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CONTENTS	PAGE NO.
Constructivism as Instructional Model of Science Teaching Alyas Qadeer Tahir	06
Educational Resources for HIV/AIDS Prevention in Uganda: The Role of PIASCY Program in Primary Schools Ndawula Stephen & Nakawuki Rose Costa	20
Educational Managers' Behaviour for Improving the Quality Teaching at Secondary Level of Education Nadeem Iqbal	32
Instructional Performance of Feminist Pedagogy in Boys' English Language Teaching Classrooms Mamuna Ghani & Muhammad Arfan Lodhi	44
An Evaluation of Virtual Teaching Experiences at International Islamic University Islamabad Shazia Naureen & Muhammad Munir Kayani	58
Teachers' Knowledge, Beliefs and Pedagogical Practices in Integrating ICTs in different Curriculum Areas in Secondary Schools: A Case Study of Pakistan Alcuin Mwalongo	69
Exploring Differentials across the Preschool Systems in the Maghreb Region Mohamed Ridha Ben Maad & Sana Cherni	80
Perceptions of Students, Educators and Principals about Quality Assurance of Elementary Teacher Education	92

Azhar Mumtaz Saadi & Muhammad Saeed	
Practice Teaching or Internship: Professional Development of Prospective Teachers through their Pre-Service Training Programmes Irshad Hussain & Sheikh Tariq Mahmood	105
Mentoring in Teacher Education: Building Nurturing Contexts and Teaching Communities for Rural Primary School Teachers in Sindh, Pakistan Nilofar Vazir & Rakhshinda Meher	123
Organizational Learning for Developing Competency in Malaysian Islamic Banking Institution Norudin Mansor, Noor Hafidzah Abdul Malik & Azman Che Mat	144
The Impact of Interace between Educational Realities and Exploitative Corruptions in Public and Private Offices on Development in African Countries Osezuah Simon Oria & Ugonoh Samuel Inobemeh	160
Teaching Teachers and Students about the Nature of Science Nelofer Halai	171
Impact of Teaching - Terminology of Mathematics Subject in English and Mother Tongue on the Learning of Students at Secondary School Level Sultana Solangi, Zafarullah Sahito & Muhammad Kamran Abbasi	180
Use of Information and Communication Technologies in Teacher Training Muhammad Safdar	191

Women Differences in Seeking Educational Leadership and Management Nadia Rashid	207
Analysis of Text Included on Natural Phenomena in Grade-1Textbook of Federal Board of Education in Pakistan Masood Nadeem, Dr. Muhammad Pervez, & Rubina Hanif	225
Comparative Study of Instructional Strategy of Allama Iqbal Open University and Arab Open Universit Muhammad Rashid & Muhammad Javid Iqbal	241
Factors Affecting the Students' Academic Performance Muhammad Riaz Ahmad, Muhammad Khalid Pervaiz & Muhammad Aleem	252
Retention of Basic Literacy Skills of Neo-literates: An Unknown Reality Muhammad Asif Nawaz & Maqsud Alam Bukhari	263
Need for Professional Training of Secondary Schools Heads Naveed Sultana	273
A Cross-country Comparison of the Iranian Curricula for Translation Programme at the Undergraduate and the Graduate levels Ramin Rahimy	289

Effects of Social and Educational Conditions on the Achievement of Position Holders at Higher Secondary Level in Punjab Khalid Khurshid, Iram Gul Gillani & Shazia Noreen	303
A Critical Review of the Impact of Educational Technology in Teaching Learning Process at Secondary School Level in Khyber Pukhtoonkhawh, Pakistan Sajjad Hayat Akhtar & Parveen Munshi	312
Opinion of the Teacher Trainers about the Gap between Skills Acquired during Teacher Training Programs and Skills Required in Actual Classroom Tehseen Akhtar, Talat Khurshid & Muhammad Anwar	323
Comparison of Human Resources Impact on Teaching Grammar to Second Language Learners and Developing Teachers' attitude towards Teaching of English Grammar at Secondary School Level Hassan Danial aslam, Muhammad Asif Nadeem, Munawar Hussain & Mannan Khan	335

Constructivism as Instructional Model of Science Teaching

Alyas Qadeer Tahir^{*}

Abstract

The purpose of this paper is to share and disseminate the science teaching model of constructivism to science teachers of Pakistan enabling them to be in better position to implement national science curriculum in its real soul and sound. Through introduction of this model, it is intended not only to make the present knowledge of science available to the students but also to discover the science phenomena in their own environment. The principles of constructivism and implications for instruction designing have been elaborated with specific examples from science curriculum. The steps of constructivist learning models and a model lesson plan on learning cycle have been given in the paper as guidelines for science teachers.

Introduction

When planning a general science course or curriculum, curriculum developer normally encounters the questions like-wise; what material will be covered? Or in what order will it be presented? Thinking of science from a constructivist perspective helps science educator to decide what might comprise a science curriculum. Constructivism emphasize that a learner has to make sense of science through an existing conceptual structure. Whatever science knowledge is constructed will be an interpretation of experiences in terms of prior knowledge. Accordingly, two questions are fundamental; what experiences should be provided to the learner in order to facilitate learning, and second, how can learner represent, what is known already to give meaning to these experiences?

To answer these questions, one needs to take a look on research in education and characteristics of learners. There are two kinds of

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ideas usually concern with the students. These are called concrete content and formal content. Concrete content is that which is observable directly, is qualitative, or involve one to one correspondence, while the formal content includes verbally stated hypothesis, functional relationship. The most important result with Piagetian theory (1952) is the well-documented idea that secondary students may not be able to reason with formal content. They have not developed mentally to the point where formal content is understandable to them. They can reason only with the concrete or early formal content.

Since all the students can do convergent, divergent and valiative thinking, the prescription for enhancement is practice. However, concrete or early formal students can't handle the formal concepts. If the content is geared above the ability of the learners, no thinking higher than memorization can occur.

Overview of previous Research

Conception of teaching and learning as psychological process has been recurrent influences on the curriculum reform. Many learning theories were certainly prominent in the curricular reforms of 50's and 60's. Piaget's name is associated with a number of British projects as well as American projects in this period. Most of these theories were largely developed from experimental studies in psychology, that were detached both from social context like class room and from the content of science. Of all these theories, that were influential in the 50's, 60's and 70's curriculum reform, only that of Piaget's theory has still much influence on science education.

No single approach of teaching is best for all subjects, all children, all of the time and under all circumstances. The dominated model of teaching is that associated with the rational-linear framework begun by Tyler (1950) and further elaborated on by Taba (1956), Popham and Baker (1970) and direct instructional theorists like Gagne and wagar (1983). This perspective has dominated curriculum texts, teacher preparation programmes and central planning criteria, in spite of contrary research evidence which shows teachers plan in a

way which contrasts markedly with the linear process. The model has four basic tenets:

- Specifying objectives;
- Specifying knowledge and skills;
- Selecting and sequencing learning activities;
- Evaluating the outcomes.

The model assumes a close link between end and means; it also assumes that the learning environments in which teaching takes place are static and controllable rather than dynamic. This technical view of planning and teaching, usually stated through the careful specification of detailed behavioral objectives, is designed to promote efficient learning and measurable outcomes.

An alternative model has emerged during the last 15 years. Critics of the rational model claim that there is a mismatch between the complexity of classrooms and the specific goals laid out in the plan. They claim that classrooms and lessons have a multiplicity of goals and much of the learning that goes on in them is neither controllable nor predictable in any scientific way. Such critics argue for a non-linear model of planning where science teachers start with the activities which in turn produce outcomes (some foreseen, some not) and finally explain their actions by assigning goals to them. Such a theory has been strongly suggested by a number of research studies which have investigated teacher's planning practices. Taylor (1970) found that teachers gave the content of lessons and the teaching and learning activities embedded in them a much higher priority in their planning than the delineation of objectives. In fact, these aims and objectives seemed to be the least mentioned of all their planning actions. Studies by Joyce and Hartoounian (1964) and Peterson, Clark (1978) further indicated the limited adherence to the rational-linear model with teachers preferring to concentrate on the content and the activities designed to bring about learning.

This more organic model of planning and teaching sees objectives in a different way. They are viewed as flowing from a cyclical process and are seen as symbols, advertisements and, in many situations,

justifications for action. Although such a descriptive model accounts for a great deal of experienced teachers' planning, this does not mean that objectives do not play a highly significant part in the planning and teaching process.

In a constructivist environment (Carin 1989) students are encouraged to share their understandings of an idea or concept at the beginning of the discussion of a topic. Through activities and other experiences, the teacher may then reinforce acceptable explanations of challenge incorrect or incomplete knowledge. Using these foundations, students have a better chance of assimilating and utilizing new knowledge, constructing new understandings on the foundations that they bring to the discussion. The learning cycle used in "Macmillan/McGraw-Hill Science" (1999), USA is a four-step cycle that seeks to utilize the philosophy of constructivism with hand-on-activity approach to the learning of science. These steps are Engage, Explore, Develop and Extend/apply.

Under the more familiar title of "Constructivist Approach to Learning" these ideas have now been elaborated in considerable details (Driver and Oldham 1986). A basic difference between the case of this constructivist approach to learning and other theories is that so much of its development has been rooted in studies of young persons interacting with scientific phenomena. Another main difference is that, these studies have been done by science education researchers, not by psychologists. It shows that this is not so much a general learning theory to be related to science curriculum, but is knowledge about the way learners interpret scientific phenomena, form concepts about them and how the science teacher can facilitate such process of learning.

Principles of Constructivism

Constructivism has great implication for the science teachers as well as the curriculum developers. The applicability of this approach (Sahram, 1988) is based on the following principles;

1. Classroom Activities

a) Hand-on Investigative Lab

Direct sensory experiences provide opportunities for learners to experience the phenomena or material under study.

b) Active Cognitive Involvement

Cognitive activities such as thinking at loud, developing alternative explanation, interpreting the data, participation in cognitive conflicts, development of alternative hypothesis, are all examples of learner's activity which activate the constructive learning model.

2. Higher Level Assessment

A most significant role of teacher, from a constructivist perspective is to evaluate student's learning. Traditional assessment practice seems to be associated with an emphasis on completing product for classes.

However, the active participation of students is rare in this case. Usually the students are frustrated in the traditional way of assessment. The students are highly motivated, when they pass the test or exam in a competitive environment. The more frequent use of quiz and test questions is a very important aspect of learning environment.

3. Developing of Thinking

How the teacher can enhance the convergent, divergent, and valuate thinking? This can be done by putting the students consistently into situation where they can be and must develop such thinking. In constructivism this situation is called disequilibrium. The most powerful tool for stimulating thoughts is the questions the teacher asks in the classroom.

Asking questions that stimulate only recall thinking or only divergent thinking narrows the students' experiences and leads to monotony. The development of different types of thinking depends upon the questions asked by the science teacher.

Here are given some questions on stoichiometry and gas behaviour, which represent the early formal to formal piagtian level usually the student poses in the school age, and the types of thinking it can develop;

a) Cognitive-Memory Thinking

- i) What is Avogadro's number?
- ii) Given the equation: $2\text{H}_2\text{O} + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$, how many grams of H_2O can form from 2.0 g of H_2 and 4.0 g of O_2 ?
- iii) An ideal gas sample at 1.2 atm and 250° is heated to 350° K. What is it final pressure?

b) Convergent Thinking

Given the equation: $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$, how many H_2O molecules can be formed from 6 H_2 and 2 O_2 molecules?

Are grams conserving in a chemical reaction? Are moles conserve? Explain using specific examples?

Why can you suck coke through straw?

c) Divergent Thinking

When pure Fe is heated in an open crucible, it gains weight, what possible compounds could be forming?

Given two or three ways, the gas laws might be used to measure the volume of a natural gas deposit?

d) Evaluative Thinking

How would you experimentally determine what compound form when Fe is heated in air? As pressure increased about 20 atm, PV/nT for H_2 (g) steadily increases from 0.0821. Why is that?

Divergent and evaluative thinking in chemistry arise most naturally in the laboratory, especially if the lab exercises have some open ended components. Such thinking can be stimulated through class instructions if the students are pushed to do extensive brain storming.

Laboratory Instructions from Constructivist Perspective

Laboratory experiences play an important role in this approach, because the laboratory work provides concrete experiences for the students which help in developing the science concepts. One of the advantages of using the science lab is to enable the students to develop their own concepts in science. The most important point is that science lab. Instructions from constructivist perspective should be based upon the principle of “guided inquiry”. Which lead the students to construct their own concepts with the help of teacher? The lab Instructions usually follow the same cycle as applied in classroom i.e. exploration, development, and application.

It is not clear, whether the phases of learning cycle serve their original purpose, to help in promoting reasoning at a more abstract level. However they are ideal for giving concrete experiences with the subject matter and that they increase tangibility to the abstract concepts normally encountered in the chemistry. The lab instructions for the learning cycle are different from the traditional one in the sense that the students are not exposing to all information related to experiment at once. This information is delivered to students in a sequence.

For example the 1st group of instructions may be consisting of material relevant to exploration stage of the learning cycle and the last one related to application stage of learning cycle. This makes it difficult to combine it as whole. It is agreed that the learning cycle is ideal tool for the introduction of basic principles of science.

Implication for Instruction Designing

The main steps involved in applying this approach to curriculum design are:

1. Identification of Concepts

It is necessary to specify those main concepts of science, which students should be exposed to, and what ideas they may construct from these experiences. For example, major principles involved in chemistry are related to the properties of elements and compounds

which can be easily understood by chemistry students in the terms of periodic table, electro-negativity, oxidation number, and the atomic size. The major concepts in introductory chemistry provide a foundation for other relevant concepts in chemistry. Some of the basic concepts could be classified as;

- a) the tendency of two non-metallic elements to react increases as the difference in electro-negativity increases.
- b) the oxidation number of elements in a compound usually correspond to full sub shell.
- c) any covalently bonded element with more than one oxidation state become less metallic and more electro-negative in its higher oxidation state.
- d) the lower the electro-negative of an element, the greater will be its tendency to give up electrons in an oxidation-reduction reaction.
- e) metallic oxides form basic solutions and non metallic oxides form acidic solutions.
- f) principles of hard acids and bases.
- g) the number of group around a central atom is limited by the size of the central atom and by the orbital in the central atom available for bonding.

The first two and the last concepts are helpful when explaining the types of covalent bonds. The other helps tie together the physical and chemical properties of the elements. With these principles, the students are able to make predictions of the formulas of compounds and relative tendencies of the elements, their ions, or their compounds. All these principles are developed by the students themselves. Experience with the chemicals comes with the exploration phase of learning cycle, while the concepts are being developed during the application stage.

2. Information about Students

If we adopt a view of learning as conceptual change, we must have information about the ideas that students may bring to the learning

situation. This information would likely provide a base for the development of advance concepts in science class.

3. The Role of Teacher

The teacher's role is to mediate the learning of students. This assertion should have an important influence on the way teacher think about teaching. In the classroom, teacher should provide opportunities for students to represent their knowledge in a variety of ways through out the lesson by writing, drawing, using symbols, and assigning language to what is known.

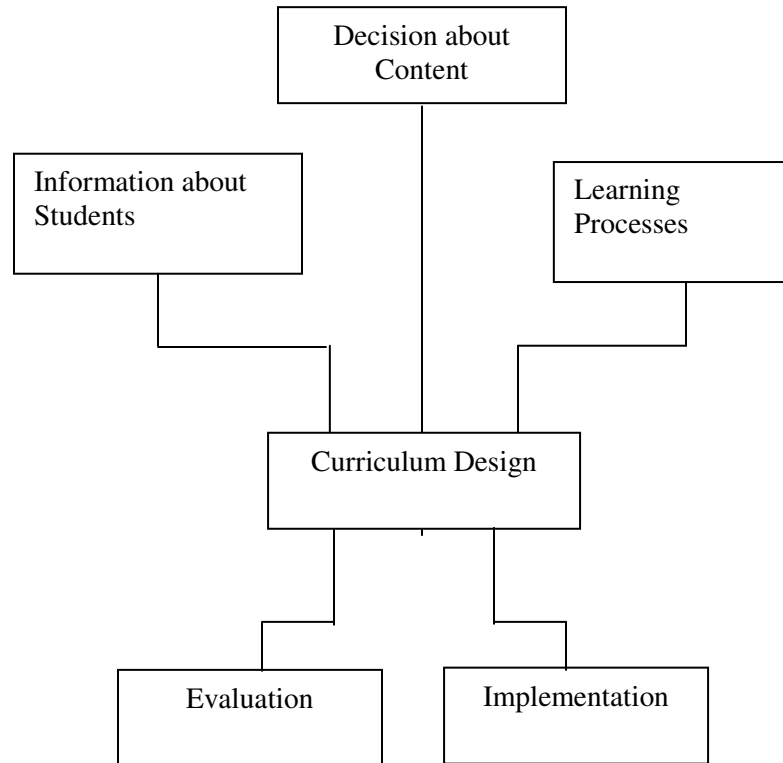


Fig. Constructivist Approach to Curriculum Design

The teacher can't modify the students cognitive structures, only the students can. The teacher can assist students with cognitive restructuring by placing them in a situation which results in disequilibrium. The teacher can't convey or transmit meaning; they can only transmit the words. The meaning must only be constructed by the students. The teacher remains the key factor in the renewal process because the objectives is to, change the teaching/learning process from traditional way to constructive way and this will require the willingness and motivation of science teacher. In this approach the teacher have to use the constructivist learning model for developing an understanding of new contents.

The responsibilities of science teachers in this case are totally different from the traditional one. Using the new approach the science teachers can more effectively motivate the students to continue their science education, because most of the students lose their motivation towards the science, due to difficulties in understanding the scientific concepts.

Format of Constructivist Learning Model

The constructivist learning model has been effective as a teaching strategy that directly involves the students in active investigative science experiences. In this learning model, the students engage in hands-on activities before being introduced to new concepts and terms or reading material. This learning model consists of three phases;

1. Engagements and Exploration (Step-1 and 2)

Students explore new material and ideas. They make observations, and collect data.

2. Development (Step-3)

The teacher guides the students in large group discussions, and the students organize their observation and data. The teacher introduces the vocabulary related to concepts by using the book or other audio visual aid.

3. Extension or Application (Step-4)

The teacher poses a new situation or problem that students can solve by applying or extending the new concepts. In this phase the students are involved in additional hands-on activities for strengthening the concepts.

A Model Lesson Based on Learning Cycle

Concept	:	Density as physical property
Grade level	:	Elementary (VI – VIII)
Objective	:	How physical properties of matter allow one substance to be distinguished from other.

Engagement (Step-1)

In this part of the lesson the teacher will try to gain the attention of the students by demonstrating the activity relevant to concept being studied;

Activity: Floating Egg

Fill 500 ml beaker with water and carefully put a fresh egg in the beaker.

Will the egg float or sink?

Now add four table spoon of salt to the water and observe the behaviour of egg.

Can you think of reason why the egg response the way it does?

Write your observation and conclusion in your note book.

Explore (Step-2)

The exploration part of the lesson allows students to compare the densities of different liquids solids. For exploring the new ideas the students are involved in hands-on and minds-on activity. The following activity is suggested.

Activity: Less Dense Objects Get to the Top

In this activity we will investigate how specific property of matter allows us to distinguish one substance from another.

What you need?

Narrow tall glass jar, corn oil, glycerin, water and eraser.

What to Do?

- i) Measure 100 ml water in to the glass jar, and add two drops of color to add.
- ii) In what order were the liquids arranged.

Students will draw and label an illustration that shows which liquid appeared on the top, in the middle, and on the bottom. Students should be allowed to share their ideas with class mates about the phenomena under study and would try to formulate a hypothesis about it.

Hypothesis

The students will hypothesize what would happen if they drop small eraser and a cork into the jar.

Development (Step-3)

At this stage the teacher would ask the hypothesis developed by the students and may identify the misconceptions if there is. After discussing the hypothesis with class the teacher can move forward and make development such as;

In this activity the students found some objects float on the top of other because of the property of density. Density is defined as the amount of mass per unit volume of matter.

The mass of an object is the amount of matter it contains. Volume is the amount of space it occupies.

In this activity we used equal volumes of each liquid. However the mass of each volume of liquid was different and, therefore, their densities were not the same. The corn syrup had more mass therefore, was denser. It sank to bottom of the jar the water has less mass than corn syrup, but has more mass than the corn oil so it made

a layer in between. The baby oil has the least mass of all so floated on top.

Mass and volume are physical properties, therefore, density is also a physical property and it is calculated with the help of following formula.

$$\text{Density} = \frac{\text{Mass}}{\text{Volume}}$$

Extend/Apply (Step-4)

This part of the lesson allows the students to apply their understanding of concepts and skills to different situations. Emphasis should be on application to everyday life and events. Following questions are designed for this concept.

1. A chemist is trying to identify the main components of an unknown chemical reagent. He finds that 5cm³ substance has a mass of 20 gm at 20°C. The following are the names of and densities of the components.

Chloroform = 1.5 g/cm³

Ethanol = 0.9 g/cm³

Toluene = 0.65 g/cm³

Find out which one is the major component?

- i. Describe how you would measure the density of an irregularly shaped object using a balance and graduated cylinder.
- ii. A student finds a shiny piece of metal that he thinks is gold. In the job he determines that the metal has a volume of 30cm³ and a mass of 700g. Is the metal gold?

- iii. A plastic ball with a volume of 19.7 cm^3 has a mass of 15.8g, would this ball sink or float in a container of gasoline.

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Educational Resources for HIV/AIDS Prevention in Uganda: The Role of PIASCY Program in Primary Schools

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Nakawuki Rose Costa^{**}

Abstract

In 2002, Ugandan President Yoweri Museveni launched the Presidential Initiative on AIDS Strategy for Communication to Youth (PIASCY) to promote abstinence and life skills education among the school-aged children who are the majority in Uganda. The purpose of the study was to examine the role of PIASCY Program as a means of HIV prevention in primary schools of Uganda. Emphasis was in primary schools of Kampala district. The study adopted a Survey research design. Five hundred fifty one (551) subjects and ten (10) schools participated in the study with. These were selected using simple random sampling, stratified and purposive sampling. The instruments of data collection included questionnaires, observation guides and Interviews. Data was analyzed using descriptive statistics namely: Frequencies, percentages and means; presented in form of tables. Findings from the study revealed that PIASCY program was not effectively implemented due to lack of facilities and resource materials. In light of these findings, the researchers recommended that more facilities and materials should be provided.

Introduction

The availability of educational resources is an important variable for effective program implementation. The task of curriculum implementation involves a major process of providing the materials, (Shiundu et al, 1992). A new program requires relevant and adequate facilities meant to ensure its successful activation. Educational resources facilitate teachers to achieve specific objectives constructed for the content (Downes, 2009). Without resources, the implementation of PIASCY program in Uganda would be disadvantaged.

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In a school setting, resources are useful to both the teacher and the students. Apart from helping the teachers to clarify certain points in the lesson, they also offer a substitute for a direct experience which, (Hamilton and Thompson, 2007). The greatest draw back to the implementation of new ideas and techniques is often not lack of funds but delays and problems connected with ordering and delivery of facilities and resources. There must be continuous supply of teaching and learning materials with adequate support services. The development and production of material resources should be effective at school, Oluoch (2002).

Schools embarking on a new curriculum should be those which can obtain the necessary facilities and equipment such as classrooms, desks, seats, blackboards, playing fields, laboratories, and workshops as well as textbooks for both teachers and learners (Mukwa, 2009). In preparation for the implementation of the new curriculum, it must be necessary to either increase and improve these facilities and resources. The success or failure of curriculum implementation is dependant on the availability or otherwise of these facilities and resources. The provision and supply of these resources should be a responsibility of the school authority and the school community.

PIACSY materials are availed to teachers and pupils in form of manuals and posters in all affiliated schools to campaign against HIV. The materials play a vital role since they offer a series of suggestions to the prevention of HIV and AIDS in the school. HIV materials are also designed to facilitate the provision of high-quality referrals to pupils (JSI, 2009). A similar program has been carried out in the Caribbean, where a huge leap forward was made. Representatives of ten Caribbean teachers' unions meet to carry out training on the WHO Teachers' manuals for HIV prevention and to discuss the next steps forward in promoting quality Education for All in the region. As a result the twenty teachers who receive the training act as master trainers in their own countries, spreading the training throughout the schools there. These teachers have now built the ambition to train their colleagues as well as to advocate on the teaching of HIV and AIDS in their schools, (Education International, 2006).

In Nigeria, the use of ICTs materials has been emphasized in education and promoting skills development, targeted support directed toward strategic initiatives that help in communities to provide access to Sexual and Reproductive Health & Rights information- health and enhance behavior change via the facilities and resources. The project distributes resource materials- CD-rom, DVD to 20 schools with a population of 20,000 students, (Stockholm Challenge Award, 2008)

Facilities and resources are an essential component of curriculum because they are designed to help users understand and implement the ideas contained in the program. In East Africa a baseline study has shown that a considerable proportion of pupils from primary school level already have sexual experience and that they lack basic knowledge on reproductive health and HIV/AIDS prevention (TGPSH, 2006). With the availability of resources, pupils are enhanced to become confident and effective. With better tools, his professional capabilities are more fully utilized and he accomplishes larger and better results, Bishop (1985). This study sought to establish the role of PIASCY Program as an educational resource for HIV/AIDS prevention in Uganda's Primary Schools. The study sought to establish whether the schools had adequate facilities and resources like PIASCY manuals, cassettes, posters among others.

Statement of the Problem

PIACSY program committed itself to promote abstinence and life skills education among school-aged children in Uganda. However, most of the schools lack the essential facilities and resources; and yet these serve as key source of AIDS control information. Consequently, some primary pupils have fallen victims of teenage pregnancies, high school drop out rates and sexual defilement, to mention but a few; as a result of risky sexual behaviors (MOE 2003, 2005 & Atugambe et al 2005). This study was therefore intended to assess the role of school facilities and resources in the implementation of PIASCY program in primary schools in Kampala District, Uganda.

Objective of the study

The aim of this study was to assess the role of facilities and resources in the implementation of the PIASCY program in primary schools of Kampala District.

Research question

What is the role of facilities and resources in the implementation of PIASCY Program in primary schools in Kampala district?

Methodology

Research Design

A Survey Research design was used in this study to enable the researchers to gather data from a sample of population at a particular time. This design was deemed appropriate as it enabled the researchers to reach various respondents including teachers, pupils, and Headteachers within a short time, (Kothari, 2004). Through the survey, researchers were able to collect original data for purposes of describing and measurement of characteristics of participants in primary schools of Kampala district.

Study Population and Sample

The study was carried out in primary schools of Kampala district. The sample consisted of five hundred fifty one participants (551) that included; five hundred (500) primary pupils, twenty-five (25) Headteachers and twenty-five (25) teachers and the District PIASCY Coordinator. Twenty- five (25) primary schools participated in the study and these contributed 30% of eighty- two (82) primary schools in Kampala District.

Sampling Techniques

This sample was based on a suggestion that in descriptive research, one can select from 10% and above of the accessible population, and that the main factor considered in determining the sample size is the need to keep it manageable enough (Warwick and Lininger, 1975). This enabled the researchers to derive from it detailed data at an affordable cost.

The study adopted stratified sampling, simple random sampling and purposive sampling. A list of public or government aided schools was obtained from the Ministry of Education and Sports. There were eighty-two (82) primary schools stratified into divisions namely: Central, Makindye, Lubaga, Kawempe and Nakawa. Out of these schools, twenty-five (25) primary schools were randomly selected/picked that is five (5) schools were picked from each division.

Slips of papers with each bearing the name of the school and compiled according to each stratum i.e. Divisions, were folded and then schools were picked randomly totaling to twenty five (25) schools from all the five (5) divisions. Primary six pupils were selected because it was by then six (6) years since the introduction or inception of the PIASCY program in primary schools and so; the program started with the current primary six pupils and so was considered to be more knowledgeable about the subject or program. Primary six pupils had been exposed to the PIASCY program for a reasonably long period (6 years) and hence were most likely to provide more realistic responses.

The Headteachers, teachers in charge of PIASCY and District PIASCY Coordinator were purposely selected because they were believed to have pertinent information concerning the implementation of PIASCY program in primary schools. Purposive sampling involves the selection of samples based on a certain purpose in order to increase utility of the findings (Enon 1998). It was the intention of this research to select key stakeholders in the area of study that were engaged and well versed with the PIASCY program so as to document the true picture of the issue under study.

Table 1: Total number of respondents that participated in the study

Respondents	Number of participants
Headteachers	25
Teachers	25
Pupils	500
District PIASCY Coordinator	1
Total	551

Instruments

Questionnaire

Two categories of Questionnaires; one for the teachers and another one for the primary six pupils were used. The Questionnaire for teachers and pupils contained items related to PIASCY materials and facilities and the effective implementation of the program in primary schools.

Interview Guides

Structured interview guides were designed and administered to Head teachers, teachers and the District PIASCY Coordinator to collect in-depth data, which would not be obtained through questionnaires. In addition, they were used to gather reliable information and to get a complete and detailed understanding of the issue (PIASCY program). Data from interviews with Headteachers, teachers and District PIASCY Coordinator enabled the researchers to probe areas that needed more clarification through personal initiative of respondents.

Observation Checklist

Direct observation was done in all the twenty-five (25) primary schools using a checklist focusing on the availability and adequacy of PIASCY facilities and materials.

Validity and Reliability of Research Instruments

The validity of instruments was guaranteed by piloting of instruments in two schools outside Kampala, Mpigi District to establish if respondents would give valid responses. The researchers, in order to modify the instruments and make them more adaptable in the study, used suggestions and advice obtained from teachers when piloting. To test the reliability of instruments, the Cronbach Coefficient was used. The Cronbach Alpha Coefficient is a model of internal consistency, based on the average inter-item correlation. The reliability of instruments using the Cronbach Alpha Coefficient was calculated using the SPSS program. All reliability for pupil's Questionnaires at 0.719 and teacher's Questionnaires at 0.758 were above the critical level of confidence at 0.05. Therefore all questionnaires were reliable for collecting data.

Data Collection Procedures

Permission was granted by the Kampala City Council to the researchers which introduced them to the Headteachers of the sampled schools. The Headteachers then introduced the researchers to their teachers in charge of PIASCY. After meeting with them, the researchers in consultation with the Headteachers, agreed on dates to meet for interviews and filling questionnaires. Pupils' questionnaires were completed and returned on the same day. The researchers with the assistance of the class teachers did the supervision of pupil's questionnaires in the schools. For teachers who were unable to complete filling the questionnaires were given ample time to respond to the items without interfering with their daily programs. The study realized 100% response rate of questionnaires.

Data Analysis and Findings

Data obtained from the instruments were coded and analyzed using descriptive statistics, that is, frequencies and percentages with computer. The Statistical Package for Social Scientists (SPSS) version 13 was used to calculate the frequencies and percentages and these were presented in the form of tables and graphs. Frequencies and percentages were used by the researchers to make conclusions and recommendations.

