisfaction, it was found that there was no significant difference in service quality in higher education in terms of gender. Besides, Güzel-Şahin (2011) investigated the university students' perception about service quality in terms of five dimensions, namely, physical appearance, reliability, interest/ desirousness, assurance, and empathy. For all dimensions, there was no significant difference in students' perception about service quality in terms of gender. Yılmaz, Filiz and Yaprak (2007) examined the service quality of university students in five dimensions. In terms of gender, there was no significant difference in interest dimension; on the contrary there was a significant difference in competence, reliance, concrete features, and desirousness. In terms of department, there was a significant difference in competence and desirousness dimensions. In terms of class level, the obtained value in desirousness variable was close to the significance level.

Çavdar (2009) investigated service quality in higher education in six dimensions (concrete features, competence, attitude, content, presentation, and reliability). In terms of gender, there was a significant difference in reliability dimension, but not in other five dimensions. With regards to department, there were significant differences in competence, attitude, content, and presentation dimensions, but not in concrete features and reliability dimensions. In the sense of class level, there was a significant difference in content, and presentation dimensions but not in other four dimensions. Eren, Özgül and Çullu-Kaygısız (2013) conducted a study on undergraduate students who were studying at tourism and found that there was no difference between students' education satisfaction in terms of gender variable. On the other hand, there was significant difference in consultancy service and assessment and evaluation in the sense of department variable. Similarly, in terms of class variable, there were significant differences in consultancy and education services. Seniors were more satisfied with the consultancy service than freshmen. Moreover, in terms of education service, juniors and seniors were more satisfied than freshmen. Service quality in higher education was approached in different dimensions. When service quality was investigated in terms of different variables, the difference between different dimensions of the service quality and gender, class level, and department was found. Moreover, students, who benefit from education services at higher education institutions generally perceived service quality at medium and low levels. Therefore, it is thought that universities, which prepare students to the profession and life, should increase their service quality in order to provide students with qualified education.

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