Through the questionnaires, teachers were asked to indicate the level of adequacy of some facilities in the implementation of PIASCY program in primary schools. Table 2 shows the level of adequacy of facilities according to teachers.

Table 2 indicates that, apart from the teachers' manuals (74.2%) and newspapers (76%), teachers said that other facilities were inadequate. A case in point were displays like compound posters (56.0%), films and videos (88.0%), cassettes or CDs (88.0%) and models (78.3%). Generally, teachers lacked adequate facilities and materials to allow effective implementation of PIASCY program in primary schools.

Table 2: Level of adequacy of facilities in schools

		Frequency	%
Teachers' handbooks	Very adequate	5	20.0%
	Adequate	13	54.2%
	Not adequate	7	29.2%
Displays like posters, charts and pictures	Very adequate	4	16.0%
	Adequate	7	28.0%
	Not adequate	14	56.0%
Films and videos	Very adequate	1	4.0%
	Adequate	2	8.0%
	Not adequate	22	88.0%
Cassettes or CDs	Very adequate	1	4.0%
	Adequate	2	8.0%
	Not adequate	22	88.0%
Models like health officials, HIV victims, counseling rooms	Very adequate	1	4.3%
	Adequate	4	17.4%
	Not adequate	20	80.0%
News papers like straight talk	Very adequate	4	16.0%
	Adequate	15	60.0%
	Not adequate	6	24.0%

Through Questionnaires, pupils also concurred with the teachers as they were asked whether they easily accessed PIASCY handbooks and the majority said 'No' (62.2%). This is presented in table 3 below.

Table 3: Pupil's response on whether they could access PIASCY handbooks in their schools

		Frequency	Valid Percent
Valid	Yes	188	37.6%
	No	312	62.4%
	Total	500	100.0%

Generally, most primary schools lacked the necessary materials and facilities and this greatly affected the implementation of the PIASCY program.

Through interviews, Headteachers and teachers reported that they were neither involved in the designing of the PIASCY materials, nor in the training on how to use the materials before the PIASCY program was introduced. They also reported that they lacked the necessary materials and facilities to allow effective implementation of the PIASCY program. Schools had a few materials and facilities like Teachers' and pupils' manuals and compound posters. The majority of the teachers and Headteachers retaliated that they received few PIASCY manuals from the Ministry of Education and Sports (ranging between 2—10 copies per school) as compared to total population of pupils in primary schools. Through observation, the researchers noticed the availability of PIASCY messages on posters in a few schools' compound which among others included;

AIDS kills and has no cure, abstain from sex, stay in school, not all friends are good, virginity is healthy, report all people with bad intentions, peer groups may be misleading, Say "NO" to sex, Together we can fight HIV/AIDS, Be aware, HIV/AIDS is around us, Abstinence is still far the safest means of protection, Your body is precious, so protect it.

The researchers however confirmed insufficient PIASCY materials and resources in the majority of primary schools in Kampala District. Many schools lacked Cassettes, Videos, Films and pictures to transmit PIASCY message. In most of the schools, the compound lacked posters conveying PIASCY messages with the exception of the minority schools that were assisted by some NGO's like Plan Uganda in Kawempe Division. The teachers and Headteachers that the researchers interacted with attributed this to lack of funds to allow them to purchase all the necessary materials.

Discussion of Research findings

Through observation, it was found that the selected schools had inadequate resource materials and facilities. School libraries had few copies of PIASCY manuals and kits for pupils and teachers and this greatly affected the implementation of the PIASCY program in primary schools in Kampala District.

Through questionnaires, pupils revealed that they could hardly access the manuals. Out of 500 pupils, 312 revealed that they could not access PIASCY manuals (62%). Findings using teacher's questionnaires also show that schools had inadequate facilities and materials and this negatively affected the implementation of PIASCY program in the selected primary schools in Kampala District. Teachers revealed those inadequate displays like posters, charts and pictures (56%), no films and videos plus cassettes and videos to supplement PIASCY manuals (88%), and few HIV models (78.3%).

Through observation, majority of the schools lacked Cassettes, Videos, Films and pictures to supplement on the few PIASCY copies that they received from the Ministry of Education and Sports. Some schools lacked compound posters (Talking compound) and Head teachers and teachers attributed this to insufficient funds to enable administrators to purchase some of the materials and facilities for effective implementation of PIASCY program in their schools. It should however be noted that, the pioneer schools had talking compounds and had almost all the necessary materials and were active in participating in AIDS awareness parades, community sensitization among other activities.

Generally, schools lacking the necessary resources and facilities tended to be negatively affected regarding the implementation of PIASCY program. For an innovation to be successful, materials and resources should be available and adequate, (Olsen, 2000). Resources and facilities improve users' access to an innovation. This translates into a consistent use PIACSY materials by pupils even if there is minimum teacher interaction. From interviews it revealed that users who had resources and facilities tended to hold more positive attitudes about PIASCY program than those who did not. Such users are at an advantage because with use of materials they can acquire PIASCY messages even off school compound.

Recommendations

- i. The government of Uganda should endeavor to provide the necessary resource materials and facilities to enable effective implementation of PIASCY program in primary schools.

- ii. Headteachers, teachers and parents since play a key role in curriculum implementing the curriculum, should be involved in the planning, designing, and development of PIASCY manuals.
- iii. There is need to re-formulate PIASCY manuals according to the different teaching subjects since teachers are expected to integrate PIASCY messages in their respective teaching subjects.
- iv. PIASCY program should be included in the school examinable curriculum so as for teachers not to dodge implementing it.

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Educational Managers' Behaviour for Improving the Quality Teaching at Secondary Level of Education

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Abstract

Secondary level of education is considered the most pivotal stage of entire system of education. This stage holds a key position as it provides a large number of educated manpower in Pakistan. For futuristic development, improvement of quality of this level is essential, which is directly related to the quality teachers, teaching learning facilities, effective educational management or organizational behavior of management and qualitative output of students. The main purpose of this study was to investigate the impact behavior of educational managers for enhancing the quality of teaching at secondary level of education. The main objectives of the study were (1) To explore the management abilities of educational managers. (2) To examine the criterion acceptable behavior of educational managers in the light of teachers' opinions. (3) To recommend for improving organizational behavior of educational managers particularly for valuing the teaching. The nature of the study was descriptive. For data collection a questionnaire on 3 point scale was used. This questionnaire was administered among 100 teachers of secondary schools who were the sample of this study. For analysis Mean score was applied as statistical instrument. Over all it was recommended that educational managers may model their behavior for enhancing the quality teaching.

Introduction

Effectiveness of education can be ensured through effective management. The school is a social organization which can play the role of social change. If the persons working together in school are knowledgeable, cooperative, morally sound and hardworking then a culture of good social norms emerges and that is beneficial for the community. This interplay between individuals and the social environment of their world of work is powerful in giving rise to organizational behaviour, which means the behaviour of people in the school organization. It has become the dire need for society that

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everyone must have a specialization in any field of life due to rapid expansion of knowledge. Education modifies that behaviour of a person, thus education can perform this duty well if the system of education runs effectively. For making the education system workable and successful and management, organizational behaviour must be focused.

Organizations do not succeed or fail people do. Organizations are intimately associated with people who are living and changing; therefore human behaviours must be considered and understood within the dynamics of the formal organization (Teary & Clark, 1986). Organizational behaviour provides the indispensable foundation of knowledge that is absolutely essential if one hopes to achieve success in educational leadership. Although a fully developed education system is the result of proper funding, adequate supervision, properly qualified managers, adequate educational facilities, efficiency and effectiveness of teaching staff but the organizational behaviour of the educational managers counts much in the uplift of standards of output

Hence the field of organizational behaviour helps managers both deal with learn from their workplace experiences. Managers who understand organizational behaviour are better prepared to know what to look for in work situations, to understand what they find, and to take or help others to take the required action. While considering the successful organization and its management the educational managers must know their responsibilities and they become the followers of be, know and do philosophy because the educational managers are the heads of educational organization. They are the custodian and guide of the future generation. The future will be in their hands.

Good management is able both to recognize the significance of these indicators (for example, an increase in turnover among employees) and to take constructive action to improve things as a result of this insight (such as updating benefits and incentive pay schemes). Good managers add value to an organization. However, good managers must be able to identify, manage and modify the behaviour of other members of the organization is this added value from managerial

activities is to be realized (Wood et al, 1998). It is an established theory that proper organizational behaviour ensures the full utilization of available educational facilities and resources for the development of the organization. So the main focus of this study was to explore the importance of behavior of educational managers for valuing the teaching as significant component of institutional performance at secondary level of education.

The educational managers are the backbone of educative process. They are the policy makers, planners, implementers, administrators and change agent in education. Any positive and fruitful change in society is difficult without education. A change in education system is originated from policy objectives their curriculum objectives textbook preparation, teaching method and evaluation. The real ground where next generation is equipped with knowledge attitude and skills is organization i.e. educational institution.

The educational managers are responsible for educational organizations because the education leadership is the key to open the door of educational development. After all, leadership and administration as well, means working with other people to achieve organizational goals. The educational managers who are appointed as teachers, principals, executive education officers (EDOs) and district education officers (DEOs) are to be especially effective for enhancing the organization's performance. The organizational behaviour of the managers particularly of the school heads counts much in the uplift of standards of output, updated skills and abilities to ensure high level of productivity. More education and training is essential if the managers of the future are to constantly seek to add value to their stock of human capital and to strive for improved performance.

Keeping in view the effect of organization behaviour on the performance of educational managers for their successful management in institutions, the present study has the significant role for exploring the weaknesses of these managers during their work experiences and assisting them in promoting professional development for their jobs. The study is particularly important for the concerned persons who are directly involved for enhancing the

academic performance of institutions at secondary level of education. Overall this study will be important for teachers, principals, education district officers (EDOs) and District Education Officers (DEOs). This study would help all concerned persons who manage the education system and directly or indirectly are involved in educational organizations. The main crux of the study is the knowledge of organizational behaviour which highlights the managerial roles performed by educational managers in organizations.

Objectives of the Study

Following were the objectives of the study:

- i. To explore the management abilities of Educational Managers.
- ii. To examine the criterion of acceptable behavior of educational managers.
- iii. To recommend for improving organizational behavior of Educational managers in the light of the conclusions of the study.

Literature Review

Every society is a group of people who live together, play together and share joys and sorrows together (Jerald, 2000). Education is also a social process which is established with the efforts of policy makers, administrators, teachers, students and community members. Like other organizations, in education some people perform the role of managers, while others play the role as followers.

Secondary education holds a key position and is the terminal stage for the majority of students. The largest number of educated manpower in Pakistan is available at this stage. The economists consider the secondary education as a backbone of the national economy while the sociologists consider it is an effective weapon of social reforms. It can be said that secondary education is closely related with the economic development and social welfare of the country (Ali, 1970). For achieving the targets of secondary education to prepare the country for futuristic development there is need to establish and launch this system of education effectively. It means effective organizational behaviour of concerned persons is required

then we can say education is the best tool for enhancing the quality of entire social system.

A study of persons and groups in an organization is called organizational behaviour. This study covers behaviour of individuals groups and managers. The leadership qualities of the people at different stages are examined for improving the overall behaviour in the organization. It covers all components of management (Wood et al. 1998). So the organizational behaviour is a study of human attitude in a social setting based on certain principles. A person working in an organization has some perceptions values and working capacities. Some external factors are also affecting the environment.

Cameron (1995) states that management as a process for achieving organizational objectives. The persons who are responsible for guidance counseling and direction use management skills and create suitable environment for getting targets easily. The organizational activities are coordinated and regularly feedback is ensured only to maintain and keep the culture and climate alive. Successful management is totally dependent on the human element. Heads do not get the job performed by themselves, regardless of their individual talents or drive. They must work with the through other to achieve organizational goals and objectives (Karus and Curts, 1986).

Management of School means setting realistic goals and drawing up plans to achieve them. Those plans involve distinct phases, setting objectives, allocating resources, delivering results, evaluating the impact, and resetting objectives in the light of evaluation (Thomas, 1999). The working role of administrator is likewise manger. The need for manger has well increased with the development of more complex organization. Rapid growth of knowledge that is useful to management will demand a higher quality of managers. The word "management" identifies a special group of people whose job is to direct the effort and activities of other personnel towards common objectives, therefore management "get things done through other people" (Massie, 1992).

Therefore, successful management is totally dependent upon the human element. Heads do not get the job performed by themselves,

regardless of their individual talent or drive. They must work with the through others to achieve organizational goals and objectives (Karus and Curts, 1986). According to Certo (2003) management functions are activities that make up the management process, the four basic management activities are planning, organizing, influencing (influencing referred as motivating, leading, directing, or actuating is concerned primarily with people within organizations) and controlling.

Ubben and Huges (1992) describe five functional aspects four of these take place inside the institution and the other occurs in interaction with the outside world. The inside functions include curriculum development, instructional improvement, student services, financial and facility management. The outside function is community relations. Leadership and managerial behavioral dimensions encompass and complete the map of administrative job.

Rue and Byars (2000) also state that three basic skills have been identified: conceptual skills, human relations skills (involve understanding people and being able to work well with them) and technical skills. It is generally agreed that supervisory management needs more technical skills than managers at higher levels. Human relations skills are essential to effective management at all levels. Finally, conceptual skills become increasingly important as a person moves up the managerial hierarchy.

Education is the learning process by which values, attitudes, information and skills are acquired and integrated. Management Education is the process of learning values, attitudes, information and skills to achieve desired relations between resources and objectives (Choudhury, 2001). The goal of educational management at the institutional level is to achieve the social and system goals of education plus any additional objectives peculiar to the specific institution, to do this the manager will need to understand more completely the existing motivation of their fellow administrators, teachers and pupils (Kemmerer and Windham, 1997). Sharing of management tasks and ownership of the need for them is crucial to successful school. In our opinion, management is managing people and other resources in the organization and outside the organization

for achieving the mission and objectives of the organization. It is nothing but managing people with tact; managing people for achieving targets.

According to a Report of the World Bank (1991), the main ways in which governments can help to improve the quality of education are setting standards, supporting inputs to improve, achievement, adopting flexible strategies for the acquisition and use of inputs, and monitoring performance. Over all for quality education at any level requires effective management practices, effective teaching learning process, adequate teaching learning facilities and professional development of academicians and administrators or managers. Singhal (1991) argued that the operational setting in which the schools function provides the internal environment in the schools and is reflected through:

- Infrastructural facilities available.
- The human resources especially the teachers and the administrators.
- The teaching learning process to take into account the way curriculum is transacted.
- The learner achievement reflecting outcomes of schooling.

Manager plays an important role in any activity. It helps for the success of an activity or organization. It organizes the factors of production from effective utilization. Whether small or large, family-owned or factor-type, an organization should implement the principles of management for the success and survival of the enterprise. Management local, state and national levels of the government helps in improving efficiency. Transnational corporations and also other organizations all over the world, including non-government organizations, hospitals, hotels and clubs need management for utilizing resources to the maximum possible extent.

Procedure of the Study

This was the descriptive/survey type study. All the teachers working in secondary schools of Lahore city were the population of this study. 100 teachers were selected randomly as a sample of study. The

sample of the study was comprised five secondary schools and twenty teachers from each sampled school were selected. For data collection a questionnaire was developed on 3 point scale, allotting 3 to certainly, 2 to seldom and 1 to never. Collected data were analyzed by applying the Mean score. The average mean score was 1.93. Following conclusions were drawn from the results of the study and recommendations were made for the improvement of organizational behavior of educational managers for improving the quality of teaching at secondary level of education.

Conclusions

On the basis of data analysis following conclusions was drawn:

All educational institutions are considered successful if their teaching learning process is remarkable. According to this study school heads were more effective who affect the teaching quality at secondary level of education. For measuring the role of heads regarding the value of teaching majority of respondent opined that the heads of secondary schools have good understanding about quality teaching as mean score came out 2.68. Hence they were not capable to create good organizational behavior which has significant impact on teaching as the majority of respondents viewed about it and their views were highlighted by 1.85 mean score. But on the other side heads expect better performance from their teachers as mean score came out 2.87. Therefore if the heads have expectations for better performance for this purpose they have to focus on the congenial atmosphere of the schools. In this regard the majority of the teachers argued that existing institutional climate at secondary level of education was not suitable for better performance of teachers with 1.54 mean score highlighted.

As regard the teaching as heart of institution for making it model a healthy competition among the teachers, is necessary. While the respondents of this study agreed that the heads of secondary schools did not create a professional competition among the teachers for enhancing the quality teaching and mean score came out 1.79. For valuing the teaching the heads seldom appreciated the good teachers indicated by 2.14 mean score. Keeping in view the value of good teachers as the key factor for making the school well reputed, regarding this 1.74 mean score depicted that the heads did not

delegate authority and responsibility to good teachers. Majority of the teachers opined that heads did not guide the teachers for improving their teaching by using different teaching techniques as mean score came out 1.68. While for supporting this statement that the heads appreciated the teachers for using the innovative techniques of teaching learning process, majority of the teachers rejected it with 1.8 mean score. Motivation is taken as key indicator for making any impossible target possible but in secondary schools heads bitterly failed to use the motivational techniques for enhancing the performance of their teachers as mean score came out 1.49.

Keeping in view the academic role of school heads for enhancing the quality teaching they may supervise the teaching. Regarding this teachers were asked about the frequent visits of classes for observing the teaching learning process but majority of the respondents rejected this statement. Hence mean score came out 1.45. Although teaching is the main component of institution performance but sometimes it is affected by the academic problems of teachers and these problems demand the special attention of the school heads regarding their academic role in institutions. For this purpose teachers' opinions were taken and majority of them stated that the heads of schools seldom took interest in the academic problems of the teachers. As the mean score calculated was 1.99. About work load majority of the respondents stated that it was not equally distributed among the teachers which were supported by 1.9 mean score. While the majority of the respondents stated that teachers were not involved in decision making regarding quality teaching and the mean score came out 1.55.

For enhancing the performance of teachers according to demands of society, they need the professional development which may acquaint them with latest inventions in their fields. But majority of teachers opined that chances of in- service training were not provided to all teachers equally as highlighted by 1.49 mean score. Teachers as decision makers can play an important role for enhancing the quality of academic performance of the institution because they are implementers of decisions which are made by policy makers at national level. So in this context when teachers were asked about their involvement in decision making regarding quality teaching,

majority of them disagreed with this statement. Hence mean score came out 1.55. While 1.57 mean score depicted that organizational behavior of school head at secondary level was not creative and critical which is considered main factor for improving the quality teaching.

Teaching learning process is conditioned with adequate educational facilities as better the condition of facilities better the teaching and learning. While focusing the relationship of both variables respondents of the study were asked. But majority of them argued that the heads did not provide the adequate educational facilities for teachers and students as mean score came out 1.7. Keeping in view the leading role of heads for making sure the quality teaching, teachers were asked that the heads like to be a part of team while leading teachers for valuing teaching. In this regard most of the respondents rejected this statement and mean score came out 1.37. While all the respondents were agreed that organizational behavior of heads affects the institutional performance hence 3 mean score was calculated. Main focus of the professional development is to prepare the people for changing demands of society. Regarding this study the need of professional development of heads was felt and teachers were asked about its importance for improving the quality teaching particularly and performance of institution generally. So majority of the teachers opined in the favor of this statement as supported by 2.98 mean score. Overall average mean score was 1.39 was calculated which indicate the impact organizational behavior of schools heads on the performance of teachers means there is relationship between heads performance and teachers performance.

Recommendations

Following recommendations were made on the basis of data interpretation:

- The schools heads may focus their diligent attention on their organizational behavior which has a direct impact on quality teaching of their teachers.

- They may make sure for that the environment is workable and they are providing better management, resources and facilities and professional development of their teachers.
- The academic organizational behaviour of schools heads may improve the teachers' performance which will affect the institutional performance and effectiveness.
- For making the leading behavior of schools heads professional development for them may be given through which output of schools will increase.

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Instructional Performance of Feminist Pedagogy in Boys' English Language Teaching Classrooms

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Abstract

The major aim of this study is to explore the relationship between gender specific pedagogy and academic achievement in EFL learning. It investigates the effectiveness of women teaching in the state run boys' schools at primary and elementary level. Women put their best step forward to carry out their responsibilities. This study has covered different perspectives like gender, education, language acquisition, language teaching and feminist theories etc. All the paradigms cover multi dimensional aspects including social, emotional, cognitive, affective and psycho-neurotic foundations.

Introduction

Our country shows dismal improvements regarding quality and equity based education. While it is agreed that Pakistan inherited a very low literacy rate at the time of partition (Ashraf 2004), the massive effort that was required to tide over the situation was never undertaken. Whatever attempts made were at best half baked and without the desired commitment. Least amount of funds (only 2% of GNP) was channelled towards education (Haroon 2000: 421). The allocated funds were mostly pilfered or wasted away on meaningless experiments. Rather than building upon the previous experiment, the new power wielders would scrap it and present another one to promote political interests rather than students' interests. As a result the textbooks kept changing and at the same time the weight of the school bags also kept increasing. But neither the quality nor the literacy rate improved. Today, the literacy rate is just equal to fifty three percent, which is lowest in South Asia and one of the lowest in

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the world. In the given percentage, 10 to 15% are those who can just sign (Pakistan Country Overview 2006).

However the orthodox scenario has slightly been changed for the last few years, where government took some measures to promote healthy education. One major step is the recruitment of female teachers in boys' school (at primary/elementary level) running under government patronage. Previously there was isolated school system for males and females at primary and elementary level (except girl's primary schools where boys are also being taught in co-classes at primary level). Though, this concept has been common in English medium schools for many years, where female teachers teach male students from primary to tertiary levels. However, a vast majority of under privileged students are still getting education in the schools running under government supervision. The presence of the female teachers in the state-run schools is proving to be an auspicious step towards the better education (UNESCO 2004: 06). On the other side however, these women teachers have their own reservations and difficulties while working at boys' schools. Another important issue based on gender is the different adaptation of fields by male and female teachers. Men are more likely to teach business, math, science, history and technology, while women are more often found in languages, home economics and special education (Acker, 1989; NCES 2000). An achievement survey for primary classes showed that both boys and girls in rural and urban areas performed better when taught by women teachers. This is evident from following table:

Table 1: Gender. (Pakistan)Students' composite score according to teacher's

Teachers	Urban			Rural		
	Girls	Boys	Total	Girls	Boys	Total
Women	63	60	62	63	71	64
Men	53	56	54	50	59	55

Source: Determinants of primary students' achievements; National Survey Results; MSU; Islamabad; 1995. (Cited in "Increasing the Number of Women Teachers In rural Schools" (2000: 07): country case study made by UNESCO & APPEAL.)

Objectives of the Study

The objective of the study was to ascertain:

- i. Women teachers' performance in ELT class at primary and elementary level in state run schools. To evaluate their performance in perspectives of different paradigms i.e. adaptation of any particular teaching methodology, teaching grammar and vocabulary, teaching English beyond the syllabus, students dropout ratio, use of AVA, home work tasks and lesson planning.
- ii. The instructional outcomes of feminist pedagogy in boys ELT classroom. To check the effects of feminist pedagogy on different social, cognitive and psychoneurotic variables of language learning i.e. motivation, anxiety, interest, attitude, social & emotional development etc.
- iii. The efficacy of the existing criterion of appointing female teachers in boys schools

Feminisation of Teaching

Teaching is relatively low paid occupation that brings little respect to teachers. Teachers, especially at primary and elementary level have never been viewed with high esteem in some countries like Pakistan though they are well esteemed in many other countries such as Japan. Men and women opt the teaching profession for different reasons. "For many women, teaching is a means of status maintenance, while for men it is more often served as an avenue of social mobility" (Rury 1989: 41). The men who become teachers often have other career paths or have few opportunities because of their social class and life circumstances. In many countries of the world teaching is the highest status career open to women so they are often over qualified for it. In Pakistan, till late 70's women did not receive as much education as their male counterparts and their illiteracy restricted their participation in teaching profession. But, gradually women's literacy rates increased for the last three decades and they began to have broader roles in the educational portfolio (UNESCO 2000). In a study of 41 countries, teaching ranks as one of the top nine typically 'female' occupations (Anker 1998). Elementary teaching is the fifth leading occupation for women in Canada and the sixth for women in USA. Of all the levels of formal teaching, women have the highest representation at the primary level.

Teaching at primary level is ever growing female occupation in most of the countries (Anker 1998). In countries like Argentina, Brazil, Russia, Philippines, Austria, Germany, Hungary, Sweden, Ireland, Italy, Israel, New Zealand, UK, and Czech Republic, women make up 80% or more of the teaching staff in public and private primary education (OECD 2005).

However this pattern is not shared world wide. Data collected by UNESCO (2004) reveals that women's entry in academic position varies both by region and country within region. Women have the lowest representation in the regions of South and East Asia, the Arab States and Sub-Saharan Africa, averaging one-third or less of the positions in these regions (UNESCO 2004). In China and India, women make up 49% and 36% of primary teachers respectively and same is the case with Pakistan (OECD 2005).

According to the WVU (West Virginia University) council for women's concern (2008) feminist pedagogy is good teaching way that benefits all the students. Women teachers treat their students with warm affection without breaking the shackles of their ego and self-respect. Male teachers have been found stubborn and somewhat teasing attitude towards their students (Boyle 2004), no matter the degree of intelligence and competence is many times larger in male teachers compared with the female (Wood 2005). In language classes women teachers were found encouraging the participations from quiet students without calling attention to their reticence. Instead they were observed using non-verbal cues (such as leaning forward, nodding the head, facial curiosity etc) in order to make their students much included and involved (WVU 2008).

State Education and Female Teachers in Pakistan

When Pakistan came into being the ones who had to acquire education were divided into two distinct categories. One category was educated in Urdu medium schools and religious seminaries, while the other was the product of English medium schools. The latter had been established after Macaulay's education reforms in India in 1835 (Haroon 2000: 421-425). With the introduction of distorted and dualistic educational system, it gave opportunities to the sons and wards of the nobles to acquire education in English

medium schools. Equipped with modern education, they enjoyed distinct advantage in terms of career building and job opportunities. The under privileged in the sub-standard Urdu medium schools, the product of which was looked down upon, devalued and considered invalid for the high post jobs. The upper strata got divided into two categories; Oxford, Cambridge, Grammar and Convent schools product and the other of state run public schools. The great majority with lesser incomes had to contend with low quality government schools, whose product was ever denied in making any opportunity for upward social mobility. The lower class living in rural areas mostly opted for Deeni Madaras, which imparted religious training only. The students of the Madaras were to be Taliban in making. The middle class started to produce a 'hybrid generation', lectured in eastern values, but helpless before the avalanche from the west. As a result, this class remained torn between the two worlds and became an amalgam of half Pakistani and half Western (Haroon 2000).

Educational system of Pakistan has always been endeavouring to its last hiccups to attain the developed and successful infrastructure. Foreign donor agencies have also been making concerned efforts in the shape of multifaceted developmental plans in the area of education. For this purpose ministry of Education has been given a vital assistance from World Bank, Asian Development Bank, United Nations Development Program, UNESCO, UNICEF, ODA, Japan International Operating Agency, NORAD, GTZ, OPEC, EEC and other donor agencies. But the conditions are still hostile and atrocious. Nearly 25000 primary schools are still without buildings. According to the National Educational Policy (1998-2010), our educational status as a nation is very dismal. About 25% of our children are not enrolled in primary schools and 50% of this enrolled, dropout before completing primary schools. Pakistan ranks at number 31 out of 35 Muslims countries. The policy also highlights the unhealthy trend of teachers' absenteeism, lack of commitment and motivation. Harsh behaviours and uncongenial teaching methodology is common malady in schools (Ministry of Education 1998-2010: 117).

Bhaskara (2001) in his study of E9 countries commissioned by UNESCO projects the obstacles of female teachers and mentions the

need to reach the levels of professionalism. In Pakistan he cites “where most of the population lives in rural areas (66.7%), there are fewer women teachers, as they are unwilling to go to remote places” Bhaskara (2001: 41). The problem is basically cultural, as it is not accepted by the society that women in rural areas could go to teach in schools. In Pakistani education system women have been feeling the tightening noose of limited expectations, societal scorn and inadequate role models for many decades. But, since last decade, the scenario has been changed a little bit. There have been efforts to counter these slights. Now some educators as well as non-educators claim that there has been over-compensation, and that, in fact girls and young women are given more importance in educational settings than boys and young men, especially at primary and elementary level (UNESCO 2004). But, still there is a long way to meet the challenges of gender-equity.

The present study highlighted the effects of feminist pedagogy in boys’ ELT classroom. A same kind of study was carried at PhD level by Jatoi (1991) at Harvard University. Her study, however, was based on the effects of feminist pedagogy in mathematics classroom. But, it can be correlated with the EFL classroom as well. This study was conducted at primary and elementary level in Pakistani schools regarding teachers’ gender and the students’ achievement in mathematics. It was observed that the boys taught by women had the lowest average in mathematics’ achievement scores (Jatoi 1991). Moreover it suggested that female teachers in Pakistani primary schools were the major cause of low student achievement in the mathematics (Warwick & Jatoi 1994). But the study seems to lack the actual classroom conditions or pedagogical scenario. Nevertheless it is generally claimed that women teachers are weak in mathematics and, pure and applied sciences but they are very much proficient in language and literature and home economics (Acker 1989). But the researchers Warwick & Jatoi (1994) prime facie seem to condense their study on surface level only (achievement of the mathematic class). There are many other factors and variables that play their role in the classroom like motivation, anxiety, students’ interest, attitude and teacher’s personality etc. So, the low achievement of a certain class cannot be attached with the performance of the female teachers. As later on, the study itself

accepted that the 15 percent of teachers who hold one or more university degrees, among them the gender gap was shifted to the favour of female teachers. "The size of the gap on both mathematics tests suggests that women holding university degrees do much better at teaching mathematics than men with the same education" (Warwick & Jatoi 1994: 391). This finding has refuted the hypothesis that women in Pakistan typically have students with lower achievement scores in mathematics than their male counterparts (Jatoi 1991).

Methodology

The present research covers qualitative paradigm. However data collection / analysis tools are qualitative as well as quantitative. Quantitative approach has been adopted for the questionnaires. While qualitative approach facilitates interviews and observations. Data was collected from forty female teachers through questionnaires, interviews and observation. Fourteen head teachers were selected through random sampling and data was obtained using questionnaire and interview. By the same token 300 students were selected randomly from different GPS/GES/GHS/GHSS and data was collected using questionnaire. Observation of 54 classes was done from different schools based at urban as well as rural areas.

The design of the questionnaire was constructed to probe women teachers' performance and students' outcomes in boys' ELT classes. The nature of the questionnaire designed for the present study was made concise by means of close ended question format. Three questionnaires were prepared, one for the students, the other for the teachers and the third questionnaire was for the head teachers. The questionnaire for teachers comprised 48 items. The questionnaire for head teachers comprised 17 items, while questionnaire for students had a weightage of 25 items. Most of the questions were closed ended with two or three responses. These questionnaires have been judged quantitatively by simple percentage method.

The researchers conducted fourteen interviews with the teachers and eight interviews with the head teachers. Moreover, observation technique was also used as a tool. The researchers attended fifty four classes (one class two times) and observed the teachers and the

students' performance. Observation was conducted in three classes (6th, 7th and 8th grades) from one higher secondary school, three classes (3rd, 4th and 7th grades) from three elementary schools and three classes (3rd, 4th and 5th grades) from five primary schools.

Results and Discussions

- Most of the female teachers (above 58%) adopt GTM (Grammar Translation Method) method in the class.
- Nearly 80% women teachers teach grammar and vocabulary items regularly in the class.
- Majority of the teachers teach English beyond the curriculum.
- Drop-out ratio of female teachers' class is found very much low as compared to the drop-outs from the classes of their male counterparts. In 78% female teachers' classes, students' drop-out has been found less than 5 in number.
- Use of AVA during teaching is almost remote. However 38% of the teachers are found interested in using AVAs.
- Majority of the teachers (78%) prepare lesson plans before delivering lecture. However this trend is not much popular across the female teachers teaching at primary level.
- Most of the teachers assign and check students' homework regularly.
- Majority of teachers are successful in evoking motivation among their students.
- In the presence of women teacher, low-scaled anxiety has been observed on the behalf of the students.
- Majority of the students are found interested in the class. However there have been low numbered students who could not develop their interest in the class.
- Majority of the students have positive attitude towards learning as well as teacher. However the extent of positive attitude is high towards learning as compared to female teacher.

The findings of our study show that in government schools, due to large and over burdened classes and students' low educational background, GTM method has been found very conducive and

applicable. Mostly female teachers followed GTM, but there were many teachers who used some sort of eclectic approach for ELT. Classroom observation mean score of GTM was 3.61* which may be considered as good. The present study indicates that 80% teachers were found to teach grammar and vocabulary items regularly in the class. Mean score of this item is 3.91. In this project, no doubt 62% of female teachers did not use any audio visual aids. But, 38% of the teachers using AVA during teaching enlighten their small scaled efforts to meet the current EFL pedagogical challenges.

It may be worth an effort to trace down the expertise of women teachers regarding assigning and checking of homework. Almost 90% of the teachers, strengthening the viewpoint of female teachers to be a savor and mentor, gave and checked students' homework on regular basis. 60% teachers persuaded to annex their students' interests in homework as well as other activities. During observation most of the teachers were found successful in capturing the interests of the students. Most of the time students were found enthusiastic in taking part in classroom activities. Most of the female teachers were found to prepare lesson plan before delivering the lecture (Mean score 3.01). 87% women teachers were found to complete their English syllabus before time. Moreover many teachers were found interested in teaching English beyond the curriculum (Mean score 3.00). Students' absenteeism and dropout ration has been very common in government schools. But dropout ratio of female teachers' classes was auspiciously less as compared with dropouts of the classes supervised by male teachers.

Our study also revealed that 100% teachers motivated their students as they regard motivation a driving force and useful technique in changing the complexion of our school system. 95% teachers favoured to bear good and impressive personality in order to draw positive effects on learner's performance in ELT class. Most of the female teachers considered themselves successful to invoke students' interests in the language class. Most of the teachers observed students' attitude very positive towards teacher as well as learning. But some teachers felt no hesitations in affirming that their students bear negative attitudes towards teacher sometimes. Most of the teachers (80%) asserted the opinion that their students never felt any

anxiety in the class, which is a very healthy sign towards language learning. Moreover data collected from students' questionnaires, head teachers' interviews and observations, it was proved a solid fact that students felt low-scaled anxiety in the classroom. 85% teachers consider it important to motivate and encourage their students in ELT class, asserting high self-esteem to them. This attitude is considered very valid in language learning as well as achieving high objectives in almost every field of life. The results of observations are prepared quantitatively as well. Almost all the aspects have mean score from 2.6 to 4.41, which indicates that most frequencies fall in between the satisfactory to very good. The weakest aspect was the students' weak command of listening and speaking skills. On the other hand the strongest aspect was the teacher's feed back provided to the students.

As far as the appointment criteria of women teachers' is concerned 62% teachers were fully satisfied with the current criteria of appointing women teachers in male schools. On the contrary, 25% teachers were not satisfied at all with the present criterion. An overview of the findings based on questionnaires, interviews and observations suggests that women teachers can contribute a great deal to teaching English in boys' classroom. Our study has proved and may give evidence that in order to appoint female teachers in male schools at basic education level, change in language learning outcomes is inevitable. The mean of the mean is 3.52 which indicates that the overall teachers performances in 54 classes falls between the 'Satisfactory' and 'Good'.

Conclusion

The present study of EFL feminist pedagogy in male schools may be proved a fruitful attempt to break into new areas of research in both applied linguistics and 'gender and pedagogical' research. Being innovative and unique in its nature, the study has filled some gaps between woman language teachers, male students and more important state run schools' environment. When compared with the EFL pedagogical expertise and performance of their male colleagues, female teachers can truly be regarded some steps ahead of them. Their prodigious devotion and dedication churned the otherwise jammed wheels of education and kept them moving regardless of the

odds they faced. Therefore, we must examine the micro dynamics of the myriad meaning-making and coping strategies that women teachers of our social background resort to, when confronted with such kind of professional disempowerment.

Recommendations

This study may prove very conducive and thought provoking for students, teachers, researchers and policy makers, and relevant to those working in the field of ELT and more broadly within social sciences. But there is still a huge amount of scope for the replication of the study to discover more aspects of feminist pedagogy in ELT classes.

- Women teachers' performance in other subjects may also be discovered in the same vein. The educational institutions must remain free from gender biased discrimination and social influences to escape the students from being exploited. In order to keep pace with the fast progressing public schools across the country, there is an urgent need to initiate pragmatic and forward looking ELT programs in the state run schools.
- Male teachers may also wish to establish ground-rules with students to provide parameters for lessening their anxiety and increasing motivation in the EFL teaching class. In order to keep pace with fast developing world, there is an urgent need to initiate pragmatic and ELT teacher training programs. In doing so, it will provide a comprehensive language teaching output and perspective, and will enable, encourage or compel women's pedagogical mobilization in the socially divided school system.
- It is also suggested that more than one female teacher must be appointed in the schools as a single teacher has been found facing great difficulties on the social, cultural and religious grounds.

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An Evaluation of Virtual Teaching Experiences at International Islamic University Islamabad

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Abstract

The study aimed at the evaluation of virtual teaching experiences in the department of education at international Islamic university Islamabad. Total 97 students of MA Education (1st and 4th semester) were selected as a sample of the study, who participated in this experience. Two subjects were taught through virtual mode first is western philosophy to semester one and the other is English and its teaching to fourth semester of M.A education respectively. A questionnaire was developed to find out the facts and self data collection technique was adopted to gather the data. Data was tabulated and analyzed by using mean. The conclusions of the study were; Virtual mode of teaching was effective for teaching and students were involved actively and enthusiastically in virtual classroom. There were time laps in communication due to non availability of polycom service. The recommendations of the study are that Polycom service may be made available for virtual teaching as to improve the quality of video-conferencing and to remove the laps in communication. Virtual mode of education may be promoted in the universities and collaboration may be made with the universities of developed countries so that knowledge may be shared up to maximum level.

Introduction

E-learning is a term used interchangeably with distance learning, online learning, e-learning, or Web-based learning. E-Learning is the learning process in which delivery is via internet, e-mail and computers. In the virtual learning environment the teacher and students are at different physical locations. The teacher delivers the

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course through course management systems like internet, multimedia, Video-conferencing and discussion boards. Video conferencing is a form of learning technology which represents an intimate method of communication on an individual or small group basis and is widely used in universities and colleges for academic purpose (Carr *et al.*, 2008).

Virtual learning has been very successfully used in higher education. Virtual learning is student-centered and available anytime and anywhere (Stonebraker and Haziltine, 2004). Students have tremendous opportunities to use e-learning resources as notes, lectures and allied study materials available on the university websites. Weekly homework like solving exercises, case studies, review question can be posted as e-mail attachment. The students have given the opportunity to join the discussion boards where they can share their ideas as well as share graded assignments and projects. Teacher can be available on this discussion board during announced office contact hours. The traditional problems of access and participation in higher education can be overcome by this method of online learning.

There is an escalating inclination to introduce e-learning system and its management in higher education. There is an increasing trend for online institutions offering academic certificate and degree in different programs, disciplines and levels. Several universities offer orientation, registration, counseling, purchase of books and classes on line. Some virtual universities also offer classes on several campuses simultaneously. Face to face encounters along with online teaching and other technologies will also be provided in opportunities for both academics and philanthropy (Rosenblit, 2005).

Ullmann (2009) reported that there is a wide spread trend of on-line teaching in the universities. The e-learning provides an opportunity of convenience for students to be there they would normally incapable to attend. Online students are able to utilize on-campus facilities such as get in touch with an academic advisor, recover forms, use of labs and assistance. The adult learners returning to education after a long time feel difficult to cope with this new e-learning. This is due to be deficient in technological required skills to

complete assignments and courses. All programs of Purdue University Calumet School of Nursing were either face to face and online or entirely on line. For all students the school has a provision of supportive services in the form of a non credit courses. Every student completes these courses as online learning. For teachers Intranet sites circulate quick information among faculty and allowed them to work together via electronic mode. The School introduced Computer Tutor, a self learning package to improve the computer skills of students. Modifications in the sites were carried out on the requirements and evaluation of all stake holders.

Dela and Melinda (2009) reported the experiences at the University of the Philippines Open University (UPOU). They developed the system of virtual learning along with monthly face to face sessions. The purpose can be to develop an online learning system for educational discussion, measurement, sharing of resources, course contents and students submissions of assignments and projects. Mobile learning can be used to include less privileged sectors of society as part and parcel of e-learning program of the university. The systems guarantee the quality of education in virtual learning as well as the trends and issues of online institutions are widely comprehensive.

Voice calls on the computer through Internet can be made though Skype, user friendly software. Calls can be made free to other user in some countries. Other services offered are instant messaging, immediate file transfer and video conferencing. It permits two types of communication that is text and voice. Voice communication can be used for one to one as well as for video conferencing. This feature can be used as an effective tool for e-learning. For experimentation this software can be used very successfully by teachers, students and institutions. Students can communicate, discuss, share, and learn through skype to achieve a suitable level of mastery.

The International Islamic University is situated in Islamabad. It provides opportunities for the development of individuals as well as society. The desire to produce scholar and practitioners, imbued with Islamic Learning, character and personality, and capable to meet the economic, social, political, technological and intellectual needs of

the Muslim Community (Muslim Ymmah) was the raison d'être of this university. The University was reconstituted as International Islamic University, Islamabad with the promulgation of ordinance No.xxx of 1985.

There are 10 faculties in this university. One of them is faculty of Social Sciences. The Faculty of Social Sciences was established in 2000. The Department of Education is a part of Social Sciences. It offers Ph.D., MS, M.A., M.Ed., B.Ed., and BS degree programs. The Department of Education started the concept of virtual teaching at International Islamic University. For this purpose two semesters of M.A education was selected. A scholar of Syracuse University, USA was selected for this purpose. He along with a co-teacher taught the subject of western philosophy to the first semester and Teaching of English to the fourth semester of M.A Education program.

The Problem

The study was designed for Evaluation of Virtual Teaching Experiences in the Department of Education at International Islamic University Islamabad. The Skype software was used for the purpose of video conferencing as mode of virtual learning.

Objectives

- To evaluate the effectiveness of the virtual mode of education
- To gauge the importance of new technology in the delivery system higher education.
- To discuss the student adjustment in virtual teaching environment.
- To define the issues and problems of e-learning at university level.
- To give suggestions for improvement of e-learning at IIUI.

Significance

This study is significant as it provides useful data on the virtual mode of education. It will helpful for Higher Education Commission of Pakistan to promote e-education in universities of Pakistan. It would set a trend of using electronic media for effective teaching at

higher level. It would set a trend of using this technology for imparting education.

Methodology

It was a survey study. All the 97 students of M.A Education comprised the population of the study. The sample was universal that is 52 students from first semester and 45 from fourth semester. A questionnaire was designed to collect data. The questionnaire was divided in six sections. The total items were 47. Likert scale was used for the construction of questionnaire. All the items were close ended. The questionnaire was pilot tested, modified and administered. Data was collected by the researchers. Self data collection was applied for data collection. Data was analyzed tabulated and interpreted in the light of the objectives of the study. Mean was used a statistical technique.

Results of the Study

The results of the study are given below:

Table 1: Computer, Monitor, and Allied Facilities

Statement	N	Mean
Multimedia, internet with computer, monitor and allied facilities were available	68	2.82
Computer with internet was available for every student	68	1.16
Mikes were enough	68	1.75
Appropriate camera was available	68	1.92

Table-1 shows the environment of virtual teaching. Most of the students opined that multimedia internet with computer; monitor and allied facilities were well utilized (as the mean was 2.82). Individual computer with internet was not available for every student (as the mean was 1.16). Enough number of Mikes and appropriate camera coverage was not available during the virtual teaching as mean was (1.75 and 1.92 respectively).

Table 2: Pedagogy

Statement	N	Mean
Virtual teaching was effective	68	2.22
Easy to grasp Concept virtually	68	2.20
Notes available on web-discussion board	68	2.05
Lesson plans distributed in advance	68	2.07
Courses outlines were covered	68	2.41
All planned Classes executed	68	2.23
Majority classes started on time	68	2.38
Teaching Method was effective	68	2.17
Class discussion involved every student	68	1.92
Everybody got a chance for class participation	68	1.91
Graded homework assigned every week	68	2.16

Table-2 shows various aspects of pedagogy. Most of the students were of the view that virtual teaching was effective for teaching Western Philosophy and Pedagogy of English (as mean was 2.22). It was easy to grasp concepts virtually (mean 2.20). Notes were easily available on the web discussion Board and the Lesson plans were distributed in advance (as the mean was 2.05 and 2.07).

Both of the outlines of courses were covered and all planed classes were executed properly (mean 2.41 and 2.23). Majority of the classes started on time (mean 2.38). The virtual method of teaching was effective for learning (mean 2.17). Every student was involved in the discussion and got a chance to participate to some extent (as mean was 1.92 and 1.91 respectively). The graded home assignments were assigned weekly (as mean was 2.16).

Table 3: Students Adjustment

Statement	Total	Mean
Student's confidence	68	2.39
English speaking skill	68	2.11
Developed ability to explain ideas	68	2.25
Assignments were submitted in time via Email	68	2.36
Feedback on the assignments were provided	68	2.52
Assignments were effective way to discuss ideas	68	2.26
Virtual teacher was available during contact hours	68	2.39
Enthusiastic to participate in classroom activities	68	2.07
Eager to come and attend the class	68	2.20
Time Lapse in virtual communication	68	2.05
Limited communication due to virtual mode	68	2.07

Table 3 reflects students' adjustment. The student confidence, English speaking power and ability to explain their ideas were appropriately developed during the Virtual teaching Learning process (as mean was 2.39, 2.11 and 2.25 respectively).

The students emailed their assignments in time and feedback on these assignments was provided properly (as mean was 2.52 and 2.26 respectively). Students were of the view that assignments were effective way to discuss ideas and share on the discussion board (as mean was 2.26). Virtual Teacher was also available during contact hours (as mean was 2.39) Students were enthusiastic to come and attend the class and they also participated actively in classroom discussions (as mean was 2.20 and 2.07).

The communication was limited in virtual mode and the respondents felt time lost in virtual communication as the mean was (2.07).

Table 4: Role of Co-Teacher

Statement	N	Mean
Co-Teacher of the course was active	68	2.25
Co-Teacher helped in class management	68	2.32
Class arranged for activities	68	2.41
Co-Teacher arrange the discussion in case of technology problem	68	2.08

Table 4 reveals the role of co-teacher. The co-teacher of the course was active, helped in class management, activities and discussions (as mean was 2.25, 2.32 and 2.41). Co-teacher arranges class in case of non connection and technology communication problems.

Table 5: Availability of Technical Support

Statement	N	Mean
Technical Support for the class was adequate	68	2.39
Faults removed on time	68	2.01
Worked out to start the class on time	68	2.05
Technical support available during the class	68	2.22

This table shows that the technical support for the virtual class was adequate (as mean was 2.39). Faults were removed on time and the classes started as per schedule (2.01 and 2.05). Technical support was also available during the class (mean 2.22).

Table 6 shows issues and problems of virtual teaching. The major issue was disconnection on Skype with low frequency (as mean was 2.17). Reconnection wasted time and leads to break the continuity (as mean was 2.25 and 2.14).

Table 6: Issues and Problems

Statement	N	Mean
Frequency of disconnection was low	68	2.17
Reconnection wasted a lot of time	68	2.25
Limited number of mikes creates delayed answers	68	2.30
Daily seating arrangement in seminar room – The cause of time wastage	68	2.30
Daily equipment configuration caused delay in starting class	68	1.91
Disconnection leads to break the continuity	68	2.14
Polycom Service is unavailable	68	2.00
Maximum distortion of voice created recalling again on Skype	68	2.27

Limited number of mikes created delayed answers (as mean was 2.30). Seating arrangements in seminar room were not a cause of wastage of time (as mean was 2.30). Daily equipment configuration leads to short delay in the starting time (1.91). Polycom service is unavailable and maximum distortion of voice created recalling again and again (as mean was 2 and 2.27).

Conclusions

- Multimedia with allied equipment was available. It was useful for lecture, activities.
- Virtual mode was effective for teaching and students were involved in active class discussion.
- Home work assigned in every week and discussion board was used for sharing the assignment. The feedback of assignments was provided by the virtual teacher in the class and via e mail. Students develop the ability to explain their ideas and share with each other on discussion board.
- Due to inadequate number of mikes all students were not able to participate up to maximum level. Mike was provided as and when required.

- The courses were covered and the classes started on-time as adequate support was available.
- Students were enthusiastic and eager to attend and participate in virtual class room as to avail the opportunity learning from a foreign trained teacher.
- Students developed the habit to use computer with internet to contact with teacher, post assignments, receive feedback of assignments, download notes and share assignments with each other.
- There were time laps in communication due to non availability of polycom service.
- Co-teacher managed the class activities and helped in the successful execution of virtual classes. Also deliver lectures in case of disconnection as to save the time of students.
- Daily equipment configuration leads to short delay in the starting time of class due to the activities of seminar room.
- Technical support was adequate as most of the faults were removed immediately at the spot.
- Skype was used for virtual education and it leads to break the connectivity of the class. Redialing cause a lot of voice distortions.

Recommendations

- Virtual class room with proper equipment/facilitates may be provided preferably epuiped with high range camera, centralized hanging mike should be provided for virtual teaching. So that every student can participate simultaneously.
- Polycom service may be made available for virtual teaching as to improve the quality of video-conferencing and class room discussions. It also removes the laps in communication.
- Virtual mode of education may be promoted so that all the lectures of both campuses (male and female) can be shortcut up to maximum level. It is also cost effective.
- Virtual mode of education may be promoted in the universities and collaboration may be made with the

universities of developed countries so that knowledge may be shared up to maximum level.

- As students participated with zeal and vigor during virtual teaching. So it is recommended that virtual teaching may be promoted in higher education in general and international Islamic university particularly.

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Teacher's Knowledge, Beliefs and Pedagogical Practices in Integrating ICTs in different Curriculum Areas in Secondary Schools: A Case Study of Pakistan

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Abstract

*This study set to explore teachers' knowledge, beliefs and pedagogical practices in integrating information and communications technology (ICT) in curriculum areas in a private secondary school in Karachi, Pakistan, through a case study of four teachers. Data were collected through classroom observations, interviews, informal conversations and analysis of documents, and analysed using QSR NUD*IST. It was found that teachers' knowledge, beliefs and pedagogical practices significantly influenced how teachers integrated ICT in the curriculum areas. Due to limited time, the study could not trace longer how the teachers' knowledge, beliefs and pedagogical practices changed over time, thus, a longitudinal study is needed to trace how teachers' knowledge, beliefs and pedagogical practices change over time.*

Introduction

Research indicates that teachers' beliefs, feelings and knowledge about teaching, largely influence the way they teach (Borg, 2001; Flores, 2001). Furthermore, teachers have been unable to integrate ICT in the curriculum areas successfully (Robertson, 2003) because of beliefs users have towards technology, lack of access and/or knowledge of using technology for teaching and learning (Williams, Coles, Wilson, Richardson, & Tuson, 2000) or simply fear of technology.

Purpose of the study

The study explored teachers' knowledge, beliefs and pedagogical practices in integrating ICT in Science and Social Studies in a

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secondary school in Pakistan. Though many teachers use the computers for accessing information or word processing, little is known on how teachers use computers to enhance their pedagogical practices and students' learning outcomes. Several studies have measured teachers' pedagogical practices through observing and recording lessons in which ICT is used (Asan, 2003; Cox, et al. 2004; Smeet & Mooij, 2001; Williams, et al. 2003); however, such studies have not capture the pedagogical reasoning behind the teachers' practices.

Research questions

The study was guided by the following research questions:

1. What knowledge do teachers have about using computers and integrating ICT in curriculum areas?
2. What are the teachers' beliefs about using ICT for teaching and learning different subjects?
3. What are the teachers' pedagogical practices in integrating ICT in curriculum areas?

Literature review

Knowledge

Veal (2004) defines pedagogical content knowledge (PCK) as "the knowledge base needed for teaching" (p. 331). He classifies knowledge into four types: subject matter knowledge, knowledge of the students, knowledge of the context, and pedagogical knowledge. Similarly, Rodrigues, Marks and Steel (2003) subdivide PCK into three categories: subject knowledge, teaching and learning knowledge, and general craft knowledge. All the authors focus on the contents of knowledge

Beliefs

She (2000) classifies three types of teachers' beliefs: beliefs about the subject matter, beliefs about their teaching and beliefs about how students learn. The first type of beliefs originate from the teacher's previous training, while the second and third types come from the teacher's daily teaching experiences. Cronin-Jones (as cited in Haney, et al., 2002) has similar classification, but adds beliefs about the ability of students in a particular age group.

Pedagogical practices

Borg (1998) reveals that teachers' pedagogical practices are influenced by teachers' "real-time perceptions of classroom events" (p. 31). On the contrary, Breen, et al. (2001) assert that it is the experience that shapes teachers' pedagogical practices, not the context *per se*.

Teachers' Knowledge and, Information and communications technology

Teachers' subject knowledge and how ICT is related to that subject (Cox, et al. 2004), teachers' computer literacy (Asan, 2003), and confidence (John, 2005; Teo, 2008; Williams, et al. 2000) influence ICT integration in lessons. Thus, training in computer is essential for successful ICT integration in lessons (Davis, Preston, & Sahin, 2009). However, such training needs to be relevant and context based (Rodrigues, et al. 2003) and ensures access to ICT resources and on-going support to teachers (Williams, et al.). Likewise, confidence does not necessarily lead to ICT use in classrooms because there are other factors that influence ICT use (O'Connor, 2003).

Teachers' beliefs, and information and communications technology

Several studies indicate a consistent and strong relationship between teachers' beliefs about the use of technology (Cox, et al. 2004; Russell, et al., 2003; Williams, et al. 2000), though there is a controversy on whether computer use or teachers' beliefs and practices come first. Cox, et al. (2004) confirmed that teachers' beliefs and knowledge shape computer use.

Methodology

A qualitative design was used to explore teachers' knowledge, beliefs and pedagogical practices in a specific and naturalistic place, at a given time to understand teachers' inner perceptions on the meanings, context and experiences shaping their practices.

Sampling

This study was carried out in a private secondary school in Karachi, Pakistan, in the province of Sindh. The selection of both the site and

research participants was purposive because the school was amongst the schools that had then started integrating ICT in the curriculum areas. Four research participants- Karen and Sarah for Science (Classes VI & VII; VI & VIII) and Naz and Nusrat for Social Studies (Classes VI & VIII; VIII respectively) were selected based on teachers being “trained” in ICT and use computers for education for a duration of one day workshop to several years. Scrutiny of documents indicated that ICT was rarely integrated in Classes III to V, and classes IX and X were excluded from the study because the time the study was conducted they were preparing for examinations. The selection of two teachers from the same subject and from different subjects was for comparing and contrasting the ways in which ICT was integrated in each selected subject.

Methods of data collection

Data were collected through classroom observations, interviews, informal conversations and analysis of documents.

Classroom observations

Classroom observations aimed at unearthing teachers’ knowledge and beliefs as “beliefs cannot be directly observed and measured but must be inferred from what people say, intend and do” (Pajares as cited in Sahin, Bullock & Stables, 2002 p. 712).

Each observation lasting for 60 minutes focused on teaching and learning, the subject matter and general classroom interactions. Each teacher was observed thrice over a period of four months. Classroom observations were audio taped and observation field notes were taken. The audio taped classroom observations were transcribed verbatim. Part of the audio taped data and detailed field notes were used for elicitation purposes in stimulated recall interviews and informal conversations.

Interviews

Two forms of interviews were used: stimulated recall interviews and a focus group interview. Stimulated recall interviews explored the reasons for certain actions and behaviour teachers exhibited during teaching. Three stimulated recall interviews were used as part of post classroom observations. The audio taped part of the data was played,

the teachers listened to it and it was stopped at a point for teachers to describe why they acted or behaved in such a manner. Thus, teachers' knowledge, beliefs and pedagogical practices could be unearthed.

A focus group interview explored further the emerging themes from the teachers as identified from classroom observations and individual interviews and to compare emerging themes from different teachers. Interview data were audio taped and transcribed verbatim for analysis.

Documentary review

Lesson plans, lesson notes and Social Studies and Science curriculum documents were thoroughly read to find out how ICT was supposed to be integrated in the subjects.

Informal conversations

Informal conversations were used depending on the teachers' availability and willingness. The teachers seemed relaxed; consequently, were able to reveal some of their knowledge, beliefs and pedagogical practices.

Data analysis

The transcribed interview and classroom observation data were analysed using QSR NUD*IST as data collection continued. Thus, the previous data analysis process determined data to be collected thereafter. The documents were read several times to identify emerging categories and themes.

Findings

The major findings are divided into three areas: teachers' knowledge, beliefs and pedagogical practices in integrating ICT in different curriculum areas.

Teachers' knowledge about integrating ICT in curriculum areas

Teachers' technical knowledge

Knowledge about the computer meant technical skills such as Internet searching, selecting software, and technical skills for using

ICT resources for teaching whose sources were formal training and constant computer use both at school and home.

Teachers with more computer training and who constantly used computers were more confident in integrating ICT in curriculum areas than those with less computer training and those who rarely used computers, as Sarah emphasises: Trial and error is a good thing because it increases curiosity. Sometimes in trial and error we face problems, but we learn a lot from it.

Classroom observation revealed that teacher who had attended longer and several computer courses tended to integrate ICT in the lessons smoothly than those who had attended few and shorter computer courses.

Teachers' knowledge of the subject matter

The teachers' knowledge about the subject matter included knowledge of ICT resources and programmes, reasons for using ICT, computer knowledge, and processes involved in integrating ICT in the curriculum areas. This knowledge was instrumental in their use of ICT in teaching their subject matter. It was discovered that better understanding of the subject matter helped teachers identify the type of ICT resources needed for a given topic, and decide in which topics to integrate ICT. According to Sarah, ICT integration in a subject area, *inter alia*, 'depends on the needs, the type of topics we have selected and ... the strategies for that purpose.'

Teachers' pedagogical content knowledge

Knowledge of how to teach was determined by teachers' knowledge on how students learn, the nature of the context, and the subject matter knowledge. Teachers' use of multiple teaching aids was partly influenced by their knowledge on how students learn. Karen illustrates:

There is no one way to give explanations. We show the whole process in the form of a flow chart too. Either we can do the explanation in the form of a model. May be with some animated picture or sometimes we can give the diagram to the students and ask them to label it.

The teachers reported that through the use of ICT students had become more independent and improved their presentation skills. Students have become more informative and they collect information from different websites as they search by themselves (Karen). Their presentation skills ... have very much changed from the previous times. Now they are more, you know ... they present in such a beautiful manner (Nusrat).

Teachers' beliefs about using ICT for teaching and learning

All the four teachers strongly believed that ICT enhanced teaching and learning. However, in some cases, the teachers' beliefs were inconsistent with their pedagogical practices.

Internet is a big book

Teachers viewed ICT, especially the Internet, as a reliable source of information because recent information could easily be accessed. Naz explained: 'Internet is a book. A very large book On each and every page you can pick the desired thing.' Thus, they believed that the Internet is full of useful information. However, in reality, information available on the Internet needs to be critically scrutinised for its usefulness.

ICT brings the real life situations into the classroom

Through ICT, the teachers thought it was easy to simulate real life situations. Karen illustrates:

... in the computer when you show some things that are usually happening in the normal environment, then it gives the idea of the real life.

ICT caters for multiple learning styles

Teachers believed that ICT catered for multiple learning styles of the students. Thus, during teaching they used to involve several sense organs through simultaneous use of the video clips, the oral text from the video clips and the written text that accompanied the video clips as Karen explains: 'Students have different ways of learning; IT helps many students to understand the subject. They see, they hear.'

ICT promotes collaboration in learning

Teachers believed that ICT facilitated different students to engage in different activities in the class according to their abilities and needs as Sarah illustrates:

Through computers, we are teaching, some students are working on the presentations, the other students are collecting information, and some students are typing and are good in computers.

Classroom observations revealed that students who shared computers were also seen discussing. However, in lessons that involved Internet search, individual students were seen searching for information of interest to them. The division of labour for students sharing computers and working in groups appeared to be more for logistic purposes.

ICT saves other resources

Teachers were strongly convinced that ICT saved time, the teachers' and students' energy, and paper. Sarah justifies this: 'I cannot photocopy all the different diagrams. It is a waste of resources. If we are having these computers, why can't we see them, how colourful it is.'

On saving time and human energy, Karen adds:

Clip art in the computer becomes very interactive, less time is taken. So, instead of wasting this time, if we utilise them in this animated picture so it does not need much more efforts of the teacher as well as students.

ICT shifts the role of teachers and students

ICT made teachers and learners assume new roles. Teachers became learners, learning with the students, learning from the students and learning from their own practices as Nusrat illustrates: '... we both are learning. Like a teacher is a passive one. She also wants to become a learner. That is why I took part in this [Internet search].' Thus, the traditional notion of the teachers as sages on the stage and the only source of knowledge, and learners as *tabula rasa* was challenged.

Teachers as facilitators gave students opportunities to learn. For example, Karen presented the lesson with the students. Informal conversation revealed that she had planned the lesson together with the students as she realised that students were much better than her in some ICT aspects. This was also featured in Sarah's lesson:

A group of students, good at computers and they have computers at their homes, they work with me and they support some clip art for me.

Teachers' pedagogical practice in integrating ICT in curriculum areas

Teachers changed some of their teaching strategies to facilitate ICT integration in the curriculum. When tasks were specific and had a high degree of teacher supervision, their completion took less time, while, when they were general, with less guidance they took a longer time and, in some cases, they were not completed. A possible reason for the difference could be the immense amount of information available in the cyberspace distracted them. This, *inter alia*, calls for using more structured tasks to attain the lesson's objectives.

Conclusion

The teachers' technical knowledge of using computers, the subject matter knowledge and pedagogical content knowledge greatly influenced how ICT was integrated in different curriculum areas. The teachers' role was very significant in integrating ICT in the curriculum areas. It is the teachers who selected ICT resources and, to some extent, determined how they could be used. When teachers assumed the role of learners they were breaking the long-standing tradition where teachers were seen as the ultimate source and giver of knowledge and becoming lifelong learners. However, in some cases, teachers' beliefs about using ICT did not translate into their pedagogical practices. Often ICT was used as an add-on to existing resources. Overall, there was little evidence of teachers using ICT as a tool to radically change their pedagogical practices.

Direction for future research

Since, research on teacher cognition may be difficult because it involves some variables (knowledge and beliefs) that cannot be observed directly but have to be deduced from what people say,

intend and do; to get deeper insights on these aspects, a longitudinal study is needed to help understand the changes taking place in teachers' knowledge, beliefs and pedagogical practices over time.

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Exploring Differentials across the Preschool Systems in the Maghreb Region

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Abstract

This paper sheds light on how the economic background and socio-historical context have had a solid bearing on the preschool system in the Maghreb region. Building on a number of comparative studies from mainstream early childhood education literature across discrete cultural contexts, the paper seeks to investigate the influence of these social-cultural dynamics on the conceptualization of the preschool system. However, such impact does not only figure across countries with distinct cultural and geographical lines but rather among counties sharing almost the same cultural heritage. In this respect, it is thought here that a homogeneous cultural environment such that of the Maghreb countries (i.e., Tunisia, Algeria, and Morocco) does not necessarily subscribe to the same blueprint because of the significant differences which figure in regards to the structural organization and pedagogical agendas of preschools within each of the Maghreb countries.

Introduction

Preschool is a institution that is universally premised on the necessity to satisfy the pedagogical needs in early childhood education at the psychological, social and cognitive levels. It acts as an intermediary between the educational space of the family and the community life (Terrisse, 1988). It seeks to enhance the intellectual faculty of children from the earliest stages of communication. As a matter of fact, there is substantial evidence in child research literature postulating that children are disposed of multiple competences which

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are deeply rooted in the fetal characteristics of children (de Boysson-Bardies, 1996; Lécuyer, Pêcheux, Streri, 1994). The preschool environment crucially consists in its being a tool which contains the synergy between the natural route of development of children (i.e., novice learners) and the educational program devised by the educator (i.e., the expert) (Vygotsky, 1978).

Nonetheless, preschool systems demonstrate huge diversity in as far as the pedagogical choices are concerned. Such preferences are systematically moderated by the cultural specifics of each country, which makes a given preschool system far from being nicely immersed in a cross-cultural pedagogical paradigm (Montessori, 1987). Each country establishes its own system in accordance with (i) the social status assigned to children, (ii) its definition of education, and (iii) the role of parents in the educational experience (Brougère, 2000). In this respect, Tobin et al.'s (1989) study is designed to compare the preschool systems in Japan, the United States, and China at the level of their pedagogical preferences, objectives, and cultural values. This comparative study reveals significant evidence of the differences at the three levels. In fact, the inherent cultural features of a given country can be typically distinguished in the profile of a preschool system in view of the demographic characteristics, conflict management, and the place of the individual in his/her community.

In the same vein, Bédard (2002) refers to a considerable commonality between Canada and Switzerland, two countries with an important number of ethnic communities. This cultural setup in both countries reverberates in their preschool systems through the introduction of an inter-cultural dimension that aims to consolidate the social integration of these ethnic communities and to broaden the interface of interchange between them, most notably in the Switzerland of late 1980s. This pedagogical agenda is best illustrated by (i) the implementation of foreign language learning programs as a complement to learning the official languages as well as (ii) other programs designed to observe social behavior on the basis of tolerance and diversity (Postlethwaite, 1995).

Japan and the United States: The Place of the Individual in the Group

Tobin et al. (1989) notice that there is one child educator per thirty preschoolers. She does not often help them during their engagement in a task or activity, nor does she intervene when occasional conflicts take place. There is indeed a substantial amount of freedom given to children in choosing and conducting their activities added to the importance given to learning socialization skills within the group (Kato-Otani, 2004). Importantly enough, it is in general mothers with credentials who oftentimes abandon their career jobs to be in charge of education of their children throughout the preschool years. In light of the typical one-child composition of Japanese families and the lack of socialization for the lonely mothers, the educational preschool system seeks to grapple with the absence of child-to-child contact. This is why childhood educators tend to minimize their intervention in conflict situations and focus on the relational behavior of children.

By way of comparison, in the United States there is one child educator per twenty preschoolers where the child-educator relationship is highly individualized. The educator usually intervenes when it comes to limiting or avoiding conflicts. Here, the main purpose of education consists in the psycho-motor development of children in addition to their self-worth and their emotional. The preschool experience should be therefore likened to an enjoyable enterprise (Tobin et al., 1989). This explains in part how the American culture is based on one's awareness and valuing of individualism, and so the pedagogical decisions at the preschool educational system cannot deviate from this cultural frame of mind.

According to Tobin et al. (1989), the relationship between parents and the preschool structure is deeply anchored in the socio-economic and political context in a given country. In fact, preschool tends to meet the expectations of parents in accordance with a nation-wide format that provides a set of standards for an educator to follow, which may insinuate a way of thinking in tandem with the free-market spirit of the country. Contrariwise, the expectations of Japanese lonely mothers are centered on the value of socialization and interaction which may avail both their children and them. To a

certain extent, these expectations decidedly account for the tendency in Japanese preschools to organize social encounters and opportunities of exchange, not only between children but also between their families.

Canada: A Dual Culture

The Canadian preschool system highly accentuates the importance of play in the learning course of children. In this vein, Bédard (2002: 11) notices “Quebec has recently witnessed a breakthrough in the conceptualisation and implementation of new tools and services designed for early childhood [and that] the socio-economic and demographic evolution of the Quebec society has among other things called for huge demands insofar as preschool education services are concerned.” To such demand, the Quebec government intervened to set the guidelines to standardize in a sense this booming sector of education. Through a 1997 reform, they intended to redefine the concept of play and its utility so as to optimise the learning techniques and homogenize the learning rate of children. This policy, Bédard (2002) comments, is an attempt to “abandon the spontaneous” spirit that characterizes the evolution of the preschool system in Canada. In fact, this change of heart is, according to Bédard (2002: 18), ascribed to confusion in the interpretation of the concept of play as to whether one should focus on the pleasurable side of play or its empirical dimensions to streamline learning.

Bédard (2002) maintains that role play is no more than a means used to strengthen the child’s ability to internalise knowledge and consolidate his/her fledgling skills. Play is hence a pedagogical method that systematically provides adequate motivation for children to meet the challenges of acquiring new knowledge and developing their competences. At this juncture, with reference to the above reform, Bédard (2002: 65) distinguishes between “spontaneous free play” and “learning process.” Accordingly, the virtue of play lies in the comprehensive development of children, including his/her psycho-motor, affective, social, and linguistic and cognitive competences. The play concept is not merely an activity without a rationale nor simply an act of participation of the child in his/her environment. It is rather a constructive learning instrument which seeks to enhance the qualitative aspect of preschool education

through developing cross-sectional competences (i.e., intellectual, methodological, communicative, etc.) (Bédard, 2002). As to children of an advanced age, there are childcare centres which foster their curiosity as they allow them to explore the following domains: languages, mathematics, social environment, technology, etc.

Through an in-depth look into the influence of bilingualism on the Canadian preschool system, one may notice that there has been a successful integration of the francophone and anglophone cultures. In fact, this merger spirit was partly inspired by the old French preschool system where in 1777 some childcare centres in France used to focus on play activities and verbosity skills (Pougatch-Zalcman, 1980). The play concept was further reinforced in the curricular decisions in relation to the Canadian preschool system in light of the then emerging ideas of Piaget and Vygotsky. In this vein, several recent assessment projects specialized in early childhood education, such as Bara and Gentaz (2004), pinpoint to the variety in the policy of the preschool system. It includes, among other things, focus on the psychological and social development with respect to play activities and tasks that encourage the values of solidarity and competition beyond the family confines.

As regards the influence of the anglophone culture, its characteristics reside in the qualitative aspect of functioning in the preschool system and it is manifest in the child's involvement in the choice and engagement of the pedagogical activities. The anglophone preschool system focuses on the quality of the services offered to preschoolers. In other words, the pedagogical objectives are related to integral areas of child educations such as self-esteem, motivation, ability to take decisions, independence, etc. Among these typical activities to observe these areas of development, preschools:

- Integrate elements of pleasure in all the activities (e.g., confidence-building tasks) assigned to children.
- Make assessment follow-ups and communicate estimates to parents.

- Discuss with children their works in order to boost their intellectual and motor abilities and eventually their autonomy.

The Maghreb Region

Although the modern preschool system has recently garnered increasing attention in the Maghreb countries, the number of preschoolers still remains insignificant in proportion to the child population therein¹. Preschool is still elective and in most of the cases is not programmed in the general curricular agendas of these countries. Hence, it does not qualify as necessary step for young children to subsequently join the primary school. In fact, it is only middle-class children who represent the majority of preschool attendants (Tlili, 2004). The three Maghreb countries of Tunisia, Morocco, and Algeria share a huge interface and a cultural heritage which includes a common language (i.e., Modern Standard Arabic), geographical contiguity, similar history (e.g., French colonization), and solid ethnic kinship. In light of such similarities, the question which worth-addressing here is whether this reasonably homogeneous background may intimate a uniform preschool organization across these countries or perhaps a great deal of structural and conceptual variation.

Morocco and the Apogee of Kuttab²

According to Bengharbit-Remaoun (1993), the sector of preschool education has evolved tremendously in the early 1990s thanks to the governmental efforts and consciousness raining within the community. In consequence, less than one-third of the three million population of Moroccan children aged between 3 and 7 attended preschool in 2003 and based on the governmental statistics, preschool attendance would peak by the end of the decade. However,

¹ Organisation arabe de l'éducation, de la culture et des sciences. (2000). *La stratégie arabe pour l'éducation préscolaire, période de l'école maternelle*. Tunis.

² The *Kuttab* is an elementary school generally situated in Mosque buildings and it dates back to the early days of Islam. The main subject of instruction in this educational institution is the rote-based learning of the Koran under the supervision of the *Meddeb*. Other skills are equally involved such that of reading and writing Classic Arabic.

the kuttab still receives 77.34% of children of preschool age) despite the variety of parallel educational institutions (e.g., private and public childcare centres, schools for foreign citizens' children, etc.).

The peculiarity of the Moroccan preschool system consists in the consideration of the kuttab at the heart of this educational institution. Bouzoubaa and Bengharbit-Remaoun (2004), in this respect, explain that contrary to the majority of the Arab countries where the Kuttab is of a peripheral importance, not only has the Moroccan government reinvigorated this institution it has also provided it with financial support. Concurrently, the pedagogical policy has been made clear after passing a law that specifies the major guidelines to endorse in preschool education.³ Among the objectives set by the government are learning of a considerable number of verses from the Koran, fundamentals of the Islamic faith, patriotic and humanistic values, development of sensorial competences and creativity, and development of reading skills and writing skills in Arabic, and familiarization with the Amazigh⁴ language.

The weight of the religious aspect in the Moroccan preschool system, being manifest in the prevalence of the kuttab institution, accounts for the socio-cultural setup of this country which is basically ruled by an Islamic monarchy. This peculiarity enables children, irrespective of their socio-economic background and region of residence, to receive the basic level of education. The easy access to the kuttab represents in some way a solution to the economic hindrances that prevent the mainstream of child population from joining private preschool institutions especially in the rural areas.

³ One characteristic of the 2000 law, entitled "The Basic Status of Preschool Education," is that the government delegates the management of preschool education to the private sector and only concentrates on the areas of regulations and pedagogical training.

⁴ The Amazigh language is spoken by people of North Africa (the Maghreb). It used to be the main language before the spread of Islam in this region. Despite the domination of Arabic and French, being the official languages, the use of Amazigh language remains important among the Berber communities especially in Morocco and Algeria.

Algeria: Absence of the Play Aspect

Although early childhood education is to a large extent shaped by the family, by the street, being considered as the playground, and by the Mosque, the preschool system became popular starting from the 1990s (Mékidèche, 1996; Senouci, 1992). In fact between 1998 and 1999, preschool education reached 3.8 % of institutions under the management of the Ministry of National Education. In 2003, a research study, financed by UNICEF, reported 11 % of Algerian children attended preschool with 24 % of this population were under the legal age. Also reported was that in 2004 the number of preschoolers projected to reach record attendance. In this vein, a national committee in Algeria assigned a team of education experts to elaborate a reference plan involve the age range of 5-to-6 years.

Regardless of the structural diversity in the Algerian preschool system (e.g., childcare centres, specialized clubs, etc.), all these educational institutions seem to follow the same pedagogical line. Aside from preparing children for the basic school level, the main objective revolves around the following: teaching should be exclusively in Arabic, teaching social rules of etiquette, physical education, patriotic awareness rising, learning in team work, focus on artistic activities and creativity, and introduction to reading skills and mathematical logic (Senouci, 1992). It should be noted here that the pedagogical conception is academically-oriented due to social pressure to prepare children for 'better' future education. Such effort may greatly appropriate the preschool education system in order to resemble the basic school format at the expense of the play and socialization characteristics. Importantly enough, some interviewed 1669 educators admitted that the ultimate objective was to ensure a profound schooling career for children (Bouzoubaa & Bengharbit-Remaoun, 2004).

This attitude reveals the problem of training shortage which largely explains why the majority of childhood educators resort to switching to old reflexes and traditional and socially-biased definition of childhood and education. In fact, all the interviewed 1087 educators showed preference for reading and writing activities (90.24 %). Similarly, the interviewed 5547 parents voiced consistent expectations concerning preschool which highly accord with those of

the educators. To such complementarities between social pressure and lack of educator training, the report suggested that the blueprint of objectives and their implementations be revisited with a view to encouraging the element of pleasure, developing children's emotional intelligence, and stimulating their intrinsic motivation.

The absence of the element of pleasure in the Algerian preschool system and the focus on teaching values of patriotism deeply reflect a socio-cultural reality which emanate from a tragic historical and social background. Indeed, the French colonization, which lasted for more than 150 years and left 1 million Algerians dead, was followed by a bleak wave of terrorism during the 1990s. These historical events have occasioned continual traumas in the social character of the Algerian society where little room is left for the aspect of pleasure and entertainment.

Tunisia: Edging Between Modernity and Tradition

Tunisia has an advanced record in its effort to promote the preschool system, notably with regard to infrastructure and childhood educator training (Djaziri, 2006; Rejeb, 1985). The kuttab is generally viewed by parents as an antiquated institution which can hardly meet the expectations of modern life. Accordingly, the meddeb (i.e., the person in charge of teaching children in the Kuttab), for instance, does not receive any form of training and his role is only to use drilling tasks for children to repeat and learn by heart verses from the Koran. Consequently, he does not acquire the basics of professional supervision, which makes him resort to aggressive punitive measures such as beating and insulting children who commit mistakes (Rejeb, 1985). The legislature seems to accommodate to the mainstream expectations of early childhood education. In this vein, the Act No. 65, implemented on July 29, 1991, set the major objectives which define the preschool system in Tunisia:

- Strengthen children's sense of patriotism and civil society and promote their openness to other civilizations.
- Help children build their personality and maintain the values of tolerance and solidarity.

- Develop children's emotional intelligence, various competences, and critical spirit, intellectual capacities and prompt them to take the initiative and foster their creativity.
- Ensure a balanced distribution of the different areas of learning.

In sum, the pedagogical framework adopted in the Tunisian mainstream preschool system is diverse enough to include, in addition to the element of pleasure, objectives attendant to the psycho-motor, cognitive, social, affective, communicative, and creative development of children's personality. The Tunisian experience has certainly evidenced some progress due to the government's effort to generalize this educational model across all the regions of the country. However, the problem which emerges out of this undertaking lies in the mismatch between the political text and its practicality in everyday life. As to the act of parliament mentioned above, it insists on the necessity to orient early childhood education not only to the acquisition of values of patriotism and Arab-Muslim belonging but also to learning values originating from other civilizations. As a matter of fact, while leaving behind the traditional option of the kuttab and the teachings of religious values due to the unpopularity of this institution, there is no real acculturation effort to fully immerse into the other cultures especially the European ones (Djaziri, 2006).

The case of French in this country may illustrate this mismatch. Although French is taught as a second language, its approachability among Tunisians is limited mainly due to being taught at a relatively advanced age of children (i.e., 10 year-olds). Perhaps one of the qualities of modern time Tunisia is the linguistic mix between French and Arabic (i.e., code switching). However, such blend does not qualify as a mark of acculturation, that is, the proportionate coexistence of both Arab and French cultures in one's frame of mind. Despite the social and political effort to promote French, the limitations of such endeavour may be explained by the absence of clear methodology and implementation tools of teaching French in the preschool system.

In retrospect, one may discern that there is cultural disarray underlying the preschool system in Tunisia. Such disorder

reverberates in the socio-cultural context this country at this point of time through the emergence of many discrepancies in social life such as psychotherapy being paralleled by the existence of psychic business, alcoholism and religious devotion, the large inventory of French lexicon in common people's native Tunisian Arabic dialect, and the intermittent effort to promulgate Arabism in the public sector (i.e., at the level of ministries and governmental agencies) and bias to the French language in the private sector.

Conclusion

This paper has demonstrated how preschool is differentially conceived by counties which are culturally distinct (e.g., Japan, France, The United States, etc.). Aspects of variation related to the definition of the preschool system is largely ascribable to the historical, social, and material determinants specific to each of these countries such as the place of the individual in the United States and the impact of bilingualism in Canada. However, such variation does also occur in counties which are believed to be culturally homogeneous. As a case in point, the Maghreb countries illustrate considerable diversity in as far as their preschool systems are concerned. This diversity is manifest in Tunisia's policy of openness which masks cultural disarray that is reflected on the unclear pedagogical choices. The case of Morocco, poverty and cultural heritage largely explain the governmental preferences for and support of the old preschool system of the kuttub. Algeria's historical background together with social pressure for academic success may account for the absence of the element of pleasure and entertainment in the preschool agenda.

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Perceptions of Students, Educators and Principals about Quality Assurance of Elementary Teacher Education

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Abstract

This paper focuses on the perceptions of students, teacher educators and principals of University Colleges of Education (UCEs) and Government Colleges for Elementary Teachers (GCETs) about quality assurance of pre-service teacher education programmes - B.Ed and M.Ed/M.A Education. The sample of the study was comprised of 21 principals, 165 teacher educators and 399 student teachers who were drawn at random from 21 teacher education institutions of the Punjab Province. Data was collected by developing three research instruments – two questionnaires, one for each the students and teacher educators, and an interview protocol for the principals. The validity and reliability of the instruments were ensured through experts' opinion and pilot study in 2006. The overall reliability of the instruments was established at 0.7259 Cronbach's Alpha. Findings of the study revealed that majority of the respondents were aware of the concept of quality education. They used traditional lecture style for classroom instruction and did not sufficiently exercise activity based teaching method. There was a great shortage of highly qualified, professional and research-oriented teaching staff. Many institutions were lacking in basic facilities; and hence the learning environment was not conducive.

Introduction

Quality education at all levels is the most desired goal of education system of any country. Young generation is shaped and equipped to contribute to the nation's building with an effective education system. Quality of the education system of a country largely depends

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upon the teachers produced by the teacher training institutions. Educational literature and documents in Pakistan are replete with statement emphasizing this role and advocating stout support for the cause of improving the quality of teachers. National Educational Conference 1947 concluded an ever green notion that “key stone of the arch of national education is the efficient, hardworking and the honest teacher who is fully conscious of the fact that he is the trustee of the national stability, solidarity, progress and reputation, for training and upbringing national youth is placed in his hands” (Government of Pakistan, 1947). The Commission on National Education (1959) also admits that in Pakistan “the actual situation is far from ideal. A large percentage of our teachers are untrained and as the profession is poorly paid, it does not attract the most suitable candidates”. Eighth five-year plan (1993-98) has endorsed the teacher education scenario in Pakistan as;

“Teachers have a pivotal role in improving the quality and efficiency of education system, for which pre-service and in-service training programmes of high quality are essential. The quality of pre-service training for most of the teacher training institutions is out molded and low as compared to international standards. There is an urgent need to up-date the knowledge and skills of master trainers engaged in teacher training”.

The major function of education is to increase the individuals’ capacity to learn, to provide them with a framework with which to analyse problems and to increase their capacity to deal with new information (Bowden and Marton, 1998). The ultimate goal of education and training is the better product of students. If an education system does not promote students learning, it infers that quality of the teaching learning process is not effective. In other words, as Tierney (1998) states ‘student better learning is the ultimate measure of academic quality. It improves if students feel more secure about where they are headed and how the college is taking them there’.

Srikanthan and Dalrymple (2004) state quality assurance is basically concerned with determining the level of educational services provided to students. Additionally quality assurance process evaluates the educational services provided to some institution or

personnel within a specific time frame. Quality of teacher is not the only component of quality in education. Presently the concept of Total Quality Management (TQM) is being applied to education, which was driven from the field of business and industry. In the context of education, TQM refers to the improvement of the overall teaching learning environment in an institution by exploiting all the available resources to the maximum possible extent.

In the educational environment, quality assurance is much related to the assessment and evaluation at institutional and classroom levels. In other words, assessment of teaching-learning process is central to quality assurance. Well designed assessment sets clear expectations, establishes a reasonable workload (one that does not push students into rote reproductive approaches to study), and provides opportunities for students to self-monitor, rehearse, practice and receive feedback. It is an integral component of a coherent educational experience. Since assessment plays such an important and significant part in the future of students. There is no doubt that any assessment system will determine what students learn and the way in which they do this? Hence 'assessment will also determine the way in which we teach and what we teach'? (<http://www.city.londonmet.ac.uk/deliberations>, retrieved 22 March 2007).

Teachers' performance is one of the key determinants of quality assurance in the classroom teaching learning discourse. Greaney and Kellaghan (1996) in the context of outputs of students, state "outputs are cognitive achievements of the students and affective characteristics such as the positive and negative feelings and attitudes of students develop relating to their activities, interests and values". The ultimate goal of quality assurance is better students. In other words, as Saeed (2003) states 'students' performance is associated with teachers' performance and teachers' performance is said to be effective when teachers teach effectively and students' learning is enhanced'. Mohanan (2005) found that 'the quality of learning outcome is a measure of quality of teaching. The best teacher is one who transmits the best possible body of knowledge in the best possible manner'. In order to achieve this goal, universities and other higher education institutions should produce people who

can think creatively and produce new knowledge and innovations, or even more than this, as Bloom (1987) states 'to provide intellectual measure as well as career tools'.

It is not easy to strictly define "quality" as it is a relative term. It is a complex concept which covers all aspects of an activity, a programme etc. It is a social recognition which has great concern with the values and norms of the society. It is linked with the aims and objectives of a certain programme or activity, a system or an organization. Saeed (2003) states that 'the extent of quality is associated with the extent of the achievement of the objectives'. According to a document of UNICEF (2000) basic dimensions of quality education are: Quality learner, quality learning environment, quality content, quality process and quality outcome.

It is assumed that learners who are healthy, well nourished and ready to participate and learn are helpful in improving the quality of education. In the same way environment; that is healthy, safe, protective, gender sensitive and has adequate resources is favorable for quality education. Content that is taught and the process of content delivery and teaching methodology being used are also the key factors in improving the quality education.

Researches being conducted across the different countries depict the pivotal role of quality education in stepping forward the country's progress and development. Carron and Chau (1996) found that illness and poor health are one of the main reasons for absenteeism. Willms (2000) found that children whose schools lack classroom materials and had an inadequate library were significantly more likely to show lower test scores and higher grade repetition. Miske et al. (1998), and Carron and Chau (1996) observed that in schools with greater learning gains, supervisors regularly evaluate teachers, contributing to improved teaching practice. They also found that connections between pupil learning gains, teaching and learning in the classroom, and organizational support for teaching and learning are interrelated and inseparable. In a recent research carried out by Haskova (2004), it was investigated that one of the major indicator of quality education is to establish an appropriate assessment system that will contribute to increasing learners' educational levels.

Boyer and Boyer (1999) identified following ten indicators of at quality assurance at higher education level;

- Transition from high school (start an orientation programme at the time of college entry)
- Effective communication and thinking
- Equal weightage to core courses and major (optional) courses
- Conducive learning environment
- Low student-teacher ratio
- Good information resources (library)
- Flexibility in programmes
- Good campus life (diversified extra-curricular and cultural activities)
- Better provision of students services and other factors including size of campus, setting
- Religious affiliation (<http://www.petersons.com>, retrieved on 4 May 2006).

In Pakistan many universities and teacher training institutions are providing their services in the area of teacher education. Along with different universities, government colleges for elementary teachers (GCETs) and university colleges of education (UCEs) are the main institutions imparting teacher education under the administrative control of Government of Punjab. All these colleges offer teacher-training programmes in affiliation with the University of Education Lahore which was established in 2002 as a center of excellence in the area of teacher education. Since 2002, with the establishment of Higher Education Commission (HEC) at Islamabad, the issue of quality assurance at higher education level has been more addressed. It has undertaken many initiatives to promote quality education at higher level. One of the most important initiatives is the Faculty Development Programme under which university and college teachers are trained in teaching methodology and assessment skills. Another quality assurance initiative of HEC is that all admissions to different higher education programmes are now subject to qualifying national level GRE type tests conducted by National Testing Service. Of course there is a need to improve these tests to ensure the validity

and reliability issues. It is expected that these tests will be improved and better intake will enter the higher education institutions. The present study will provide us the opportunity to explore the perceptions of students, teachers and principals of pre-service teacher education institutions of quality assurance of B.Ed, M.A Education and M.Ed programmes.

Objectives of the Study

1. Explore the perceptions of students, teacher educators, and principals about quality education in teacher education institutions (GCETs/UCes) in Punjab.
2. Identify the areas that need more improvement in terms of quality assurance in the GCETs/UCes.

Research Questions

1. How do students, educators and principals perceive about quality assurance in teacher education programmes in UCes and GCETs in regard to the five indicators of quality assurance of UNICEF?
2. Which areas need more quality assurance in the GCETs and UCes?
3. Is there any difference in the perceptions of male and female students, educators and principals in regard to quality education in the GCETs and UCes?

Methodology

The study was descriptive in nature. There were 43 colleges of teacher education in Punjab producing teachers for educational institutions in collaboration with the University of Education Lahore. All the principals, teachers and students of B.Ed, M.Ed and M.A Education in 43 colleges were the population of the study. All the colleges were categorized into four categories on the basis of geographical, linguistic and socio-economic differences. 50% of these colleges were selected through random sampling technique from each category. Proportionate stratified random sampling technique was used to draw the sample of students from the sampled colleges. 21 principals (about 50%), 165 teacher educators (10%) and 399 students (5%) from each sampled college were included in sample.

A mixed-method approach was used to collect data. In this method both the qualitative and the quantitative data was collected from the respondents. Two instruments - a questionnaire and a semi-structured interview schedule were developed, which were duly validated through expert opinions and pilot testing. The reliability of the questionnaire was established at 0.7259. The questionnaire was used to know the perceptions of three strata about the quality of education. Interview schedule was used for the deep insight of the perceptions and the concerns of the respondents regarding quality education in their institutions. The items/questions included in these research instruments were about lesson planning, use of audio-visual; aids in classroom, activity-based teaching, university qualifying examination, physical facilities, computer labs, co-curricular activities, learning environment, college resources, use of computer technology in instruction, educators and principals' job satisfaction. These items were developed with reference to the five major aspects of quality – Learner, Learning Environment, Content, Process and Outcome.

The instruments were sent to the sampled subjects through ordinary mail. About 50% of the sampled subjects completed the questionnaire in first instance. The non-respondents were sent another copy of questionnaire with the request to return after completion. Some of the sampled subjects were also contacted via telephone for the completion of the questionnaire. Resultantly, around 90% of the principals and teacher educators, and 67 % of the students responded to the questionnaires.

Questionnaires' Results

Perceptions of Principals

The perceptions of the principals of GCETs and UCEs were sought out on the basis of the five quality indicators. It was found that majority of the teachers did not plan their lesson before going in the classrooms. They use the A.V aids during their lessons rarely and give less emphasis on activity-based teaching learning strategies. The majority of them found committed to the teaching profession. They were relatively less satisfied with their job conditions. Due to meager resources at the college, they provide learning materials to their students rarely. The areas emerged out to be improved were: Lesson

planning before going to classrooms, use of A.V aids in classrooms, use of activity-based teaching, university qualifying examination, basic physical facilities in colleges, computer laboratories in colleges, co-curricular activities and college resources

One of the core issues was that how far the principals were aware of the five major components of quality in education? A large majority (94.7%) of the principals had awareness of principals with Quality Process. About two-thirds were aware of the concept of Quality Learning Environment and Quality Outcome, while around half of them were aware of the concepts of Quality Learner and Quality Content.

Perceptions of Teacher Educators

It was found that about three-quarters of the educators responded that they used to plan the lessons before teaching the lessons. They used the different audio-visual aids, computer technology and employ activity-based teaching not so frequently. Some times they provided the learning materials to their students. The majority remarked that they possess the desired mastery over the content and perform their duties with commitment. They were not satisfied with their job conditions mainly due to lack of college resources, poor learning environment and physical facilities. The areas identified were: lesson planning, content knowledge, teacher training programmes, learning environment, use of A.V aids in classrooms, use of activity-based teaching, university qualifying examination, basic physical facilities in colleges, computer laboratories in colleges, co-curricular activities, and college resources.

The perceptions of the educators of UCEs and GCETs and were also sought out on the basis of the five quality indicators - Learner, Learning Environment, Content, Process and Outcome. Like principals, a remarkable majority (94.7%) of the educators was aware of the concept of Quality Process. Awareness of the respondents ranked at second and third positions with the Quality Outcome (69.3%) and Quality Learning Environment (64%) respectively. The aspects of Quality Learner and Quality Content were ranked at the bottom with the proportion of 58.7% and 45.3% respectively.

Perceptions of Student Teachers

The perceptions of student teachers of the GCETs and UCEs were almost contrary to those of principals and educators; even contradictory to their own perceptions. Majority of them explored that teachers never plan their lessons before going into the classrooms. Most of the time they do not use A.V. aids, especially the computer technology to make their teaching learning process were effective. Generally they don't provide learning materials to the students, instead rarely recommend some books to read. Most of these books are not available in the colleges' libraries. Activity-based teaching is almost absent. At the same time the majority opined that their teachers/educators are committed to teaching profession, performing various duties well and possess the desired competency in subject knowledge. To enhance the quality of overall teaching learning environment, they identified the areas of content knowledge, teacher training programmes, learning environment, use of A.V aids in classrooms, use of activity-based teaching, university qualifying examination, basic physical facilities in colleges, and computer laboratories in colleges, co-curricular activities and college resources.

Comparative View of Students, Educators and Principals' Perceptions

The perceptions of the educators of UCEs and GCETs regarding the five major quality indicators - Learner, Learning Environment, Content, Process and Outcome indicate that with the exception of the component of Quality Learning about which two-third majority of the students had awareness; the situation was discouraging in the rest of the four quality components. About half of the students were aware of the components of Quality Learner, Quality Content and Quality Process. The aspect of Quality Outcome ranked at the bottom (35.2%) in this regard.

Table-1 explains the picture of awareness of principals, educators and students of teacher education institutions about the quality education. 65 % of the respondents were aware of the concept of quality learning environment. A small percentage of respondents were aware of the concept of quality content. The students showed much concern with the content in comparison to the principals and

educators; in turn they were least aware of Quality Outcome. The principals and educators were well aware with the Quality Process. Overall the awareness of respondents with the Quality Process was the highest (81.5 %) and the least one with the Quality Content. About two-third had awareness with Quality Learning Environment and half had awareness with the Quality Content and Quality Learner.

Table 1: Comparison of the perceptions of students, educators and principals about quality assurance in GCETs and UCEs

QL*	QLE*	QC*	QP*	QO*	Overall*
Principals					
52.6	63.2	47.4	94.7	68.4	57.3
Educators					
58.7	64.0	45.3	94.7	69.3	66.4
Students					
50.4	67.8	55.2	55.2	35.2	52.4

Respondents Awareness of respondents with quality education (%)

*QL = Quality Learner QLE = Quality Learning Environment

QC = Quality Content QP = Quality Product

QO = Quality Outcome

Analysis of Interview Protocol

The data collected through interview schedule was cleaned and different aspects were marked tallies in the form of a table. On the basis of high percentage of the tallies high concerned aspects were decided. Overall it revealed almost similar results as emerged of the questionnaires. Students were mostly concerned with the facilities and the learning environment. Educators were highly concerned with quality process and the quality learner. They were of the opinions that there were many drawbacks in the process of education in these institutions. Principals were also highly concerned with quality process as they were bound to follow the rules and regulations.

Regarding the opinions of principals, educators and students about ensuring different quality indicators, the majority claimed that they are honest and dedicated to their tasks and committed to the

profession. The majority was of the view that they use audio-visual aids and the latest educational technology rarely. The principals and educators claimed to use activity-based teaching, situational teaching and that they provide learning materials to their students; the students on the contrary reported that such happened rarely. The students partially agree that their teachers possess desired competency in the subject(s) they teach, which infers that the principals and educators were weak in content area. Both were found deficient in knowledge of teacher education. This might be that they are not satisfied with their job conditions. One of the probable reasons is that they teach at postgraduate level but they had no sufficient knowledge resources in terms of library books, journals, e-access.

Conclusions and Discussion

There is a dire need for professionally trained and committed teachers who can meet the challenges of the emerging world. For this teachers' job conditions need to be improved. Previous research in the context of Pakistan also revealed similar results (Saeed, 1997; Farooq, 1990). As the teachers are not regularly trained in teaching methodology and subject matter, therefore they face problems in classroom teaching which ultimately affect the quality of classroom instruction. The institutions are lacking in modern teaching aids; some times these are not properly used due to the reason of teachers' own awareness and lack of competency to use it. Most of the GCETs and UCEs have not adequate physical facilities of building, classrooms, library, laboratory; the home economics laboratory is almost lacking in all institutions – all do matter in enhancing the overall quality of higher education. The principals, educators and students listed eight areas for quality enhancement or assurance. These areas include teacher training, basic facilities (water, electricity), college resources, laboratories (especially of home economics), provision and use of the latest technology in classroom teaching, job conditions/ satisfaction, availability of highly qualified teachers, adequate research work.

The students are partially satisfied with the quality of instruction and the overall teaching-learning environment of the institution. The institutions are lacking in research culture on the part of educators.

The reason might be that in UCEs, majority of the staff do not possess any professional qualifications and hence they were not well aware of the latest knowledge in the field of teacher education. Many times, they have to teach the courses for which they don't possess the required qualifications. The low quality in GCETs might be due to the reason that the teaching staff had deficiency in subject knowledge and skills as majority of them had no experience in teaching at undergraduate and post-graduate level. Another reason might be that these colleges do not have adequate physical infrastructure, especially enriched library and modern teaching aids which are essential for quality teaching learning environment in any institution. It is however, hoped that the new initiatives of Higher Education Commission and the government will bring to light improvements in teacher education.

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**Practice Teaching or Internship:
Professional Development of Prospective Teachers through their
Pre-Service Training Programmes**

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Abstract

The study was conducted with purpose of evaluating the role of school-based internship in professional development of prospective teachers and to find out the gaps between the practice teaching & internship. The study was undertaken on the potential interns (N=102) and their supervisors (N=15) at International Islamic University Islamabad and National University of Modern Languages Islamabad in September/October 2007. Two questionnaires and one interview schedule were used as research tools and data were collected after a session of briefing the difference between practice teaching and internship. The data collected were analyzed through mean scores which were compared to draw the results and conclusion. The study revealed that extended school-based training –internship plays a central role in professional development of prospective teachers. It equips them with professional skills and competencies, through group dynamics and hands-on experiences. Interns have opportunities of putting theoretical knowledge into practice developing confidence to grow in professional life. They learn how to manage class and solve school-based professional problems. Therefore, the researchers recommended that practice teaching may be replaced by internship for initial training of teachers. It may enhance the quality of education in schools.

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Introduction

Teaching has been a Prophetic profession and passionate activity aiming at developing accepted and/or required attitudes, values and skills among nascent learners through making their minds. Its sanctity appears to be vested in expertise, patience, determination and commitment of teachers with the cause and/or objectives of their profession. A teacher is regarded as a facilitator and reformer who gradually brings about change among his/her learners' self and surroundings. Learners have novice minds which need to be transformed skillfully into mature and rationale thinkers. Therefore, a teacher would have to necessarily be equipped with such skills and competencies so as to make their learners independent, logical & reflective thinkers and pro-active in their life.

Teaching as a profession appears to be an art; crafting the potential of learners into ability and intelligence into intellect. It makes learners capable of applying knowledge instead of memorizing the information. A teacher is considered to be the role model and academic leader for students assuming the responsibility of transforming novice minds into intellect. It is not a simple task rather a practice of patience, forbearance, and commitment with profession and professional ethics. It requires professional training to inculcate these competencies and skills for carrying out such Prophetic responsibilities. Since a product speaks of its master likewise a graduate of any level reflects the professional competencies and ethics of his/her teacher. It is an agreed upon fact that a skilled and competent teacher is the architecture of constructive minds and intellect (Duffee & Aikenhead, 1992).

Therefore, teacher education particularly, their pre-service professional training seems to be crucial for meeting the objectives as discussed above. Van-Driel, Beijaard, & Verloop, (2001) affirmed it and stated that pre-service training makes initial teachers learn professionalism and professional ethics along with mastery of teaching methods and techniques. It equips them with knowledge of and about teaching profession: school and school environment, school records, maintenance of discipline, relationship and communication with colleagues, head teacher, students, parents and community, and time management, and skills to observe these.

It is obvious from the preceding discussion that teaching is a profession and as an art of teaching. As an art it requires appropriate practical training for job placement (Iqbal, 1996) and productive professional life. Conventionally, practical training of teachers has been imparted through practice teaching where prospective/trainee teachers work as and with regular teachers in the school as part of their pre-service training. Practice teaching is school-based training of short duration; likely to train the teachers mostly in classroom situations, but teaching profession is not limited only to the classrooms. Classroom activities add to the professional development of teachers but they need more skills, competencies, values and attitudes to meet the needs of education in 21st century. Therefore, it seems appropriate to include all professional activities in school-based training by extending its duration up to a full term and/or semester. The prospective teachers would work in schools as full time regular teachers with a paradigm shift from practice teaching to internship as it is observed in developed countries. In developed countries, interns work for an extended period (usually a full term), with full responsibility as teachers in school situation.

Different terms; practice teaching, practicum & internship are used interchangeably for the initial school-based training of prospective teachers. Iqbal (1996) differentiated between these terms and explained their nature. According to him, practicum provides pupil (prospective) teachers with opportunities to apply tests and reconstruct the theory, which they are evolving through professional experiences. They are involved purely in academic activities for implementing different teaching methods & techniques, and models of curriculum for their verification and reconstruction. Similarly, in practice teaching they (prospective teachers) assume the responsibility for teaching under the guidance of a full time teacher for a period of six to eight weeks. But internship is an extended period of placement in the school with complete responsibility of a teacher usually for a period of full term. Practice teaching consists of shorter duration than its counterparts. Apparently, internship has been preferred and implemented for initial training of prospective teachers throughout the world.

Pre-service training of prospective teachers has been considered as a key to professionalism consisting of theoretical as well as practical components. The theoretical component is completed at universities or colleges of education; whereas the practical component is school-based practicum (Sorensen, 2004) or hands-on skill oriented activities. Practical training of prospective teachers has been acknowledged throughout the world. However, different teacher education institutions implement it in different ways according to their mission, objectives and vision. Sorensen (2004) preferred school-based practicum through partnership between school and university. It emphasized on mentoring. Bollough, Young, Birell, Clark, Egan, Erickson, Frankovich, Brunetti, & Welling (2003) asserted that teacher education institutions in Europe and North America follow school-based mentoring model for pre-service training of teachers. Similarly, Oxford Internship Scheme consists of paired placement since 1980 (Benton, 1990) for promotion of collaborative practices between university and school. Florida Gulf Coast University offers practicum for a full semester (<http://coe.fgcu.edu/faculty/valesky/InternshipGuide.html>) approved by the state.

A teacher is considered as an agent of social change; therefore, teacher education institutions seem fostering this idea with pre-service teachers' training programmes. Arkansas State University offers internship to prepare prospective teachers meet the learning needs of youth in culturally diverse American schools. It offers 16 weeks internship programme (Bradley & Hinson, 2007). Likewise, Maryville University School of Education offers 16 weeks internship programme under the direct supervision of a certified mentor or teacher (www.maryville.edu/ed). It seems necessary for prospective teacher to spend specific time for school-based training for learning professional ethics. George Mason University Graduate School of Education requires 300 student teaching hours, including 150 hours of direct teaching. This promise consists of a 15-week full-time school-based experience (<http://www.gmu.edu/>).

School-based component of pre-service teacher education provides hands-on-training for making initial teachers reflective educators. Virginia Commonwealth University (2006) offers contractual

teaching during internship creating, "Educators as Critically Reflective Practitioners" (<http://www.vcu.edu/about/>). Similarly, Alabama A & M University School of Education requires minimum of 155 hours of Level II practicum in varied school placements for providing such training. Moreover, the university makes it a full-time duty minimum for a full semester (<http://www.aamu.edu/>). Internship completes through collaboration between school and university, therefore, Michigan State University (MSU) offers a three years' teacher Certification Programme consisting of one years' internship in a school. It develops collaboration between prospective teachers and their mentors, and envisioned professional partnership programme by developing liaison with schools for training of initial teachers (Baker and Rule, 1995).

However, in Pakistan practice teaching is generally, organized as a component of pre-service training of prospective teachers. It consists of two parts internal and external practice teaching with total duration of six to eight weeks. Internal practice teaching is conducted in the university or college of education and trainee teachers are prepared through mentor modeling. Whereas the external practice teaching is totally school-based and prospective teachers learn in the schools. However, Aga Khan University employs field-based mentoring model for practical training of prospective teachers.

Remarkably, teacher education institutions in the world particularly, in developed countries prefer internship for school-based training of prospective teachers. Power, Clarke & Hine (2002) stated that in internship a prospective teacher or 'an intern' spends an extended period of time, usually an entire term with a mentor and/or supervisor. It promotes opportunities and interaction with teachers and students in the school environment. It seems in accordance with the notion that work place learning occurs over a sustained period of time (Walker and Halse, 1995). Prospective teachers need to learn about the functions and functionalities of a school. They need to learn the professionalism and professional ethics. These can be learned through socializing and interactions with colleagues in different situations and settings. However, practice teaching provides fewer opportunities of such interactions for learning. Social interactions promote ethics and develop confidence. Cameron (1996)

viewed that internship provides teacher educator with wide range of opportunities; “opportunities for growth; development; change; reinforcement of views and practices; challenges of beliefs and practices leading to another level of understanding or point of view.” (<http://www.atea.schools.net.au/ATEA/96conf/cameron.html>). It is likely to enable the trainee teachers (interns) to share ideas & experiences; values; appreciate other’s professional contributions; accept new ideas & approaches realizing the needs of teaching profession in 21st century.

Khamis (1996) explained the role of school-based training (internship) component of teacher education and stated that it assists the prospective teachers to articulate their knowledge of teaching through their active involvement in different activities and according to Edwards (1995) their involvement through internship will produce deep instead of surface learning allowing them to take practical actions and discuss their implication in real situations. Therefore, it is likely to say that internship promotes opportunities of interaction with colleagues and adopts the accepted values of society. They become confident, extrovert, communicative and expressive sharing their ideas and experiences with others. Power, Clarke & Hine (2002) found that interns discuss their learning experiences and ideas & values, which they would take into their classrooms in the future.

Prospective teachers need to learn both; the theoretical knowledge and the mechanism of its implementation/utilization, and internship promotes broader opportunities for the latter. Kagan (1992) reported positive relationship between the reflective process and professional development of prospective teachers. Reflective practice enables the interns to put their theoretical knowledge into practice. McIntyre & Hagger (1993) concluded that reflection on practice in initial teacher education is an opportunity to connect any form of pedagogical theory with practice. It enables them to understand the diverse intellect of the students and involve them in teaching learning process for effective learning. These prospective teachers would become capable of developing links between course contents, pedagogical principles and everyday classroom practices addressing the diverse intellect of students. It would add to scholastic productivity and efficiency leading towards professional

accomplishment. Such an accomplished teacher can broaden the vision of students and bring about desired change in their beliefs and attitudes for creating enlightened society.

Teacher Education in Pakistan

In Pakistan teacher training has been imparted by teacher education institutions/colleges, institutes of education and research (IERS) and departments of education in universities. It consists of one year bachelor of education (B.Ed) and two years Master (M.A in Education) programmes after 14 years of education. However, B.Ed programme leads to M.Ed programmes each consisting on one year/ two semesters. However, for those who complete their F.Sc (twelve-year Education), a three years' Bachelor in Science Education (BS. Ed) is offered which leads towards MS.Ed (Master in Science Education).

The scheme of studies of both of the teacher education programmes consist of theoretical (course work) and practical (practice teaching) components. Practice teaching is assumed to equip the prospective teachers with professional skills –apply their professional knowledge in specific school situation. Generally, it consists of six to eight weeks comprising of internal and external practice teaching. The internal practice teaching completes in universities or colleges of education. The external practice teaching is conducted in schools and the prospective teachers have to prepare and deliver 40 lessons in two different subjects. One focal person from the respective school (a senior school teacher) and a supervisor (teacher from respective department of university or institute or college) assist them in lesson planning and using audio visual aids. They also monitor their performance and guide them for the better performance. At the end of the external practice teaching, each of the prospective teachers is evaluated through final lesson which is observed by a panel nominated by the chairman of the department/ director of institute or the controller of examinations.

It is a general perception that practice teaching consists of shorter duration and the prospective teachers have to plan and write 40 lessons in two different subject areas along with their audio visual aids. It puts a greater pressure on them and keeps them too busy to

observe other activities in the school. Moreover, in some schools they are not allowed to teach the senior classes and socializing with regular teachers. Therefore, it was necessary to address the issue by conducting a study. The present study elicited the opinions of prospective teachers and supervisors about their professional development either through six to eight weeks' practice teaching or internship of extended duration.

Background of the study

Quality of education is linked with the quality of teacher education and training. Conventionally, teacher education & training encompasses theoretical learning and practical training: practice teaching. Unfortunately, the educational standards in Pakistan seem low as compared to other countries of the world. It indicates gaps in teachers' training, which may be lacking in developing professional skills in teachers. If the teachers are well-trained, properly equipped with appropriate pedagogical skills and expertise; the teaching learning process may be effective and efficient. The quality of teachers' professional skills is likely to meet international standards through school-based training of longer duration –internship instead of practice teaching. Therefore, this study was undertaken to find out opinion of prospective teachers about practice teaching and internship for suggesting the measures to enhance the quality of their professional skills and eventually the quality of education.

Purpose of the Study

The present study was conducted with the objectives to (a) find out the pedagogical needs of prospective teachers (b) evaluate the attitude of prospective teachers about practice teaching and internship (c) examine the role of internship in professional development of prospective teachers and (d) identify the problems of prospective teachers in the school situation.

Program Description

The study focused on pre-service teacher education (M.A Education) programme. M. A education students, during their last semester of programme, are required to spend six to eight weeks in schools preparing lesson plans, audio-visual aids and delivering lessons in the classrooms. The work of a teacher is not limited to classroom

teaching but includes more experiences in the school situation. Therefore, this study was taken to evaluate the perception of supervisors and trainee teachers about practice teaching and internship.

Population and Sampling

The population of the study consisted of all the prospective teachers (who had completed their six to eight weeks practice teaching in the schools) and their mentors/supervisors of International Islamic University Islamabad and National University of Modern Languages Islamabad. The samples consisted of 100% of both the populations. The population and sampling is given as under;

Table-1: Population and sampling

University		Students	Supervisors
International	Islamic	53	7
University, Islamabad			
National University of Modern		49	8
Languages, Islamabad			
Total		102	15

Design and Methods

The study was descriptive in nature; therefore, survey approach was considered appropriate and adopted for data collection. For the purpose, two questionnaires were developed as research tools on five point rating (likert) scale to elicit the opinion of the respective respondents. Questionnaires were administered personally after a session of briefing on the difference between practice teaching and internship.

The researchers explained concept and nature of practice teaching and internship and difference between the two on last day of their school-based training. Interview schedules were also used for deep understanding of the scenario and twenty students (ten from each University) and ten supervisors (five from each university) were interviewed in groups.

The research tools were validated through pilot testing. Mean scores were calculated to find the tendency of the respondents. The analysis of data is presented below.

Table-2: Learning teaching, Co-Curricular Activities and Management & Discipline in school situation

Area	Theme	Practice teaching		Internship	
Teaching	Audio-visual aids	3.8	(3.2)	4.0	(4.2)
	Lesson Planning	4.0	(3.5)	4.2	(4.0)
	Individual differences	3.5	(2.5)	4.0	(4.0)
	Effective communication	3.7	(2.5)	4.0	(4.0)
	Home work	3.6	(3.0)	4.4	(4.3)
Co-Curricular Activities	Games & functions	1.7	(1.5)	3.5	(3.9)
	Scouts and girls' guides	1.5	(1.4)	3.2	(4.0)
	Educational visits	1.5	(1.0)	3.7	(4.2)
	Competitions	2.0	(1.5)	4.0	(3.9)
Management & Discipline	Maintenance of discipline	3.0	(2.7)	3.5	(3.9)
	Disciplinary action	1.5	(1.2)	3.8	(4.0)
	Regularity & punctuality	3.0	(2.8)	4.0	(4.2)
	Time-table	3.0	(3.2)	3.5	(3.9)

N.B: Values in parenthesis are mean scores of supervisors & others are that of trainees

Table-2 compares the mean scores of the respondents about different areas of training such as; teaching, co-curricular activities and management & discipline during practice teaching and internship. The mean scores of internship are significantly greater than practice teaching in these areas. It is evident that the respondents preferred internship to practice teaching for training in these crucial areas of teacher training.

Table-3: Learning how to correspondence, maintain school records and library & laboratory

Area	Theme	Practice teaching	Internship
Correspondence	Official language	1.25 (1.0)	3.4 (4.0)
	Reports & statements	1.5 (2.0)	3.8 (3.3)
	Correspondence with officers & sub-ordinates	1.25 (1.5)	3.5 (3.9)
School Records	Attendance registers	2.9 (3.2)	3.5 (4.0)
	Admission register	2.2 (2.7)	3.6 (4.0)
	Stock registers	1.5 (1.9)	4.0 (3.9)
	Acquaintance register	1.2 (1.5)	3.5 (4.2)
Library & Laboratory	Record maintenance	1.5 (1.6)	3.9 (4.2)
	Purchase of new equipments	1.2 (1.7)	4.0 (4.1)
	Seating arrangements	1.0 (1.5)	4.3 (3.9)

N.B: Values in parenthesis are mean scores of supervisors & others are that of trainees

Table-3 reflects the difference of mean scores of respondents about practice teaching and internship. It indicates that trainee teacher faced difficulties in learning correspondence techniques, maintaining school records; and library & laboratory in school situations skills. It indicates that internship can significantly provide more opportunities of learning these skills.

Table-4: Learning social skills in school environment

Area	Theme	Practice teaching	Internship
Social skills	Co-operation among staff members	2.5 (2.8)	4.0 (3.8)
	Communication/coordination	2.7 (2.5)	4.3 (4.0)
	Professional ethics	2.9 (2.7)	4.2 (4.1)

N.B: Values in parenthesis are mean scores of supervisors & others are that of trainees

Table-3 explains the comparison of mean scores regarding the learning of social skills; co-operation among staff members, communication/coordination and professional ethics through interaction with staff members, head teachers, community and student in the schools. It is obvious that trainee teachers face problems in understanding norms and values of the professional community because of short duration. They preferred internship rather practice teaching.

Qualitative Analysis of Interview of Prospective Teachers and their Supervisors

The researchers conducted interview in groups individually in both of the institutions. However, both of the respondent's categories were interviewed simultaneously. During interview different aspects of practice teaching and internship were discussed and highlighted.

Prospective teachers are placed in different schools for practice teaching component in groups. They have to arrive at their respective schools observing the punctuality and regularity. However, majority of them had easy access to their school as they said,

"Our schools are far from our institution, hostels and/or homes. But we have good transport system. Our university bus brings us to our school and back".

The main purpose of the practice teaching appears to train prospective teachers through school-based training for hands-on experience and making pedagogically sound. They are assigned to prepare and deliver a specific number of lessons in classroom situation. It makes them capable of facing the students of diverse intellect. The prospective teachers were of the view,

"We have to prepare and deliver 40 lessons, selecting and using their audio visual aids along with normal class work. Most of the time is consumed in planning/ preparing and writing the lessons. It is too laborious to learn other professional skills in school situation. It is a big problem for us to prepare such a large number of lessons in shorter time. We cannot participate in arranging co-curricular activities. We can learn more professional skills over longer period in schools. Therefore, the time of the school-based training may be extended without attending the classes at campus".

The current school-based training of prospective teachers seems mainly focusing on pedagogical aspect ignoring other activities in the schools. Prospective teachers have to do a lot of work along with attending classes at the campus. It creates difficulty for them in time management. It can be overcome by increasing the time of school-based training. They are assumed to learn social norms and professional ethics through their interaction with regular teachers, head teachers and students. But the prevailing situation seems to be its reciprocal as prospective teachers said,

“Head teacher and regular teachers have resentments of mixing with us. They do not allow us to socialize with them. They are rude and sometimes, some of them don’t exchange even smiles or answer the Salam/Hello”. Head teacher does not allow us to sit in the staffroom. We don’t have proper room to sit for the leisure time. We have to sit in the classroom, laboratory or some other common place like corridor. Sometimes, we lose our morale and feel inferiority to others. If we work for a full term –internship, we can develop relationship with them to win their trust”.

Socializing and social interactions are necessary for observing professional ethics. But evidently, prospective teachers face problems in learning how to develop and maintain professional relationships with seniors and juniors. The attitude of head teacher and regular teachers seems to be pessimistic putting negative impact on them. Supervisors can play important role in this regard by arranging meetings and introducing the prospective teachers with school staff.

Local supervisor is considered to help the prospective teachers in lesson planning and solving other school-based problems. Prospective teachers were unsatisfied with her role. Majority of them said,

“Local supervisor don’t help us in solving our school-based problems. She always looks busy and don’t help us in preparing the lessons and managing the classes. We have to ask again and again for help: sometimes, for sitting place, sometimes, class allocation etc. If we have more time to spend in the school we can develop repo with the supervisor and learn more professionalism”.

The prospective teachers are assumed to teach the class 9th & 10th during practice teaching. But they are not allowed to teach the senior classes. They were of the voice,

“Head teachers don’t allow us to teach the 9th & 10th classes. These are the terminal classes and promotion of teachers to higher ranks and their salary ceiling depends upon the results of these classes. They are of the view that we will spoil their students without teaching them appropriately. How we would face these classes in practical life. Head teachers can manage if the time period of practice teaching is extended and assumed in the beginning of the school calendar”.

School-based training of prospective teachers is usually organized during fall semester when teaching learning process in schools seems to be in full swing. Obviously, head teachers are reluctant to assign them teach their terminal classes: class 9th & 10th. These are crucial classes and they do not believe in pedagogical abilities of prospective teachers. Their promotions to next grades are linked with the good results of these classes. That’s why the prospective teachers are not allowed to teach these classes. On the other, hand it is a problem for prospective teachers. If they do not face these classes during training how they would learn pedagogy of the adolescent and their classroom management.

Pedagogy of adolescent, professional skills and competencies of a teacher are not limited to the classroom and teaching a few subjects rather it consists of all school activities. They are assumed to learn the communication skills and interaction with different personnel working in the school. But a major group of prospective teachers raised their voice,

“We have a few opportunities of arranging and conducting co-curricular activities in schools. We don’t have access to the school records for learning official communication and communication skills. We have not participated in only a single staff meeting. How we can learn the professionalism and professional ethics? We don’t think that this short term school-based practice could bring any remarkable change in our professional behavior and pedagogical

skills, because of lesser time and greater work. The period of school-based practice should be extended up to a full term –internship”.

However, supervisors or mentors are considered facilitators providing immediate guidance and help to the prospective teachers. The supervisors more or less had the same sentiments and views. Collectively, they were of the view,

“Our students are social and cooperative. We monitor and guide our students on daily basis. Of Course the time is less according to the workload on students. They would learn a lot over an extended period of time that should be a full term”.

Overall, the prospective teachers and their supervisors were of the opinion that practice teaching plays a crucial role in professional development of prospective teachers but internship would play a greater role in developing professionalism and professional ethics. Therefore, internship would be implemented instead of practice teaching.

Results of the Study

From the data collected through questionnaires & presented above and interview with the supervisors and potential interns, following results were drawn;

1. The main emphasis of practice teaching is on lesson planning, preparation of audio-visual aids and classroom teaching rather on co-curricular activities. They observe discipline of the school; regularity and punctuality according to the timetable. They take classes regularly and use simple audio-visual aids for effective teaching. They do face problems in understanding the mechanism of arranging co-curricular activities; games, functions, classroom competitions, educational visits scouts and/or girl guides. It seems to happen that trainee teachers are under pressure of preparing a large number of lessons and audio-visual aids and they have less time for other activities. They are degree oriented. Head teachers also do not allow such trainees to participate in other activities. However, the respondents were of view to increase the duration of such training and trainees

should work for an entire term in the school assuming the responsibility of full time teacher through internship.

2. During practice teaching, trainee teachers have fewer opportunities to learn official language; how to make correspondence, prepare different reports and (budget) statements. They only know about the attendance & admission registers and are not enough familiar with stock registers of library & laboratory and acquaintance roll. They do not learn these skills during practice and it is a big gap in their professional grooming. The respondents were of the view that entries of the registers are permanent records and over writing or cutting make it false. Trainees are not experts and can make such mistakes. Therefore, they are not allowed to do such activities. However, during classroom teaching teachers may introduce them with such activities through practical involvement. If the duration of the school phase (internship) is prolonged then these are possible.
3. Social skills and professional ethics are necessary for productive professional life. However, practice teaching provides fewer opportunities of learning such skills due to less opportunities of interaction with students, colleagues and community. Trainee teachers face problems in understanding norms and values of the professional community because of short duration. They preferred internship rather practice teaching.
4. The main findings of the study reflected that internship helps interns in more effective way than practice teaching. It helps them in placement and makes them familiar with school environment enhancing their professional expertise. It provides observation. It equips them with professional development, through group dynamics and outdoor learning experiences.

Conclusions

The study concludes that internship plays a crucial role in professional development of teachers. It equips them with

professional skills and ethics, through group dynamics and outdoor experiences. Interns have opportunities of putting theoretical knowledge into practice developing confidence in professional life. They learn how to manage class and solve different problems, organize and participate in co-curricular activities in schools. Therefore, practice teaching may be replaced by internship.

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**Mentoring in Teacher Education:
Building Nurturing Contexts and Teaching Communities for
Rural Primary School Teachers in Sindh, Pakistan**

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Rakhshinda Meher**

Abstract

This paper examines how mentoring can improve the performance and level of teacher education in Pakistan, especially in rural areas. It presents a qualitative case study that focuses on two teachers from rural Sindh; one male and the other female. These teachers were participants in the Mentoring Program at the Aga Khan University – Institute for Educational Development (AKU-IED). Data was collected through participant observations, from structured and unstructured interviews, in the classroom and the field, and from reflective journals. The program focused on re-conceptualizing the role of these teachers as mentors, developing relevant skills through critical thinking and reflective practice. The objective was to enhance teachers' pedagogical content knowledge and androgogical skills. After the program in their cluster based schools these teachers assumed roles that addressed the contextual needs of their areas. The research for this study shows that the program helped mentor teachers to move from traditional to progressive approaches to teaching in which not only personal gains were achieved but whole school improvement was observed.

Introduction

Access to quality education in rural areas has been consistently neglected. Today in many parts of the world, growing up in rural areas often means being bereft or receiving sub-standard education.

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Education for rural people lies at the heart of rural development and this is fundamental for reducing poverty world wide contends (Dekoster, 2004). This is further exacerbated in Pakistan by the fact that teaching is a low paid profession which seldom receives laurels and often the services teachers render go unrecognized. Furthermore, the kinds of teacher training offered at institutes remains outdated and traditional, with theory being imparted in traditional lecture modes which often leads to rote and regurgitation and rarely addresses contextual realities and engenders practical outcomes. The stress on academic teaching and learning fails to provide or develop social and moral attributes which are also necessary in relational learning. In Pakistan teaching as a career is seldom given the status it deserves. Moreover, teachers teach the way they have learned on the job or in the manner they have been taught; they may, or may not, have professional training therefore, their journey instead of progressing remains stagnant throughout their life as a teacher or a learner. In addition, professional training especially at the public school level is more concerned with theory and less with practical approaches; a top down approach delivering only content knowledge as information and facts is dominant, rarely teachers learn from each other or collaboratively. Although mentoring is a major way of teacher education in the world today, in Pakistan it is still a very rare process. Hence, the notion of mentoring does not even arise.

However, the role of educational supervisor and learning coordinator is recognized in Pakistan, people in these roles seek to apply knowledge and to instill theoretical and technical skills. There is an even greater need for mentors in rural areas where schools are scattered and populations are large. Generally, literature states that teacher training in Pakistan is on the whole relatively ineffective because it fails to address the contextual realities and situational needs of the students (UNESCO, 2000).

This study sets out to examine how teachers in rural areas of Sindh, Pakistan who were not aware of the notion of mentoring could be helped to become mentors through AKU-IED's Mentoring Program. The word 'mentor' is generally used in a much narrower sense, to mean teacher or advisor. However, we have looked at the role from a broader perspective as a "wise and trusted counselor" (Macquarie

Dictionary, 1997) and as an “experienced and trusted adviser” (Concise Oxford Dictionary, 2004).

Hence, the term “mentor” historically denotes a trusted guide and counsellor, and the mentor-protégé relationship a trusting and meaningful association between two individuals with differing levels of experience and knowledge in particular contexts. Literature and research for mentoring has been and continues to be accepted and results demonstrate successful practice. Furthermore, mentoring is recognized as a powerful tool for training professionals and supporting adult learning in education and many other professional fields. Insights gained by Anderson and Shannon (1988) state that the term mentor has a variety of meanings. A mentor is one who serves as a role model, sponsor, encourager, counselor, and friend to a less skilled or less experienced person for the purposes of promoting the latter's professional and/or personal development. It is assumed to involve an ongoing, caring relationship. Thus, a mentor's role can be synonymous with a teacher, coach, trainer, role model, nurturer, leader, talent-developer, and opener-of-doors (Sullivan, 1992).

With the above in mind, the framework of this study was built on the AKU-IED premise that a mentor acts as a role model for others and can make a difference. Mentoring was conceptualized as a four-way process. First, mentoring is an intentional process. The mentor and mentee must be willing and committed towards the process. Second, mentoring is a nurturing process which fosters the growth and development of the mentee toward full maturity. Third, mentoring is an insightful process in which the wisdom of the mentor is acquired and applied by the mentees. Fourth, mentoring is a supportive, protective process. This involves an ongoing caring relationship. The course set out to develop ‘mentors’ as key agents of change based on the belief that “mentoring is a mutual process of sharing experiences, knowledge and wisdom with a less experienced person who will benefit from this exchange” (Zey, 1984:7).

Thus the objective of the program was to develop a person who oversees the career and development of another person usually a junior, through teaching, counseling, providing psychological

support, protecting and at times promoting and sponsoring his / her work. It incorporates our own definition that extends to envisaging a mentor as dynamic, active, visionary, knowledgeable, and skilled; one who has a committed philosophy that keeps the teaching and learning of students in focus; and who guides other leaders to be similarly active and dynamic (Crow and Matthews, 1998).

It has been observed that teacher mentoring programs have dramatically increased since the early 1980s as a vehicle to support and retain novice teachers. The vast majority of what has been written about mentoring has focused on what mentors should believe and do in their work with novice teachers. The professional literature typically describes the benefits for novice teachers (Odell and Huling, 2000). Acting on this premise, it was expected that prospective mentors would participate in professional development to learn about the mentoring process and what is expected of them before assuming their duties (Kyle, Moore, and Sanders, 1999). Research shows that mentor teachers need support and the opportunity to discuss ideas, problems, and solutions with other mentor teachers.

It was perceived that mentors would receive training in adult development and be fully prepared for the all aspects of the relationship. For their preparedness and involvement in the mentoring process, they would receive a handbook detailing the activities they were likely to be involved in and the respective responsibilities of the mentor and mentee outlined. (Mousour, 1998)

AKU IED and Mentoring

The Aga Khan University, Institute for Educational Development (AKU-IED) commenced operation in 1993. In its work and priorities, AKU-IED complements, extends and adds value to the work of other agencies which seek effective strategies for social sector development. The AKU-IED focuses on improving the performance of teachers and other stakeholders through offering a variety of professional development opportunities leading to school improvement. Considering the significant contribution of AKU-IED, its role has been recognized as a national partner in the

implementation of Education Sector Reform Assistance Program (ESRA) initiatives funded by USAID.

In order to improve the quality of education in Sindh and Balochistan provinces, the AKU-IED launched its first Certificate in Education: Primary Education Program for supervisors in primary education (SPEs), learning coordinators (LCs) and resource persons (RPs). The program specifically focuses on 'mentoring' as it allows the professional relationship to grow between individuals based on their needs, abilities and available resources. Therefore, through out the program participants get ample opportunities to explore mentoring skills in order to work effectively and help their colleagues in their professional growth. Furthermore, critical thinking and reflective practice are common themes, which are embedded across the program.

Nature of Research

The study employed a qualitative approach that involved two teachers from the rural area of Tehsil⁵ Thari-Mirwah, District Khairpur.

Teacher 'A' (Allah Dino), a male supervisor for primary schools, had fifteen years of teaching experience at the time of study and was responsible for the male schools within one Tehsil in the rural area of Sindh. Teacher 'B' (Rabia) is a female supervisor; with twenty years of teaching experience. In addition to teaching in primary classes she was responsible for fifty-six schools as Supervisor in the same Tehsil, Thari-Mirwah of Khairpur District. These teachers had not been given an opportunity to participate in any teacher education programs during their long service and did not know anything about mentoring or any of its related concepts.

⁵ The province of Sindh has eight districts with these districts teachers were selected from 4 districts (Hyderabad, Thatta, Khairpur, Sukkur). Each district has two to eight Tehsils depending on the size of the area and its population.. A Tehsil is a smaller unit of governance which operates under the Union Council which is a local body at the district level.

A qualitative approach was found to be the most appropriate because data could be collected within a natural surrounding, be gathered by several sources, it was process-oriented, findings could be written in detailed and descriptive manner, and most importantly it would reveal how different people make sense of their lives.

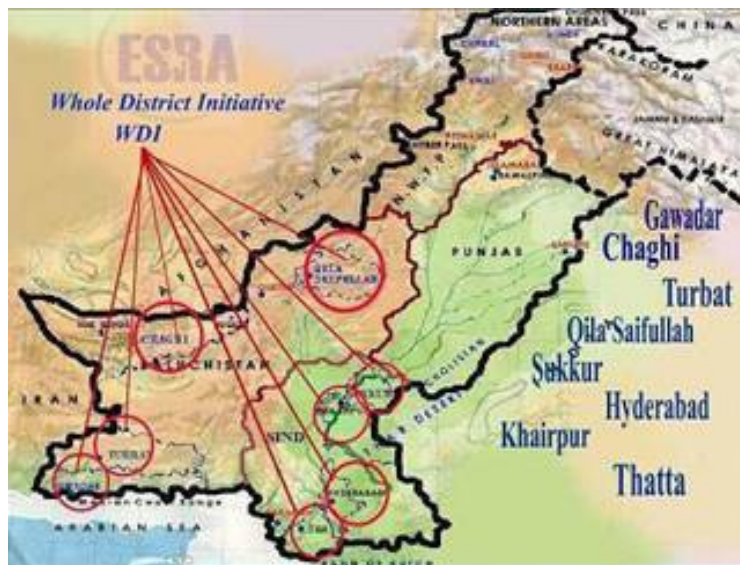


Figure 1: Districts geographical location

The role of AKU-IED was to involve these teachers in mentoring and prepare them as mentors. After completion of Certificate in Education: Mentoring Program (Cert. Ed) program these teachers/mentors would return to their contexts and train teachers in their cluster-based schools, thereby fostering whole school improvement and educational change in their district. These teachers were expected to work as mentors who provide similar experiences to their cluster school teachers who are their mentees.

The data sources for this study include informal conversations, classroom and field observations, and the reflective journals they maintained throughout the program. The program was developed as a field-based program spread over a period of three months and

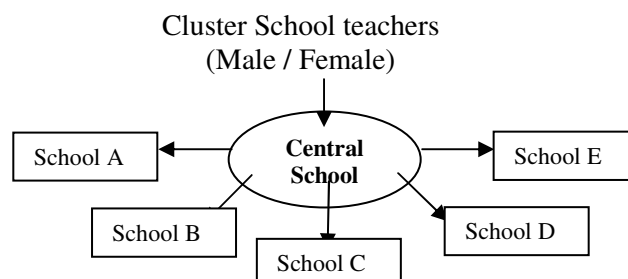
specifically focused on developing the participants' skills of 'mentoring' that allowed the course participants to establish professional relationships between individuals based on their needs and available resources. Throughout the program participants were provided opportunities to explore mentoring skills in order to work effectively and help their colleagues to grow professionally. Furthermore, 'critical thinking' and 'reflective practice' were common themes that were embedded in the program.

During their first phase at AKU-IED the Course Participants (CPs) were encouraged to rethink their existing beliefs, attitudes and practices towards teaching and learning. CPs was encouraged to think critically and to write reflective journals in order to improve their mentoring skills and practices. All quotes sated in the paper are original. They were translated from Urdu (National language) to English language. It was ensured that the meaning was not lost during translations.

Mentoring Program at AKU-IED

Table-1: Model of Cluster Schools

Province (Sindh)			
District (Khairpur)			
Tehsil (Thari-Mirwah)			
Central School as Resource Centre (Male)		Central School as Resource Centre (Female)	



The course participants explored alternatives for enhancing their understanding about the role and philosophy to improve their

mentoring skills. Moreover, the CPs engaged in 'hands-on and minds-on' activities in order to enhance their content knowledge in core subject areas and learn new ways of integrating different subjects at the primary school level. This phase of the program predominantly focuses on the theoretical and practical aspects of the role of a mentor as a role model, sponsor, encourager, counselor and friend to a less skilled or less experienced person for the purpose of promoting the latter's professional and personal development (Anderson and Shannon, 1998).

Through the process of activity-based learning the participants enhanced their pedagogical content knowledge in core subject areas and developed ways of integrating different subjects. These group-based activities were very well accepted by the course participants and responses were positive and encouraging. For instance, Rabia and Allah-Dino mention in their reflection that:

There are many advantages of group based learning. Students will also enjoy in the same way as we have by being given several opportunities to work in groups. It helps us to think individually and also more effectively by sharing ideas through discussion with our colleagues (Rabia).

We had no such experience of working in groups before IED mentoring program, we would hide our work from each other. There was competition. Now we learn through group work that encourages us to work cooperatively and not competitively. I hope that my students will also enjoy learning in the same manner through sharing ideas and caring that we all learn and not only I (emphasis) learn (Allah –Dino).

The CPs acquainted themselves with a variety of professional development approaches for working with their cluster teachers. They developed mentoring skills such as peer coaching, team teaching and designing workshops together. The mentors learned how to provide support, encouragement and guidance to their cluster teachers.

We applied these newly learned techniques in our cluster. According to our environment I introduced low-cost and no-cost resource concepts. We did peer coaching; a totally new idea because we usually have one teacher schools in our district. We introduced a system for receiving teaching and learning comments, as reflections, in the same manner as IED faculty did. This was something we had never thought of before (Rabia).

In rural areas teachers have lots of problems related to classroom teaching, especially in Primary Schools. They have less subject content knowledge and seldom know any teaching strategy other than lecturing. Cluster schools workshops for teachers helped teachers to learn from each other and practice peer coaching and team teaching (Allah-Dino).

CPs were also exposed to various strategies such as activity-based but active learning, co-operative and inquiry based learning, questioning and problem solving. These new strategies developed in them skills of becoming a good mentor:

An activity that is done professionally I have learned should be done with co-operation and coordination. We should give importance to the views of others and express our own views in simple language and manner if needs are to be addressed and learning is to take place. Moreover, teachers develop a sense of ownership if they are also contributors in their learning process. Learners learn better by being actively involved. I learned that all activity based learning is not necessarily active learning. I thought the two were the same. Now I have understood the difference (Allah-Dino).

We had this idea before too that we should provide the child with opportunity to learn through activities so that the child learns from his own experience. Children should be provided with an environment in which they are free to express their ideas. But this does not mean that the teacher leaves all learning for children. The teacher as I understand constructs and builds on children's ideas. This is really active learning (Rabia).

During the second phase, the field based component, the mentors returned to their respective contexts to practice their newly acquired knowledge, skills and attitudes.

Mentors engaged in teaching, shared their experiences of real classrooms situations and received critical feedback which they incorporated in their successive teaching practice. During this period they were facilitated by the AKU-IED team who continued to mentor them. The CPs applied the group-based activities in their classroom teaching and saw considerable changes:

We are a role model now to others and go on and teach what we have learned at IED. When we go in our cluster schools and teach. Teachers are able to identify the role of a good teacher without us 'telling' them. The context of each district is different. We try to incorporate methods suitable to their context so that the quality of education improves in our schools. In our cluster schools we demonstrate how children can work on their own as well as with others to improve their skills and learn from others, rather than only from the textbook, while the teachers can act as a guide for them (Rabia).

The mentor role is challenging for us, we have learned at IED in such a way that we have developed and grown professionally. We must improve our classroom teaching skills. I am aware of the need to communicate with each other. This helped me to better understand my own role as a supervisor. Changing my role from ordering to guiding is very hard. The more I reflect I understand it does not undermine my power as a supervisor. A mentor can be an effective supervisor if he is equipped with better understanding of his role. My new role makes me feel good (Allah-Dino).

Both mentors played their role actively. Reflective practice and critical thinking helped them to reflect on their own beliefs about teaching, student learning and teaching as a profession. It also provided them with opportunities to confirm the experience they have gained through the program. Reflective practice in mentoring can also provide an opportunity for renewal and regeneration necessary for all adults. Mentoring enhances mentors' self-esteem

(Wollman-Bonilla, 1997). The experience of mentoring empowers experienced teachers and gives them a greater sense of significance in their world (Carger, 1996). Mentors as observed in the field and through their reflections derive satisfaction from helping less experienced colleagues (Scott, 1999). Mentors frequently describe their mentoring contribution as a way of giving back to the teaching profession (Boreen, Johnson, Niday and Potts, 2000).

As mentors the teachers established a mini resource center at the central school of their cluster. They conducted and evaluated a workshop for cluster school teachers. They were enthusiastic about teaching newly acquired subject matter and approaches to teaching the subject to their fellow cluster teacher (*see cluster school workshop figures on page 20*):

As a mentor I have learnt now that I have to be sincere about bringing changes in our educational field. I will begin with myself and my classroom (Allah-Dino).

Teaching is already a very low paid profession so the salary is not that important it is the pride. I feel and the respect I get that makes it worthwhile. The teachers tell me I smile more. This is the sign of a good mentor (Rabia). These reflections clearly indicate the personal self actualization as well as the professional self emerging in their new roles.

Initial Research Findings

Key findings evident at the three stages are as follows:

1. Before AKU-IED Program

Before introducing the new techniques and methods of teaching the participants were re-conceptualizing their existing notions of current practices in Primary Education, in which their responses showed that they mostly followed the traditional methods for teaching where students were passive listeners and learning was mostly teacher-centered. They were not aware of the concept of mentoring and how that could be applied for educational change, which leads towards school improvement

Although the participants were educational supervisors and coordinators, their role was administrative rather than academically supportive. In their reflection both the mentors emphasize that:

Before coming to AKU-IED, Mentoring Program we did not get any opportunity to learn such skills, which would change our beliefs and notions about our curriculum and syllabus. We learned how important objectives are and how they should match with the outcomes of Primary Education. We were not aware about the concept of mentoring in teacher education. I believe we can help to bring some change for improving our government schools school and teacher education curriculum (Allah-Dino).

As a supervisor before coming to this program, we were not clear about our role. I realize for bringing change in the quality of education we have to think differently. I will discuss and work with the support of my officials and community once I return home. I want that teachers work sincerely and more effectively and they perform there role more efficiently. When you visit our site I may have made a small difference (Rabia).

During the Program

CPs' reflections and classroom observation during the course reveal that they changed some of their beliefs and notions about teaching and learning. The program helped them to enhance pedagogical content knowledge and skills through activity based learning, while realizing the importance of students' in the learning process helped them to think about their own practices (*See classroom activities on page 20*). As both participants explain:

The program enhanced our subject content knowledge mainly in Language, Social Studies, Science and Mathematics. We can teach our classes in a better way, not only from textbooks but by using other resource material as well. The challenge however remains to develop these resources, but we have at least made a beginning, the rest will follow (Rabia).

We were facing difficulties while teaching concepts of Science and Mathematics but now we have the experience how to learn through practical work / hands-on activities through simple low cost

materials, which help in learning. We can use these methods in our cluster schools workshops with our teachers; especially where funds are limited. We will need to think of ways to deal with large class sizes (Allah-Dino).

The program focused on mentoring skills, so as to develop them as Mentors and Pedagogical Leaders. CPs discusses their new roles compared with this previous experience as supervisors:

As supervisors we just visited the schools to check general routine administration. We never thought about giving the teachers' professional support to improve their teaching and learning. We did not think that as important as fulfilling our real responsibilities we never thought about academic support we now realize that our role and responsibilities go much beyond supervision (Rabia).

Our Mentoring Program experiences helped us develop our mentoring skills and leadership qualities through a structured professional development program. Our practice teaching experiences and observation and coaching skills in giving feedback to our colleagues about teaching, provided a valuable amount of learning for our own future role and responsibilities (Allah-Dino).

After the Program

After completion of Phase One, mentors returned to their context to practice and implement their newly acquired roles beginning a one-year field-based mentoring program for their cluster school teachers. During Phase Two they were observed in the field when they conducted workshops for their cluster based school teachers at central schools. They had developed a resource centre for teachers in each of the central schools. AKU-IED facilitators visited the participants for follow-up support. The following findings are some initiatives that they undertook and that are evident of their learning as mentors.

Mentor Professional Competency

As mentor teachers assist their protégées in improving their teaching, they also improve their own professional competence. Several studies have documented the positive effects of mentoring on the

mentors themselves (Gordon and Maxey, 2000). The quality of teaching by mentors improves (Yosha, 1991). Mentors benefit by applying cognitive coaching skills with their students such as listening, asking inquisitive questions, providing non-judgmental feedback, and by reassessing their classroom management (Clinard and Ariav, 1998). The same responses were given by mentors:

As a mentor now I can help in developing my own Cluster School Teachers to solve there classroom teaching problems, for example, like how to plan a lesson for a multi-grade class, by considering different options and strategies I acquired as new learning experiences those that I developed through the AKU-IED Mentoring Program. My own subject content knowledge enhanced. I was not aware about the language skills nor how to develop activities for students according to the need at different levels. Now that I have practiced I know better.

Before coming to the Program in my opinion Social Studies was a boring subject, for that reason I always avoided teaching it. Now I realize it is an interesting and a valuable subject to be taught as citizenship education. For this it is important to build children's attitude and develop them as critical thinkers. The way in which I myself was involved as a learner provided me an opportunity to learn from my facilitators and coordinators. Now I am willing to teach this subject in my school and demonstrate in my cluster-based mentoring workshops what social action is all about and not simply as geography and history (Allah-Dino).

Reflective Practitioner and Critical Thinker

Mentors report that mentoring has forced them to be reflective about their own beliefs about teaching, students' learning, and teaching as a career. It also provided them with opportunities to validate the experience they gained over the years (Ganser, 1997). Mentors found that just as teachers learn more about their subject by teaching, so analyzing and talking about teaching was a natural opportunity for them to deepen their teaching sensitivity and skill (Tomlinson, 1995). These critical reflective mentors found that they are more focused in their mentoring relationships; they applied more and acted

more energetically, took more informed action, and were generally more satisfied with their mentoring relationships.

Reflective practice in mentoring provided them an opportunity for renewal and regeneration which they considered necessary as adults. This drive to improve themselves was essential for them as it helped reduce the threat of stagnation in their later years (Daloz, 1999; Stevens, 1995) about which they were worried. Their journals were tools for growth through critical reflection. It was not enough to observe and record experiences, but 'equally important' as the ability to make meaning out of what was expressed (Clark 1994: 355), especially in Pakistan where teachers do not have a writing and recording culture. This was a significant and purposeful move to improve their practice both mentors said that:

Reflection and critical thinking greatly facilitated us into organizing Multi-grade teaching, planning the curriculum, re-looking at its narrowness, appreciating, and understanding the differences and re-looking at the notions of curriculum, syllabus and scheme of studies, role of text books and our role as teachers and mediators of the prescribed official offered curriculum. Earlier which we conceived as acceptable doable, the same we now challenge (Rabia).

Reflective writing is a critical component in meaning making, enabling learners to communicate connections between new information and what we already knew. For me the journal became another text on which to reflect, but it was a text written in the learner's (my) real voice, and this personal engagement added a necessary affective element to my learning process (Allah-Dino).

Reflective Journals are useful learning tools. Before AKU-IED Program I was very rigid. I taught through the teacher- centered method. After continuous critical thinking and reflection I realized that in order to develop the child holistically, a child-centered method is more appropriate. My experience in the classroom (children's interest) in their learning convinced me of this approach (Rabia).

Teacher Leadership

Mentor training and experiences at IED helped build mentors' capacity for leadership through structured professional development. During field observation, as their coaching skills surfaced mentors become recognized for their valuable knowledge and expertise in the areas and were sought out for various campus and district leadership roles. This is what we gathered on our visits to the schools through conversations with local teachers. Literature states what our study reveals and what the head teachers also recalled, namely that it is not uncommon for mentors to move into leadership positions as a result of their success as mentors. It is often the case that they are more effective in these new positions because of the training and insights they receive as mentors. In this connection the two mentors reflected that:

In planning the workshops for the cluster school teachers we are now giving more time in planning and especially consider subject content knowledge. For this we read more from other books and not only the prescribed text book so that we can help cluster teachers during workshop sessions. The credit goes to the program and our institutions, which provided opportunities to build on what we had learned as mentors as combined elements of mentoring and teaching (Allah-Dino).

Before the mentoring program we think of ourselves as boss but this thought has changed and we are now thinking positively of others as equals. Now we are working for improvement and teachers are now working in a friendly environment with out any fear or threat. Teachers work together and learn from each other's experiences. We are now working on academic aspects for teaching and learning and feel more responsible ourselves as mentors (Rabia).

Mentoring combined with Inquiry

Working with cluster-based school teachers leads mentors to act as researchers. These mentors who participated in inquiry critically examine their own practice which leads them to become aware of the complexity of their role in teaching and supervising. The benefits of mentoring programs were substantial for both mentee and mentor teachers. The mentors began to ask the important "Why" question. Both mentors said in their response:

Asking the 'why' questions allows me to reflect, share my practice in order to improve my cluster school teachers practices. Helping them in a systematic way enables them to develop processes by which they can question their own practice through critical reflection and taking actions. Thinking systematically and critically about what is taught and how it is taught requires commitment and understanding. We often share these experiences with each other (Rabia).

Through mentoring I can identify and plan my own agenda for learning and development. I am now realizing that sharing practice is essential to professional learning. Questioning, understanding and acknowledging my ability, strength and weakness within the teaching-learning environment is a powerful form of professional learning. This was a great leaning experience for me in AKU-IED Program (Allah-Dino).

These responses show their thinking process and reflect what the literature says about mentoring being an active relationship built on negotiation and trust. It is not the mentor's role to dominate, judge and be overtly critical. Rather the mentor should develop a relationship built on constructive criticism, support and a relationship that allows for development. In short, mentoring is a process through which knowledge and understanding, skills and abilities, may be passed on to less experienced practitioners (Blandford, 2000).

Working with Colleagues

A common experience of the IED teaching depicts team teachers usually do not allow their colleagues into their classrooms and remain in isolation without sharing and providing professional support to each other due to many reasons that need to be explored. Research literature on school culture and staff development i.e. Hargreaves & Dawes (1990), Hargreaves & Reynolds (1989), Huberman & Miles (1984) and Fullan (1982) have highlighted the importance of releasing teachers from their isolation by "cracking the walls of privatism" and emphasized collaboration among the teachers for their professional development. In this connection, while working in the field mentors were observed supporting each other and offering suggestions, giving and receiving constructive

qualitative feedback and sharing concerns with each other, as reflected in the following observations:

For me the most important learning aspect is mentoring, in which professional learning emphasizes guidance, development and the use and enhancement of individual abilities. Preparation for the role of mentor is the key in facilitating the learning of the mentee (Rabia).

As we have gone through the process of mentoring skills, it was my great learning experience that mentoring is regarded as one such system to facilitate professional learning and thus create change. Such professional learning stems from the belief that individuals may best learn through observing, doing, commenting and questioning, rather than simply listening (Allah –Dino).

From the above reflections it seems to be quite evident that teaching is one of the loneliest professions, with teachers rarely having the opportunity to work with a colleague in a collaborative way so that they can learn more about the teaching-learning process. Mentoring in one form or another is a means by which teachers can break down their isolation and support professional learning in ways that focus on the daily work of teachers and teaching-learning situations.

The above findings support the view that the mentoring program helped to transform more teachers from traditional to new methods of teaching on a path that leads from educational reform to transformation. Cluster-based mentoring program will continue to support teachers for an ongoing school improvement plan.

Conclusion

The study re-emphasizes the importance of cluster-based mentoring programs as a powerful agency for the professional development of teachers, especially in rural areas. Where access to education and training are marginal, the role of mentors is significant. Therefore, it is imperative that these programs are institutionalized so that maximum benefit can reach the deprived areas. The role of mentors as “change agents” is seen as exemplary; they are committed to fostering a mentoring and enabling environment and capacity building result-based achievement (3rd Quarterly Report, July-

September 2004). However, given the positive learning experiences of these teachers, AKU-IED must ensure the sustainability of the new roles of mentors by supporting them in the field so that mentors do not get frustrated nor feel alone in their venture or pursuit to bring about meaningful change in their rural environment and return to traditional practices.

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Organizational Learning for Developing Competency in Malaysian Islamic Banking Institution

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Abstract

This paper discusses several indicators of the organizational learning that had been adopted by the staffs of the Islamic Banking Institution in Malaysia. Five features of the organizational learning consisting of internal exchange, learning approaches and participative policy making, learning climate, reward flexibility, and informing that may influence the level of competency. The trend shows that these indicators could be among the primary determinants which contribute to the progressive development of the Islamic Banking industry in Malaysia. Analysis of survey responses among 170 staffs from Bank Islam Malaysia Limited from the state of Terengganu and Kelantan suggests that most of the variables investigated significantly contribute towards enhancing the competency level of the staff of the institution. Among the selected features, by using multiple regression analysis, internal exchange is the main features that influence the practice of organizational learning, which therefore influence the competency level.

Introduction

Bank Islam Malaysia Limited (BIMB) is synonymous with Islamic banking in Malaysia, continues to lead the way and to assume the role of trendsetter for Islamic banking. Started operations as

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Malaysia's first Islamic bank on July 1st 1983, its establishment was primarily to cater for the financial needs of Muslims in the country and to further extend its services to the whole population at large. The role of Bank Islam is to realize Malaysia's dream of setting up and developing an Islamic financial system that is modern and competitive, as well as being a viable alternative to the more established conventional system. The introduction to the Islamic banking, one of the very important components in the Islamic financial system, is a step to realize the country's aspiration. Bank Islam's success story is by and large a significant victory for Islamic financial system as whole. This has placed Bank Islam in the center of attention in the banking sector and is well on its way to turn Malaysia into the international capital of Islamic banking.

Organizational Learning

Through the years many have tried to define the phenomenon of Organizational Learning. There are many ways to define Organization Learning according to various views of researchers in this subject. Reviewing on the work of Argyris, one of the modern gurus, Senge (1990) stated that organization is 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 to learn together. Based on Pedler et al. (1991), a learning company is an organization that facilitates the learning of all its members and continually transforms itself. Thurbin (1994) defined learning organization as one, which improves its knowledge and understanding of itself and its environment over time, by facilitating and making use of the learning of its individual members.

The essence of organizational learning is the organization's ability to use the amazing mental capacity of all its members to create the kind of process that will improve its own (Dixon 1994). The evolution of OL as stated by Karash (1995) provides the mileage in which people at all levels, individuals and collectively, is continually increasing their capacity to produce results they really care about. Peters and Waterman (1982) said, "The excellent companies are learning organizations". As most researchers agreed the importance of organizational learning for a company's survival and effective

performance has been highly emphasized in the literature (Argyris and Schon, 1996; Fiol and Lyles, 1985; Inkpen and Crossan, 1995, and Senge, 1990) which formed the strength of the organizations involved to survive in their activities. As OL involved with the process of improving action through better knowledge and understanding (Garvin, 1993), it will further enable a company to transfer information to valued knowledge, which in turn, enriches organizational capability of adapting to environmental changes and demand (Yang 2003).

Further studies done by Sim and Killough (1998) empirically showed that under advanced manufacturing technology (AMT), OL effects of performance informing can contribute to the improvement of production performance as what had been discovered by Choe (2004), based on Lee et al. (1992) and Barr et al. (1992), where the organization may continually processing, updating and changing the organization's shared mental models. Thus the provision of informing is the beginning and a necessary condition of organizational learning. The work of Smith et al. (1996), indicated the positive effects of learning on performance could be explained with the resource-based view. The resource-based theory suggests that competitive advantage of a firm is caused by the firm's unique resource. Based on the previous studies the concept of OL could be concluded appeared to be probably the only competitive advantage for firms in a very fast changing and tough world (Tran, 1998; Stata, 1989). As claims by Campbell and Cairns (1994), once a learning organization is established, it can matured itself can progress towards becoming a leading organization, leading the industries, and possessed all the capabilities for achieving and sustaining competitive advantage.

Competency

Human resource managers viewed the concept of competency as a technical tool to implement strategic direction through the tactics of recruitment, placement, training, assessment, promotion, reward systems and personnel planning (Burgoyne, 1993) and thus enabling an increase in the collective competencies of employees of an organization (Yang, 2003). As suggested by most psychologists by showing a great concern with concept of competency as a measure of

ability (Sternberg and Kolligian, 1990) may generate the ability to provide a good definition of organizational goals (Burgoyne, 1993) which could match the observable performance of a person represented their underlying traits or capacity.

Thus OL is seen as one way of particular company or organization to be competent in the industry through acquiring and dissemination of knowledge within organization through continuous learning. According to March (1991), organizational learning is essential component in any effort to improve organizational performance and to strengthen competitive advantage. Thus, all the five variables investigated in the study concerning features Learning Organization Learning are essential conditions for improving performance. In other words, the capacity to learn is essential condition for increasing the organization's value as well as level of competency (Montes et al., 2004). Choe (2004) claims based on Little et al. (2002) argues that since knowledge is also a valuable resource of a firm, creating and sustaining a firm's competitive advantage is considerably dependent on the knowledge and knowledge-creation capabilities of that firm. Therefore, effective organizational learning or learning organization, by which unique knowledge is obtained, contributes to the attainment of the organization's competitive advantage and as a result, improves organizational performance. Consequently, the performance differences between organizations can be addressed with the asymmetries in knowledge or knowledge-creation processes (Conner and Prahalad, 1996).

Problem Statement

Nowadays, banking industry in Malaysia is at the stage of stabilization in the industry life cycle. It shows that this banking industry has developed very well and the competition is considered intense. BIMB as the first Islamic bank in Malaysia has to confront certain dynamical issues within the banking industry. Among the basic issues include; why does BIMB cannot be one of the anchor banks like other conventional bank in Malaysia? Is it because their staffs are not efficient enough? Or maybe the organization is not efficient? Or was it because of the strategies taken was not competitive enough to match the needs of the industry. It is perceived that, in order to be an efficient organization, the staffs of

the particular organization should be very knowledgeable in their core businesses. One way of achieving this is through learning organization or organizational learning (OL). The concept of organizational learning has taken its prominence in the past several decades as a way to achieve competitive advantage. That's why companies are urged to become "learning organizations" to develop their learning capability for survival and maintaining competitiveness (Hong, 1999). This study will investigate to what extent BIMB Eastern Region, in the state of Terengganu and Kelantan are endeavoring the concept of Organizational Learning. The result in this study indicates that there are such trends, which of the element from the variables significantly contribute to the development of competency in BIMB.

Objectives of the Study

- i. To investigate to what extent does BIMB in Terengganu and Kelantan practice the concept of Organizational learning.
- ii. To determine the most influential features among the selected variables that these Islamic institutions practice in their learning process.
- iii. To examine whether organization learning play its role towards increasing the competency level of the institutions (BIMB)

Significance of the Study

This study bound to be useful for at least three different groups such as the particular institution involved, BIMB, the Banking Industry and the staff of the institution. It could be beneficial to many organizations that are involved in banking sectors as they had to be updated with latest and current changes that are occurring within the industry. For banking industry that could either be Islamic or Conventional, this investigation can helps to improve their competency level. Apparently, this study is considered timely and very much needed for the institution in order to meet their client expectations and maintaining their credibility in the industry. Every firms or institutions in banking sector need to maintain their service quality to obtain customers beliefs and loyalty. Hence, it also can influence customers to choose which Islamic institutions that offers better products and services with better service quality.

Theoretical Framework and Hypothesis

The framework below demonstrates the main variable of investigations is the competency while five selected dimensions such as internal exchange, learning climate, reward flexibility, informing and learning approaches and participative policy making are treated as independent variables.

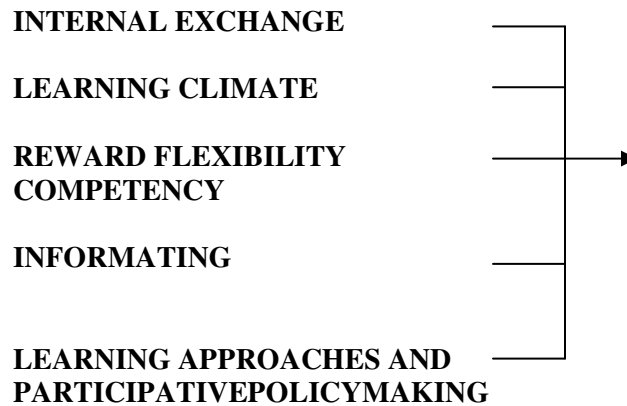


Figure 1.1 Schematic diagrams for the theoretical framework

The relationships between these variables are further explored through the following hypotheses:

- Hypothesis 1: There is a significant relationship between organization learning with individual's competency.
- Hypothesis 2: There is a significant relationship between internal exchanges in an organization towards competency.
- Hypothesis 3: There is a significant relationship between learning climate in an organization with individual's competency.
- Hypothesis 4: There is a significant relationship between reward flexibility in an organization with individual's competency.
- Hypothesis 5: There is a significant relationship between informing in an organization with individual's competency.

Hypothesis 6: There is significant relationship between learning approaches and participative policy making in an organization with individual's competency.

Methodology

Data Collection and Sampling

BIMB divided according to geographical areas such as western region, eastern region and northern region. For eastern region, it includes east coast states, which are Terengganu, Kelantan and Pahang. This study focusing on BIMB operation in eastern region covers the state of Terengganu and Kelantan.

In Terengganu, there is one regional office in Kuala Terengganu, and four branches, which are in Chukai, Dungun, Jerleh and Kuala Terengganu. The total of BIMB staffs in Terengganu is 128 staffs. BIMB Terengganu Regional Office started their operation in 2004 and it is located at Darul Takaf Building, Jalan Sultan Ismail, and Kuala Terengganu. This office has 65 staffs that consist of several departments. The departments are Consumer Banking Centre, Commercial Banking Centre, Automobile Financing Centre, General Administration, Credit Administration, and Credit Recovery Centre. In Kelantan, there are one regional office in Kota Bharu, and nine other branches, which are in Wakaf Siku, Kota Bharu, Machang, Pasir Puteh, Tanah Merah, Pasir Mas, Rantau Panjang, Gua Musang and Kuala Krai. The total of BIMB staffs in Kelantan is 134 staffs. BIMB Kelantan Regional Office started their operation in 2004 and it is located at Wisma Abrar International Building, Jalan Kebun Sultan, Kota Bharu.

Therefore, the investigation of cross-sectional data is collected from the staff of BIMB in the states of Terengganu and Kelantan. Convenience samples with a selected sample size of 170 respondents from the population of 262 for both states were adopted for the study. The data collection procedures used personally administered questionnaire to get more respondent from Kelantan as compared to Terengganu aiming for a good representation of the population. However due to certain limitations involving time constraint and distances, the study end up with more data were collected from the state of Terengganu.

Instrument

The self-developed questionnaires were divided into 7 sections: Section A (Demographic), Section B (Competency), Section C (Internal Exchange), Section D (Learning Climate), Section E (Reward Flexibility), Section F (Informating), and Section G (Learning Approaches and Participative Policy Making) and consists of items from 10 to 17 questions. All questions in these sections were measured using a 5 point Likert scale.

Findings

In assuring that the coefficient of data generated is acceptable, the study conducted reliability testing of all the variables investigated. The results which were more then 0.7 strongly suggest that the data are highly reliable.

Table 1: Respondents Profile

<i>Profile</i>	<i>Frequency</i>	<i>Percentage</i>
Gender:		
Male	100	58.8
Female	70	41.2
Age:		
Btwn. 20 to 30 yrs	94	55.3
Btwn. 31 to 41 yrs	65	38.2
Btwn. 41 to 50 yrs	11	6.5
Marital Status:		
Married	118	69.4
Single	50	29.4
Others	2	1.2
Institutions:		
Terengganu Reg. Office	56	32.9
K. Terengganu Branch	21	12.4
Kemaman Branch	14	8.2
Dungun Branch	10	5.9
Jerteh Branch	13	7.6
Kelantan Reg. Office	2	1.2
Kota Bharu II Branch	16	9.4
Kota Bharu A.M	15	8.8
Financing		

Pasir Puteh Branch	12	7.1
Tanah Merah Branch	11	6.5
Years of service:		
Less than 3 yrs		
3 to 9 yrs	64	37.6
10 to 20 yrs	44	25.9
21 yrs and above	52	30.6
Educational Level:	10	5.9
PMR (My. Low Cert. of Edu.)	3	1.8
SPM (My. Cert. of Edu.)		
Diploma	97	57.1
Degree	35	20.6
Master	31	18.2
Income per Month:	4	2.4
Less than RM1000		
RM1000 to RM2000	33	19.4
RM2000 to RM3000	83	48.8
RM3000 to RM4000	35	20.6
RM4000 to RM5000	13	7.6
RM6000 to RM7000	5	2.9
Currency Exchange:	1	0.6
1 USD=RM 3.50		

Table 1 above shows the profile of the respondents for this study. Number of respondents for the study was 170 out of 262 populations of the organizations. 58.8% are male and 41.2% are female. Based on age, most of the respondents that answer the question are between 20 to 30 years old, which is 55.3%, 38.2% from 31 to 41 years old and 6.5% from 41 to 50 years old. Majority of the respondent are married, which is 69.4%. For BIMB in Terengganu, 32.9% respondents comes from regional office in Kuala Terengganu, 12.4%, from branches in Kuala Terengganu, 8.2% in Kemaman, 5.9% in Dungun, and 7.6% from Jerleh branch. As for the case of operation in Kelantan, only 1.2% out of 170 respondents in regional office at Kota Bharu, this is very small number of respondents as compared to in the state of Terengganu, another 9.4% is from Kota

Bharu II branch, 8.8% comes from Kota Bharu Automobile Financing, 7.1% in Pasir Puteh, and 6.5% from Tanah Merah.

Reviewing on years of service of the respondents, only 5.9% of them had been with the institution for more than 21 years. While others had been serving the institution for less than 3 years (37.6%), 10 to 20 years (30.6%), and 3 to 9 years (25.9%). Most of the working strength of BIMB composed of those with secondary school qualification where 57.1% of them were selected as a sample. While 38.8% of the workforces were among those were receiving college education. Only 2.4 % of the staff possessed Masters degree.

The analysis on monthly income revealed that a small numbers (0.6%) of the respondents earn an income from RM6000 to RM7000 per month, and only 2.9% of them earned an income from RM4000 to RM5000 per month. Most of them that responds to this study earned RM1000 to RM2000, which is 48.8% and followed by 20.6% and 19.4% who earned from RM2000 to RM3000 and less than RM1000. Lastly, only 7.6% of them earned an income of RM3000 to RM4000 per month.

Table 2: Correlation Coefficient Analysis

<i>Variables</i>	<i>Competency</i>	<i>Internal Learning</i>	<i>Reward Learning</i>	<i>Informing</i>	<i>Exchange</i>	<i>Climate Flexibility</i>	<i>Approaches & PPM</i>
Competency							
Pearson	1	0.665**	0.560**	0.362**	0.546**	0.405**	
Correlation							
Sig.		0.000	0.000	0.000	0.000	0.000	
(1 tailed)							
N	170	170	170	170	170	170	

*** Correlation is significant at the 0.01 level (1-tailed)*

Pearson Correlation was used to assess the relationship among variables (independent and dependent variables). Table 2 shows the result indicating that independent variables are statistically significant with the p-value of 0.000 at 0.05 significant levels. The

analysis on the strength of association revealed that, Internal Exchange (section C) formed the highest Pearson Correlation analysis with, $r = 0.665$, indicating that this section is at the stage of substantial to very strong correlation with the competency (De Vaus, 2002), followed by variable in section D, which is Learning Climate with $r = 0.560$, and variable in section F, which is Informing with $r = 0.546$. Both sections also indicate the variables are in the stage of substantial to very strong. There were two independent variables concerning Learning Approaches and Participative Policy Making, and Reward Flexibility that were not able to establish strong relationship. But with the r value of 0.405 and 0.603 respectively indicating that these two dimensions still considered important in lifting the competency level of the staff. The Pearson Correlation analysis as a whole suggested that there were significant relationship between independent variables with competency. It also further suggested that the relationship between Organization Learning and Competency in BIMB for both state of Terengganu and Kelantan is always a concerned by the management of the institutions.

Table 3: Regression Analysis (Multiple Regressions)

<i>Variables</i>	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>T</i>	<i>Sig.</i>
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
(Constant)	0.467	0.278		1.681	0.095
Section C	0.493	0.082	0.494	5.994	0.000
Section D	0.177	0.094	0.144	1.891	0.060
Section E	0.054	0.042	0.082	1.274	0.205
Section F	0.313	0.074	0.285	4.234	0.000
Section G	-0.143	0.065	-0.166	-2.191	0.030

Note: $R^2 = 0.527$

Table 3 mentioned the summary of multiple regression analysis among all independent variables towards competency as the dependent variable. Among all independent variables, variable in section C (internal exchange) indicated the highest contribution towards the dependent variable with t-value=5.994 and beta score of 0.494, and it is followed by variable in section F (informing) that

indicate $t\text{-value}=4.234$ and $\beta\text{ score}=0.285$. Then section G (learning approaches and participative policy making) with $t\text{-value}$ of 2.191 and $\beta\text{ score}$ of 0.166. The ranking is followed by variable in section D (learning climate) with $t\text{-value}$ of 1.891 and $\beta\text{ score}$ of 0.144, and lastly section E (reward flexibility), with $t\text{-value}=1.274$ and $\beta\text{ score}=0.082$. The above analysis demonstrated that the combination of the OL features as a whole only capable of explaining 52.7% of its contribution towards establishing competencies among the organizational staffs. But out of the five (5) features investigated two (2) of the suggested indicators were found to be not significant. Among those which were not significant were reward flexibility and learning climate ($p\text{-value}$ of 0.205 and 0.060 respectively) which shows that these two variables only provide a weak contribution when they were to be combining with other variables. However the other three independent variables that were discovered to be significant include internal exchange, informing and learning approaches and participative decision making ($P\text{-value}$ of 0.000, 0.000, and 0.030 respectively).

The other unexplained percentage could be due to other factors which had not been addressed in this study. Among the possible factors could be such as inter-company learning, learning approach to strategy, enabling, self-development opportunities for all, boundary workers, and formative accounting control as suggested by Megginson et al. (1993).

Discussion and Conclusion

Why does OL should be treated as an important issue? As suggested by Norudin and Engku Ahmad Mustaffa (2002), an organization learned not only to live with the condition of changing world, but should be able to quickly learn how to take advantage of them. Furthermore with the educational level and the aspirations of the workforce are changing dramatically, it is therefore becoming part of the requirement in gaining the competitive advantage may not only involved the individual employees, but the learning process at the organizational levels should be seriously addressed.

Following the suggestion by Hair et al. (2002), all the dependent and independent variables used in this study indicated the existence of

acceptable relationship. Other studies even though conducted in different industries demonstrated similar findings (De Geus, 1988; Garvin, 1993). In fact earlier theories in learning and motivation displayed the need to keep learning continuously abreast may not only stimulate growth but making individuals, group, and organization more competitive. Our analysis using Multiple Regression indicated that there are only three independent variables that were significant in the study. With these findings three hypotheses of the study were supported. The factors that seem to be higher than the others are internal exchange, informing and learning approaches and participative decision making. As an important element for promoting OL, Internal Exchange should keep on emphasizing on the activities of delighting internal as well as external customers. For the internal customers, the willingness to create a win-win outcome through the process of negotiation and participation may not only be beneficial to the organization but to the individual staff involved.

One of the objectives of the study is to investigate the extensiveness of BIMB in Terengganu and Kelantan as to the practice of OL. As been displayed by result on correlation analysis it seems that the awareness of OL had continuously shaped the Islamic Banking activities. But still there are rooms needed to be improved if the institutions are to be considered as one of the anchor bank in the future.

Focusing on the Islamic values as the strategy no doubt created a niche but still there are other aspects needed to be explored in attracting organizational customers as well as individual customers to patronize the Islamic Banking product or services. Among others include upgrading the counter service delivery, customer relationship management (CRM), emphasizing on corporate social responsibility (CSR).

Strategically and creatively looking forward, one of the most important points that contribute to the excellence of any organization is very much related to the training and education process. Thus it is the main role of the members of BIMB specifically or Islamic Banking Institutions generally to acquire the latest technological,

social changes, economic changes, and other forces that may generate impact on the core business of the institutions. Realizing and endeavoring these developments could be possible through the cultivation of OL principles in the whole business operation. Failure to quickly adopt OL may therefore make the institutions in a non-competitive, less productive, and no longer able to survive in the business cycle.

Future Research Directions

The prospects of BIMB and the whole industry are encouraging. Shaping the industry to a greater height requires the exploration of other elements which had not been included in this study that could provide indication for enhancing the future of the industry. The suggested approach will provide better explanation as the variation of the model in addressing the unexplained 47.3% of the regression.

Further investigation should consider a comparative study between Islamic Banking Institution, involving BIMB, Bank Muamalat and Bank Rakyat. The newly proposed research may not only highlight the spirit of Islamic Banking but promoting the possibilities of having an anchor Islamic Bank.

Lastly, with the more extensive investigation, the study are expected to benefit the particular organization or institution under observation, and will further contribute to the industry towards guiding them to be competitive not only in local, national, but meeting the challenges in the international market. Through Organizational Learning, they can extend their knowledge, acquiring more information, and becoming more resilience in the market.

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The Impact of Interace between Educational Realities and Exploitative Corruptions in Public and Private Offices on Development in African Countries

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Abstract

This study was carried out to investigate the impact of interference between educational realities and exploitative corruptions in public and private offices on development in African countries. Three research questions were drawn to guide the investigation. Data were gathered from 4950 sample subjects through the instrument of questionnaire. The analyses of the data was carried out with the use of simple percentage and the findings were that, there was an interface between educational realities and exploitative corruption in public and private offices in African countries, and also that there was corruption in the acquisition of skills and knowledge among the three levels of education. The findings led to the conclusion that there was impact of interface between exploitative corruption and educational realities in public and private organizations in Africa and that the corruption is so widespread that it had taking hold of students in their skills acquisition.

Introduction

The battle between education and corruption in African countries has been for some time now a subject of whisper. It seems today that corruption is growing greater in size and magnitude, such that education appears to be having the sprinkling effect in standard and realities. The goals and objectives of education are generally spelt out in clear terms. The goals of education include: to raise the standard of living, increase in the level of per capita income, to

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provide adequate healthcare delivery service, to provide increasing job opportunities that will create room for the educated citizens to have opportunity for effective job mobility, etc.

Educational institutions are established and developed with a view to achieve the goals of individual progress and national development. This is realized through the vigorous application of educational skills and knowledge. In other words, the level of realization of national goals and objectives is determined by on the level to which educational goals and objective are pursued, realized and applied. The problem of this research therefore was that contemporary African society; many questions have been raised and unanswered. Such questions appear to point to the assumptions that African societies do not seem to make progress in terms of human and national development. The principal question has bothered many Africans as to find out why African countries have not been able to turn away from consuming nations to become producer nations, from importing nations to exporting nations, from economic dependent nations to economic independent nations, from brain- drain nations to brain-gain nations, etc. No answer has yet been satisfactory preferred to these questions or any like it.

The issue of corruption seems to occupy a premier position among the contending views, which they argue has hindered the realization of national development through the power and application of educational instrument. To situate focus on this research, was the necessity to acknowledge that different views abound that practice of corruption has influenced negative outcomes in the pursuit of national goals and objective as well as with acquisition of skills and knowledge by individuals in African countries.

Corruption has been described (by those who claim they hate it) as a cankerworm that is destructive to every known progressive move to realize development in African setting. It is assumed by them to be found in all facets of endeavour in Africa like in most other Third World countries. They argue that it is practiced by many individuals and it is double faced, that is, it is a phenomenon of give and take, which implies that, there are givers, and there are takers. Because of the power in its evil nature to destroy what is good and embellish

what is evil and bad, it has led to inefficiency and ineffectiveness in the pursues organizational and nations goals and objectives to create progress and development.

Those with good intention towards individual progress and national development offer praises to educationist over the educational skills and knowledge, which they impact in the citizens of Africa. They are quick to condemn some groups among the leaders and the led who use the instrumentality of corruption to weaken the performance of education in pursuit of national goals and objectives. But the commentators with noble minds make comments on the issue of corruption briskly that African countries are full of individuals with corrupt tendencies. Hence, they state that corruption is found in the banks, military, civil service, education sector, hotels, industries markets, etc. They complain further that it sometimes comes to a boiling point where it would appear as though it has been institutionalized.

They argue that it is sad that corruption appears to thrive so openly in African countries that it seems to be carried on like a trade without rules or boundaries. That the practice no longer has respect for fear or shame. Those who indulge in the practice of corruption carry it out with all manner of recklessness and shameless abandon. This group, which operates like silent crusaders sometimes, complains that, the practice of corruption is carried on between members of organization, staff and their clientele, or between an organization and organization. Similarly, that it is practiced between one individual and another individual, one group of individuals and another group, etc.

The contention of another group of analysts is that, the major contents within the snowing corruption are money, wine, sexes (mark), cars, houses, wrist watches, clothing's, sex, air ticket and other valuable items. Complaining they state that where such are offered and received between two individuals or among individuals and organizations there is little to be expected in terms of adequate realization of the set goals and objectives.

Conversely, there is also another group of analyst's whose argument is that the funding of education or in larger terms other facets of transactions in African societies has nothing to do with corruption. Those in this group hinge the argument on the fact that, educational system is going on well in African countries. That year in and year out graduates come out of the three levels of education. That while some of the graduates of the lower level of education go for further pursuit of education, others join the graduates from high level in the labour market in this search of employment.

This group seems to believe that, as long as the educational system is going on in African countries with the necessary input being supplied as well as funding being released by government, there should be no reason to ascribe any inadequacies to government or anybody. Hence, they claim that there is no corruption or its practice in African countries. Considering the weight of the above observations, arguments, contentious questions etc. this research could not be delayed in processing. This was with the view to ascertain whether there is actually influence of corruption on the pursuit of education in African societies. Thus, questions were formulated to act as control and guidance as follows in carrying out the investigation:

- i. Does exploitative corruption in public and private organizations have influence on national development in African countries?
- ii. Does corruption have influence on the educational skills and knowledge grades acquired in African schools?
- iii. Is exploitative corruption common among citizens and organizations in African countries?

The nature of corruption is such that, although it may be common in many high and low places sufficient attention has not been given to it by researchers. The effect of corruption on national life could be so high sometimes that the societies could become helpless to its practice and solutions deserve great effort through educational funding and recommendation. Thus, some expert and other authorities have made useful comments about the phenomenon.

The fact is that corruption is a moral phenomena, it grows out of personal desire to selfish intentions and decisions. It is therefore a destroyer of what is good for another person or the entire society. Grassian (1992) states that any act that will lead to destruction of itself or the civilization of the society cannot be a good moral act. Hence, according to Guthrie (2003), good morality is adopted in all situations because good people know it is right, but that any other consideration or conditions with strings attached are with corruption. For Kant, (2003) moral act is that which every right thinking person must be willing to follow because he/she knows that the action is justifiably right.

UNISCO (1981) decided to look at the human right from several points of view; amongst them are the right to free and qualitative education, religious beliefs and social security. Accordingly, the world body instructs all citizens to have the right to social security in the event of un-employment and disability or any circumstances beyond individual control. Hence, it believes that a government must see itself in a world of marriage between itself and its citizens ensuring that no gap exists between the ruler and the ruled.

Education cannot be separated from religion hence they go hand in hand. This is probably the reason that led the world body (UN) to instruct every society on the issue of regards to education, social security, religion etc. In this regards, the UNESCO (1981) has amplified the instinctive universal declaration of human right in Paris in September 1981 in which it claimed every person is entitled to receive education according to the individual's capability.

But Ambrose (1995) raised the fear that the UN declaration was not likely to hold for all societies because according to the author individuals are already endowed with rights such that declaration of the UN can only be perceived as a lawful existing phenomenon. In addition to this, is the fact that the Qumran, a major religious instrument also warns that "corruption has spread on land and sea because of what means hands have wrath" (Qumran 30:42)

Corruption operates in many and different perspectives. For instance, according to Okoro and Okafor (2009), corruption abounds

everywhere. That means in all societies and organizations hence specifically, the authors, claim that it is instructive to be aware that over 700 US companies were forced to re-write their accounts that were over stated” similarly, the author claim further that in Nigeria, such scandal are the over statement of Liver Brothers inflated profit on stock figures and the failure of necessary diligent search in AP PLC to uncover a debt of 20 billion naira standing in bold relief as incidents of audit that went awry. Hence, the authorities in accounting profession have been viewed along in the wake of corporate failures manifest from practice of corruption.

In looking at the Information and Communication Technology sector, Idowu (2009) also believed that the financial sector needs to be strengthened for any meaningful outcome to be achieved in the training of individuals and application of their skills in ITC. Thus, author condemned the wide-spread fraudulent practices in banks, which according to the author was a destructive growing trend. The author presented a table of amounts of frauds for clear understanding for the authorities to proffer viable solution as follows:

Table 1. Incidences and amount of fraud in commercial banks

Year	Total Number of Fraud	Total Amount involved (#m)
1994	152	2655.71
1995	127	1006.28
2004	1175	11, 754.00
2005	1229	10, 6006.18

Source: *NDIC 2000 and 2005 Annual Report Statement of Account*

Since banking has been described as the pivot on, which economic matters revolve (Oluwatosin and Idowu 2001) hold that all stakeholders must be concerned and work together for its development provided however that banks will contribute maximally to economic turn around.

Investigation and Methodology

Sampling

A sample of total number of 4950 was drawn, which included heads/administrators on learning institutions, teachers, and other workers of other public and private organizations, learners in the three educational levels. The technique adopted in arriving at the selection of the figure was by zoning, the African continent into five sections: 1. The North, 2. The South, 3. The East, 4. The West, 5. The Central. Four countries were selected from each of these sections through random sampling technique and from each sections equal number of sample were selected through random sampling technique.

Instrument of the Study

Survey method was adopted with which relevant data were drawn from the sample subjects. The administration of the instrument was carried out by the researcher and research assistants who were employed for this purpose in the various countries.

Communications were kept afloat between the researcher and the assistants during the several months between the questionnaire administration and the retrieval. The mortality rate was not high owing to the aid of GSM calls and easy access to internet services.

The data analysis was carried out by ensuring that those which were collected were subjected to necessary treatment of sorting and application of percentage relevant statistical tool obtain the results as follows:

Question I: Does exploitative corruption in public and private organizations have influence on national development African countries?

Table-2: Influence of exploitative corruption in public and private organizations on national development.

Corruption	National Development				Total
	High	Average	Low	Nil	
Public	2874 58.06%	1224 24.72%	836 16.88%	16 .32%	4950 100%
Private	2670 53.93%	1047 21.15%	1233 24.90%	Nil 0%	4950 100%

Question 2: Does corruption have influence on the educational skills and Knowledge grades in African countries?

Table-3: Influence of corruption on skills and knowledge grades in Africa

Levels of educational institutions	National development		
	Positive %	Negative %	Total %
Primary school level	107 2%	4843 98%	4950 100%
Secondary school level	2985 60%	1965 40%	4950 100%
Tertiary Level	3326 67%	1624 33%	4950 100%

Question 3: Is exploitative corruption common among the citizens and organizations in African countries?

Table-4: Practitioners and mode of exploitative corruption in African countries

Practitioners of Corruption	Response		
	Positive %	Negative %	Total
Organizational leaders and followers	1986 40%	2964 60 %	4950 100%
Political leaders and followers	3620 73%	1330 27%	4950 100%

Individuals and organizations	3764 76%	1186 24%	4950 100%
Organizations and organizations	627 13%	4325 87%	4950 100%
Political leaders and organizational leaders	3716 75%	1234 25%	4950 100%

Findings and discussion

The data on table II of this study revealed that exploitative corruption in public and private offices and that, it had influence on development in Africa countries. The data on the table revealed that public organizations ranked higher than private organizations with 58.06 % high and 24.72% Average level of high and average corruption while private organization scored less with 53.93% and 21.15% levels of corruption respectively.

Table II also showed that there was corruption in the acquisition of skills and knowledge in Africa among the three levels of education. The table showed higher education institution knowledge. The secondary school level of education was rated second with 60% while the least was the primary school level, which had 2%.

Table IV revealed that the practice of corruption existed among different individuals and organizations. Thus, between organizational leaders and their followers the score was 40% positive and 60% negative, between political leaders and their followers 73% positive and 27% negative, between individuals and organizations 76% positive and 24% negative, between organizations and organizations 13% positive and 87% negative, and between political leaders and organizational leaders, 75% positive and 5% negative.

What the finding of this study portrayed was that, there was huge practice of corruptions in different spheres of activities in African societies. The practice was highest between individuals and organization followed by political leaders and organizational leaders etc.

It is most painful that the study revealed that the acquisition of skills and knowledge was influenced by corruption in Africa. Particularly that this phenomenon was highest among tertiary institution with 67% followed by secondary school level student with 60%. It was also discouraging to observe in the study that both public and private organizations scored more than 50% each in regard to level of corruption and that the public organizations scored higher than private organization, which the respondents indicated, had influence on national development.

The result of the corruption areas and level in African society confirmed the claim made by Okoro and Okafor (2009) that it is instructive to be aware that the manipulation of the accounts in Nigeria is a reflection of the corruption level in Africa. The result was also supported by Kant (2003) Grassiam (1992) who stated that any immoral act could destroy any public good.

Conclusion

Based on the result of the findings of this study, the researcher arrived at the conclusion that there was exploitative corruption in public and private organizations and that it had influence on development in Africa countries. That the corruption was so wide spread that it had negative influence on learners' knowledge and skills acquisition. Thus, it was the opinion of the researcher that everything should be done to eradicate the phenomenon of corruption to create positive atmosphere of initiatives and actions of development.

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Teaching Teachers and Students about the Nature of Science

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Abstract

This article advocates the teaching about the nature of science to both pupils in schools and teachers in teacher education institutions in Pakistan. Not knowing about science; teachers tend to continue to teach science as fixed knowledge and not as inquiry and this cycle continues. This cycle needs to be broken. This article first discusses the salient features about the concept of the nature of science and then illustrates these ideas with the help of a simple but a powerful activity which could be used both with teacher educators and pupils in secondary and lower secondary classrooms.

Introduction

The purpose of this paper is to advocate that teachers be encouraged and helped to develop an overt and clear understanding of the methods and structure of science, i.e., the nature of science. I have tried to define the concepts that constitute nature of science essential for school science. I also want to highlight some of the challenges faced in attempts to introduce the concept of the nature of science in inservice teacher education in Pakistan. I will end by illustrating the nature of science by an activity that could be used to teach this idea to both teachers and students.

Teacher education programmes in Pakistan do not include the nature of science as part of their syllabus. However, Government of Pakistan science curriculum for pupils from classes one to eight does include this topic within the general area of “scientific literacy” as one of the aims of teaching science (Government of Pakistan, 1993). My experience has shown that science teachers in Pakistan have not given sufficient attention to this essential aim of science education because their own experiences as science students has not prepared

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them to deal with this component of science. Furthermore, preservice and inservice teacher education programmes do not prepare teachers to teach *about* science – the focus is more on methods of teaching and science content.

Need to include the Nature of Science in Teacher Education

Educational innovations cannot succeed if teachers are not taken into account is a lesson that is being slowly learnt. Hence, if change is to occur in the way science is taught it has to be mediated through the teacher (Waters-Adams, 2006). Only by bringing a change in the teacher's way of thinking, will the change be long lasting. Another reason that I advocate a reconceptualization of teacher knowledge about the nature of science is because it is always present as the "hidden" curriculum (Eggleston, 1977; Lakomski, 1988). The nature of science has never been absent from the curriculum, it is just never explicitly stated (Hipkins, Barker & Bolstad, 2005).

Including the nature of science in school science is not a new or novel idea. Educators, professional organizations and science educators have been advocating it for now more than 30 years. Many different professional organizations such as the Association for Science Education (ASE, 1981) in Britain, the American Association for the Advancement of Science in America (AAAS, 1989, 1993) and the National Science Teachers Association (NSTA, 1982, 1995) have reached a consensus on the need for teaching about the nature of science in school. Despite the prevailing consensus there is ample research evidence to show that irrespective of academic background science teachers possess a limited knowledge about the nature of science (Elkana, 1970; Rowell & Cawthorn 1982, Brush, 1989; Mellado, 1997). Not having an understanding of the nature of science is a problem because the teachers' views of the nature of science (or any other subject) can and does influence their students' conceptions of science. Hence, it is not surprising to find that our pupils have misconceptions about the nature of science (Aikenhead, 1973, 1987; Clough, 1997; Lederman, 1992). Not knowing *about* science the science teachers continue to teach science as a collection of facts. The vicious cycle of science-as-collection-of-facts approaches to science teaching breeds students who go on to become

teachers who emulate their teachers, and the cycle continues. It is important that this cycle is broken.

What is meant by the Nature of Science?

The dilemma is that before an understanding of the nature of science can be fostered in students, the science teachers need to have a fairly sophisticated understanding of it. The nature of science because it is both a problematic and contentious concept is difficult to define (Duschl, 1990). However, science educators agree that there is a measure of agreement on a number of points relevant to the school science curriculum (Hodson, 1985, 1991). The National Science Teachers Association of America in a position paper (NSTA, 2000) has listed the concepts of the nature of science that are important for school science. I have provided, below, an abbreviated copy of this list:

- Scientific knowledge is simultaneously reliable and tentative.
- Although no single universal step-by-step scientific method captures the complexity of doing science, a number of shared values and perspectives characterize a scientific approach to understanding nature.
- Creativity is a vital ingredient in the production of scientific knowledge.
- A primary goal of science is the formation of theories and laws, which are terms with very specific meanings.
- Contributions to science can be made and have been made by people the world over.
- The scientific questions asked, the observations made, and the conclusions in science are to some extent influenced by the existing state of scientific knowledge, the social cultural context of the researcher and the observer's experiences and expectations.
- The history of science reveals both evolutionary and revolutionary changes. With new evidence and interpretation, old ideas are replaced or supplemented by newer ones.

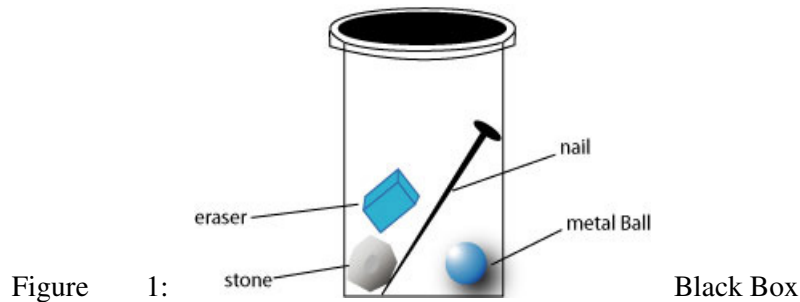
Challenges Faced in Teaching about the Nature of Science

While teaching a science methods course at the Aga Khan University, Institute for Educational Development, I studied three elementary teachers' developing understanding of the nature of science (Halai, 1999). The predominant mode of data collection was interviews. The analysis of the data gives some understanding into how elementary teachers, who do not necessarily have preparation in science, learn about the nature of science in the context of Pakistan. The findings indicate that practical, hands-on activities are helpful, but there is a need for more overt teaching of this concept and explicit discussion about it after the conclusion of the activity. The two teachers who did not have a background in science had difficulty in border crossing from their own subject sub-culture/s to the culture of science. But the surprising finding was that the third teacher who was a science teacher had greater difficulty in accepting ideas about the nature of science such as: most scientific observations are theory based and science is tentative. It is my conjecture that the science teacher being socialized in a very positivistic conception of science had more difficulty in changing beliefs, as compared to the other two teachers, who did not have much experience of learning and teaching science.

This study clearly indicates that science teachers need to first build their understanding of the nature of science through clear and hands-on activities and then would they be able to teach it to their students in school. The activity given below has the modest aim of illustrating the teaching of one aspect of the nature of science, "scientific knowledge is simultaneously reliable and tentative", with the help of a very simple activity using everyday materials (Flick & Lederman, 2005). This activity is generally called the "Black Box" activity and can be used to help teachers to understand and then to teach this concept to their students. This activity works best with pupils of class 6-8 classes, however with modification it can be used both for younger and older children.

Black Box Activity

The black box activity offers challenges similar to those that scientists face in trying to uncover the secrets of nature (McComas, 1998). A basic black box can be created from very simple materials.



- i. Take a black empty film canister; make sure that you do not take the white translucent container but the black one. Most photographic material shops are happy to give away these canisters free of cost. Put at least four small objects in it such as a (a) paper clip or a common pin, (b) a metal ball bearing or glass bead so that it can roll easily, (c) a small uneven object like a stone and (d) something soft like a piece of a rubber eraser.
- ii. Seal the canister very tightly with tape so that students cannot open it.
- iii. For most effective results divide the students in groups of three or four and distribute one “black box” to each group.
- iv. The task before each group is to use their senses to identify the objects inside the box. Under no circumstances are they supposed to open the box, but they can shake, roll or manipulate the box in different ways. They are free to talk and discuss their ideas within the group. As a final result they are to make a model of the objects within the box in the form of a pictorial diagram. Allow plenty of time for students to talk and seek empirical evidence for their “theories” of what is inside the black box. Note that I use the word theory to mean an explanation of their ideas.
- v. After all the groups have completed the task invite at least four groups to come to the black board and explain their groups’ ideas of what is in the box with the help of a pictorial diagram. Try to take groups which have same and dissimilar ideas about the contents of the block box.

From the oral presentation and the diagrams it will become clear that most of the groups are in consensus about a number of things such as: (a) there are more than one item in the box (b) that there are 3-4 items in the box (c) that at least one item in the box is a metallic object (d) at least one object in the box can roll and hence it is likely to be a spherical object. It is important to emphasize that despite the lack of direct visual evidence students' have been able to use their senses and their prior experiences to develop their "theories" about the constituent parts of this "scientific puzzle". It will also be clear that there will be some differences of opinion too in the way some groups have "discovered" what is in the box. Despite these differences a broad "theory" about the constituent elements of the box could be put forward. The teacher can now pretend to end the lesson. The students will immediately request the teacher if they could now open the black box to see if their theories about the contents of the black box is right or wrong.

Here lies the most important part of the lesson

I would encourage the science teacher not to open the "black box" but discuss how scientists work by using their senses or extending their senses with the help of instruments to "guess" the components of some elements of nature. However, often the scientists cannot open that item to see if what they had guessed was actually true or not. They have to live with their guesstimates and use other means to validate and confirm their views. One example the teacher can use to explain this is that scientists for long have conjectured about the constituent gases composing the Sun but no one has had the opportunity to take a direct sample of the gases making up the Sun's surface. This is one reason science will always be tentative. That does not mean that "anything goes" or that it is unreliable. Because of the "self regulating" process built into science through peer review and publication it is hard (but not impossible) to pass off less than reliable results to the scientific community. The students realize that no matter how sure they are about the contents of the black box they could never be 100% certain and hence there was always the chance that in the light of new evidence they would have to revise their view of what forms the contents of the box.

This activity could also help students to learn about models. The models that scientists develop take many different forms. In some cases they are actual physical constructions, such as the model of an eye that is often used in a science class. Other models may be more mental images that are developed in an effort to picture something unseen. A good example would be the Bohr solar system model of the atom that is often used by beginning chemistry students. In this model the nucleus is imagined to be like the sun and the electrons are shown as spinning around the nucleus like the planets moving around the sun. The model that students draw of the contents of the black box would also represent a mental image of their “theories”.

This activity and many other such activities can be used in teacher education programmes to serve two purposes. First, to enhance the teachers’ own understanding of the nature of science and secondly, to provide them a repertoire of activities that can be conducted in class at various levels to enhance students’ understanding of the nature of science.

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Impact of Teaching - Terminology of Mathematics Subject in English and Mother Tongue on the Learning of Students at Secondary School Level

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Abstract

The aim of writing of this article is to find out the interest, participation, and learning the terminology of mathematics subject in English and mother tongue and to analyze the impact of medium of instruction on learning of students. In this article the author also suggests measures for improvement. In this connection 100-Students were taken as sample and 20 teachers from the population of all Government high schools of Hyderabad district. Only qualified and trained mathematics teachers were taken as the sample. They were shown satisfactory remarks about students and their learning. Descriptive Survey research was used to collect data. In above connection the teaching classes of the teachers were observed and test/questionnaires were taken by the students about teaching terminology and language used by teachers during class. During the process all the observations were recoded and interviews were also conducted from the teachers. On the bases of the collected data conclusions were made that most of the students felt easy and learned more terms of mathematics when teachers used English language during classes. They further said that the terminology of mathematics is easier to pronounce and learn in English as compare to mother tongue.

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Introduction

No body can deny the importance of Mathematics. An Information and Technology based society requires individuals, who are able to think critically about complex issues, analyze and adopt the new situations, solve problems of various kinds and communicate their thinking effectively. The study of Mathematics equips students with knowledge, skills and habits of mind that are essential for successful and rewarding participation in such a society. The more the technology is developed the greater the level of Mathematical skill is required. According to Bacon, “Mathematics is the gateway and key to all sciences”.

Mathematical structures, operations and processes provide students with the framework and tools for reasoning, justifying conclusions and expressing ideas clearly. As students identify relationship between mathematical concepts and everyday situations and make connections between mathematics and technology and other subjects, they develop the ability to use mathematics to extend and apply their knowledge in other fields.

Objectives of Mathematics at Secondary School Level

- To enable the students to acquire understanding the concepts of Mathematics and apply them to the world they live in.
- To provide sound base for specializing in Mathematics at higher stage or to apply it in scientific and technological fields.
- To enable students to communicate their thoughts through symbolic expression, terms and graphs.
- To foster in students the spirit of exploration and discovery.

The Objectives of Mathematics Consider the Following Fundamental Abilities

Ability to recall and reproduce definitions, operations, notations, concepts, rapid and accurate computation, symbol manipulation, translating data into symbols, interpreting data appearing in symbols form, following a line of reasoning, constructing proof, determining the operations which may be applied to achieve the language play an important role as medium of instruction. Warsi Sarhandi (1990)

described the medium of instruction as the language in which certain subjects are taught in other words, we may say it is always a language which is a source of information and learning through out man's life. Medium of instruction should be understandable and comprehensible by both teacher and taught, so that they are at ease to teach and learn something.

According to Mueen (1992), "In Pakistan, the use of English language is well entrenched. It is offering a pre-requisite for employment in the public and private sector. It is a language of science and technology. Therefore in order to remain in step with the expending frontiers of human knowledge, the use of English in Pakistan needs to be actively sponsored by the educated and patronized by the policy makers".

So keeping in view the above aspect, the present study was designed to explore the situations regarding teaching terminology of mathematics learning in English and compare achievement of students learning; in mother tongue, and English at secondary school level.

Statement of the Problem

The present study aimed at analyzing the impact of teaching terminology of mathematics on the achievement of students in English and mother tongue at secondary school level.

Objectives of the Study

The objectives of the study were as under:

- i. To compare the achievement of English and mother tongue in teaching terminology of mathematics at secondary school level.
- ii. To compare the overall performance of male and female students.
- iii. To compare the difference of achievement between English and mother tongue.
- iv. To compare the difference of achievement between the female and male students.
- v. To compare the difference between the achievement of English teaching terminology of mathematics learning of male and female students.

- vi. To find out the teacher's opinion about the English and mother tongue teaching terminology in mathematics teaching.

Review and Related Literature

Arcavi (1994) introduces the notion of symbol sense as a "desired goal for Mathematics education". Symbol sense incorporates the ability to appreciate the power of symbols, to know when the use of symbols is appropriate and an ability to manipulate and make sense of symbols in a range of contexts. Symbol sense actually develops skills of the use of symbols and understanding of the situation. Making the sense of terms (letters) is one of the fundamental problems in learning of Algebra.

Bell, Swan & Taylor, 1981; Bell, Fischbein & Greer, 1984; Fischbein, Deri, Nello, & Marino, 1985) that the concept of division is usually taught in elementary schools by using models of fair sharing or/and repeated subtraction. Clement (1982) and Kieran, & Louise, (1993) indicated children's arithmetic experiences in elementary schools which lead them to different alternative frame works in Algebra. For instance, in arithmetic children have experience that letters denote measurements, for example 10 m to denote 10 meters, but in Algebra it may denote ten times unspecified number. Traditionally children have limited experience with letters in elementary schools such as for finding area students use the formula $A = l \times w$ which shows the use of letters as labels in arithmetic. Children's such experience of using letters as measurement labels in arithmetic lead them to make alternative frameworks to treat numerical variables as if they stood for the objects rather than numbers.

Foster (2007) highlighted that if students are taught abstract ideas without meaning, this might not develop their understanding. He suggested that teachers want students to know Algebra then they must be given a deeper understanding of the use of symbols. MacGregor and Stacey (1997) found that many eleven-year-olds who had never been taught Algebra thought that the letters were abbreviations for words such as h for height or for specific numbers. Further, he found that students have a misconception that these numbers were the "alphabetical value" of the letter such as $h=8$

because it was the eighth letter of the alphabet. Another interpretation stems from Roman numerals. For example, 10h would be interpreted as "ten less than h" because IV means "one less than five."

Rubenstein & Thompson (2001) there are certain curriculum areas in primary and lower secondary mathematics where teachers faced problems in drawing meanings from symbolically represented mathematical content. Sellke, Behr & Voelker, (1991); Brendefur & Pitingo, (1998) proposed an instructional strategy designed to provide students with a way to represent division problems. The rate or ratio model is based on establishing a multiplicative relationship between two similar quantities (ratio), or different (rate) quantities. It considers dividend and divisor as one pair of numbers from a set of infinite pairs of numbers that are related in the same proportion.

Steinbring (1998) proposed the epistemological triangle of signifier (sign/symbol), reference context and signified (concept) for the establishment of successful communication in mathematics classroom. Zahid (1998) same letter can be used in different contexts with different meanings. The different meanings of the same letter or symbol in different contexts create problems in conceptual understating of the concepts of Algebra and in solving the algebraic problems.

Methodology

The researcher constructed an achievement test comprised of 50 multiple choice items from the textbook of mathematics prescribed by the board of Intermediate and Secondary School curriculum, Hyderabad. The test was developed by keeping in view the objectives of teaching mathematics at secondary school level and based on the symbols and terms in English and mother tongue to test the learning of teaching terminology of mathematics. The tool was validated by the experts at the Faculty of Education, University of Sindh, Elsa Kazi Campus Hyderabad. The intended target population was all the students of secondary schools. Out of whole population, 100 students were selected in each gender by using simple random sampling technique and 20 teachers of mathematics teaching at

secondary school level were selected for the interview to strengthen the research results.

The researchers personally administered the test. However in some institutions the researchers sought the help from colleagues in administering the test and collecting data. Scoring was made on the principle of one item one mark. To reach certain conclusions, the arithmetic mean, standard deviation and Z test were computed to compare the learning performance of the students. The critical ration CR was calculated by using the formula, given by Garrette:

Where:

CR→ Critical Ratio

M1→ Mean of Scores Obtained by Group-I

M2→ Mean of Scores Obtained by Group-II

N1→ Number of Students in Group-I

N2→ Number of Students in Group-II

SD1→Standard Deviation of Scores Obtained by Group-I

SD2→Standard Deviation of Scores Obtained by Group-II.

Category-wise comparison of Students Achievement

Male

Table-1: Comparison of of Students Achievement

Name of the Group		N	\bar{X}	SD	Calculated Value -Z
Group-A (English)	Male	50	32	6.75	2.0
Group-B (Mother tongue)	Male	50	29	8	

T.V= 1.96(.05 Level of Significance) CR= 2.0

The Arithmetic mean of the achievement of the students in teaching terminology of mathematics in English and mother tongue was 32 and 29 respectively. The difference of means indicated the better performance of students in learning English teaching terminology in mathematics. The CR value was (2.0) greater than the table value 1.96. It means the difference of achievement between the English and mother tongue is statistically significant.

Female

Table-2: Comparison of Groups Achievement

Name of the Group	N	\bar{X}	SD	Calculated Value -Z
Group-C Female (English)	50	30	7.26	2.0
Group-D Female (Mother tongue)	50	27	9.61	

T.V= 1.96(.05 Level of Significance) CR= 2.0

The Arithmetic mean of the achievement of the students in teaching terminology of mathematics in English and mother tongue was 30 and 27 respectively. The difference of means indicated the better performance of students in learning English teaching terminology in mathematics. The CR value was (2.0) greater than the table value 1.96. It means the difference of achievement between the English and mother tongue is statistically significant.

Table-3: Sex-wise Comparison of Achievement

Language	Name of Group	N	\bar{X}	SD	Calculated Value -Z
English	A-Male	50	32	6.75	2.1
English	C-Female	50	30	7.26	

T.V= 1.96(.05 Level of Significance) CR= 2.1

The Arithmetic mean of the achievement of the students in teaching terminology of mathematics in English and mother tongue was 32 and 30 respectively. The difference of means indicated the better performance of students in learning English teaching terminology in mathematics. The CR value was (2.1) greater than the table value 1.96. It means the difference of achievement between the English and mother tongue is statistically significant.

Table-4: Language and Group-wise Comparison

Language	Name of Group	N	\bar{X}	SD	Calculated Value -Z
English	A-Male	50	32	6.75	2.0
Mother tongue	D-Female	50	27	9.6	

T.V= 1.96(.05 Level of Significance) CR= 2.0

The Arithmetic mean of the achievement of the students in teaching terminology of mathematics in English and mother tongue was 32 and 27 respectively. The difference of means indicated the better performance of students in learning English teaching terminology in mathematics. The CR value was (2.0) greater than the table value 1.96. It means the difference of achievement between the English and mother tongue is statistically significant.

Table-5: Language Comparison

Language	Name of Group	N	\bar{X}	SD	Calculated Value -Z
Mother tongue	B-Male	50	29	8.0	2.0
English	C-Female	50	30	7.26	

T.V= 1.96(.05 Level of Significance) CR= 2.0

The Arithmetic mean of the achievement of the students male & female in teaching terminology of mathematics in English and mother tongue was 29 and 30 respectively. The difference of means indicated the better performance of students in learning English teaching terminology in mathematics. The CR value was (2.0) greater than the table value 1.96. It means the difference of achievement between the English and mother tongue is statistically significant.

Table-6: Mother tongue-wise Comparison

Language	Name of Group	N	\bar{X}	SD	Calculated Value -Z
Mother tongue	B-Male	50	29	8.0	1.76
Mother tongue	D-Female	50	27	9.6	

T.V= 1.96(.05 Level of Significance) CR= 1.76

The Arithmetic mean of the achievement of the students male & female in teaching terminology of mathematics in English and mother tongue was 29 and 27 respectively. The difference of means indicated the better performance of the male students. The CR value was (1.76) less than the table value 1.96. It means the difference of learning in mother tongue is statistically insignificant.

10 out of 20 teachers said that teaching terminology in Mathematics learning is better than mother tongue it means 50% teachers are in favor of the English as compared to Mother tongue. 08 out of 20 teachers said that both languages are effective in teaching terminology of learning Mathematics. It means 40% teachers are in favor of the English as well as mother tongue.

02 out of 20 teachers said that only the mother tongue, which pace the marks on the mind of the students to understand the teaching terminology in learning mathematics. It means 10 % teachers are in favor of mother tongue. The percentage in graph above i.e. 50% and 40% means 90% are in the favor of English language and said that the terminology of Mathematics is easier to pronounce and learn in English as compared to Mother tongue.

Conclusion

No doubt that, language is a medium through which we acquire knowledge, analyze issues, think and express opinions, but most of the people think in their language and use mother tongue to learn second language involving translations process.

After getting results and classroom observations it is concluded that teaching terminology in learning mathematics in English bears fruit for the sustainable development of the society. From the statistical analysis it was inferred that at Secondary School Level, the medium of instruction in teaching terminology of Mathematics learning in English have significant effect on both male and female students. So it is suggested that the terminology of mathematics in teaching learning process is taught in English at secondary school level for enhancing the quality of education.

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Use of Information and Communication Technologies in Teacher Training

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Abstract

The study focused upon the availability and usability of information and communication technologies (ICTs) at Allama Iqbal Open University (AIOU). Teachers' skills and attitude towards the use of five necessary technologies i.e. electronic communication, word-processing, spreadsheets, presentations and Internet browsing (HEC, 2006) were assessed,. Problems and barriers to the uptake of ICTs were also evaluated in this study. Data was collected from 50 tutors and 300 students of B.Ed, M.Ed and MA Education at AIOU in 2009. An inventory sheet and questionnaires were used as research tools. The results indicated that teachers have reasonable skills to use computer and Internet while students' skills to use these technologies were unsatisfactory. Both teachers and students were frequent user of e-mailing, word-processing and searching academic related studies. Teachers often use presentations while students were less user of this technology. Both were infrequent user of spreadsheets. Major barriers were lack of training, lack of hardware, lack of quality software and power failure. Therefore, a more holistic approach may be used for the training of teachers and trainees to use these technologies. Emphasis may be given on the maximum provision of computers and Internet paraphernalia so that teachers and trainees may achieve optimum benefits from these technologies.

Introduction

The Allama Iqbal Open University, first Open University in Asia and biggest institution in Pakistan, is a unique institution in many ways affording educational facility to all children from 'nine to ninety'. Being the only Open University of Pakistan, the AIOU, since its

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inception, has been serving the nation by producing a highly educated human capital. Education has got paramount importance in the 21st century due to emergence of globalization and increasing global competition and information and communication technology (ICT) is the sole potent driving factor of globalization. Doubtless to say that in this fast, changing and competitive world, education and technology are the master keys for respectable survival, growth and development especially information technology offers some extraordinary opportunities in education (Gvernmrnt of Pakistan, 2000).

Quality of education exhibits the status of any country in the world and there is a close linkage between prosperity of a nation and the quality of education it provides to its people. Quality education improves standards of living of people by enhancing the performance of engines of economic development e.g. industry, agriculture and governmental organizations (Raouf and Niaz, 2006). Quality and quantity of education plays so critical role that rise and fall of nations depends on the quality and quantity of education (Jumani, 2005).

Developed countries have given top priority to quality education while developing countries are now also emphasizing to enhance the quality of education. Teachers play discriminative role in increasing quality of education. The quality of education is directly related to the quality of instruction in the classroom. The teacher is considered the most crucial factor in implementing all educational reforms at the grassroots level. It is fact that the academic qualifications, knowledge of subject matter, competence and skills of teaching and the commitment of the teacher have effective impact on the teaching learning process (Education Policy 1998-2010).

The rapid development of information and communication technologies (ICTs) and the move towards more knowledge-intensive, interdependent and internationalized societies create new challenges and opportunities for the design and delivery of education. (p.8)...The current and emerging communication and information technologies provide unique opportunities to continue the professional development of teachers and other educators” (UNESCO 2005).

Literature Review

Every country is giving paramount importance to enhancing the quality of teachers and national policies have been influenced by the growing realization that teachers have a key role to play in determining the quality of out put of educational institutions (Ministry of Education, 2004). Teachers play discriminative role in increasing the quality of education. Zafar (2002,p.7) described the importance of quality of education and its relation with teachers in these words, “Definitely the quality of life of an individual and society depends upon the quality of education and quality of education system and it is directly related to the quality of teacher and vice versa”. The secret of quality education lies in the quality of teachers. UNESCO (2003, P.I) document also supported this idea in these words, “Good teachers are essential for the effective functioning of education systems and for improving the quality of learning process”. Highly qualified or professionally well developed teachers are the cause of quality enhancement in educational system. Chochran (2006, p.XIIV) described the same idea in an artistically, “It is a universal fact that quality of students depends upon the quality of teachers either highly qualified or have highly professional development”. Siddique (2004, p.6) expressed the importance of teachers in these words, “If we accept that the quality of any education system ultimately depends on the quality of teachers, and that “no country can rise above the level of their teachers”, then the matter of teacher development is one which deserves our urgent, careful and continued attention”.

It is the IT era and technology has played pivotal role in the professional development of the teachers and using technology is necessary skill for teachers (Killen 2003, p.264) This skill is essential for every teacher training programme because other skills can be enhanced through the usage of information and communication technologies. Davidson College (USA, 2006) has divided the competencies of teachers into three categories i.e. content knowledge, professional and pedagogical competencies. Following three skills were part and parcel of their teacher training programme:

- Teachers know the specific uses of technology in their discipline. (**Content Knowledge**)

- Teachers have strong and technological skills. (**Pedagogical skills**)
- Teachers know and respect the influence of race, ethnicity, gender, religion and other aspects of culture on a child's development in the area of technology (**Professional skills**).

These reports and studies first give emphasis on basic skills of ICTs and then on the skills required for daily life of students and teachers, while an European Report on Quality Indicators of Lifelong Learning (2002, p.56) recommended acquisition of ICTs skills throughout the life, "In addition, flexibility will be needed for individuals to acquire ICT skills throughout their lives". ICTs based programmes and services have increased the quality of education so most institutions have introduced ICT-based programmes and services in pursuit of quality improvement and expansion (UNESCO 2005).

ICTs are not only beneficial during teaching learning process but also empower teachers by enhancing their competencies and administrators in effective management and administration. The Beijing Declaration of the E-9 Project on ICT and EFA (August 2001) reiterated its commitment to raise the quality of education through using Information Communication Technology (ICT) and better training of teachers and administrators (UNESCO 2003) . ICTs based programmes are very interesting and motivating for the learners as they are engaged in these programmes keenly. These programmes facilitate them in the acquisition of basic skills which ultimately increase the quality of teacher training programmes. ICTs can enhance the quality of education in several ways: by increasing learner motivation and engagement, by facilitating the acquisition of basic skills, and by enhancing teacher training (UNDP-APDIP (2002) ICT in Education, New York).

ICTs are very useful for indicating and addressing shortcomings of the existing activities of the teacher training programmes. ICTs can enhance teaching by enhancing what is already practiced or introducing new and better ways of learning and teaching (Education and Culture). Modern technologies are expensive and

their cost is the major problem for the developing countries but due to their effectiveness in the field of education, top priority is given to enhance the provision and utilization of ICTs. ICTs are being widely used in education, and interest in their use appears to be growing, even in the most challenging environments in the developing countries (InfoDev, 2005).

These modern technologies have revolutionized every aspect of education specially in facilitating and empowering teachers their role is superb. Education leaders agree that all new teachers must graduate from teacher education programmes with the knowledge and skills that will allow them to integrate technology easily and effectively into their daily teaching, whatever the setting. In a study on coverage, quality, new trends and international practices of open and virtual universities in Pakistan, Zafar (2007) concluded that the use of communication and information technology and the newer media has helped these two universities' (AIOU and VU) potential to:

- Improve access to education;
- Increase teaching and learning possibilities and scope;
- Provide more immediate feedback to students;
- Provide alternative learning paths to students;
- Make good teaching more widely available; and
- Increase openness, with access to technology.

Information technology is a driving factor for globalization, global economy and modern society. It has revolutionized every way of life and global requirements of education like education for all and quality education etc. can be met through the proper provision and effective utilization of information and communication technologies. The capacity and the possibilities offered by ICT in improving socio-economic life are almost limitless. Hence there is need to fully integrate ICT in education to exploit its potential to overcome any challenges to expansion of quality education (Ministry of Education 2007).

Higher Education Commission Pakistan has mentioned 100% of the faculty should have undergone 1-3 months training courses

emphasizing pedagogical skills, communications skills and information technology usage skills. (HEC, 2005) Same idea about the dynamic role of ICTs in modernization of economy and society, increasing quality of teaching learning process, enhancing research facility and good administration has been given by a UNESCO (2003) and Zafar (2005), "ICT is both a driving force for modern economies and an important tool for higher education to enhance teaching, research and administration". Information technology has now become basic vehicle for education in the modern society.

Recognizing the prime importance of ICTs in teaching learning process, research facility Farrell and Wachholz (2003, p.5) has described, "The need to encourage and facilitate the use of ICTs in education is urgent". Technological advancement has revolutionized every part of education and no doubt technology is a catalyst for teaching and learning and it has distinct advantages that transcend the classroom environment. ...ICT can enhance teaching quality by supporting and reinforcing the use of innovative teaching practices. The National Information and Communications Technology (NICT) Strategy contains the following six elements

- Use ICT to extend the reach of educational opportunity.
- Apply ICT to strengthen the quality of teaching and educational management.
- Employ ICT to enhance student learning.
- Develop complementary approaches to using ICT in education.
- Build on the current experiences of existing and successful ICT programmes.
- Develop capacity at the federal and provincial department of education levels. (Ministry of Education, 2003).

Initiatives of HEC

HEC is determined to meet the challenges offered by the information age and it has given prime importance to the provision and utilization of ICTs in higher education sector throughout the country. Besides other facilities, minimum of one gigabyte (1 GB) last mile connectivity of Internet, Pakistan Education Research Network

(PERN) and digital library are the foundation stone initiatives in Pakistan's history.

Pakistan Education Research Network (PERN)

The establishment of PERN was a radical step of HEC and its main purpose was to interlink all universities and degree awarding institutions, registered with HEC. This project provides opportunity of access to International Ocean of electronic knowledge. PERN 2 was launched in 2007 to strengthen PERN and it aimed to provide gigabyte connectivity to all higher education institutions in Pakistan. Through this mega project more than 100 times enhanced bandwidth will be provided to all universities as compared to present bandwidth (HEC Annual Report, 2003-04, 2004-05 & 2006-07).

Digital Library

The digital library programme of the Higher Education Commission (HEC) is the corner stone of its information and communication technology (ICT) strategy which was launched in January 2004. The vision of the digital library programme is to meet the information requirements of the higher education and research sector in Pakistan by providing access to high quality scholarly information based on electronic delivery. It is playing fundamental role to address the knowledge gap or "digital divide" between Pakistan and developed countries. More than 23,000 journals and 45,000 e-books from 220 international publishers are being provided for research purpose. (HEC Annual Report, 2004-05 & 2006-07).

Pakistan research repository

Another key initiative to promote open access to scientific literature and visibility of research conducted in Pakistani universities, HEC has launched the Pakistan Research Repository (PRR). More than 3000 PhD and M.Phil theses are available online in high-quality digitized format. (HEC Annual Report, 2004-05 & 2006-07).

ICTs and Ranking of Universities

For best possible utilization of ICT in higher education, HEC has launched ICT ranking process in Pakistani universities. The main objective of this programme was to develop and bring the higher education institutions at par with international standards by

providing and implementing standards to access the information worldwide. (HEC Annual Report, 2004-05).

Purpose of the Study

The study was conducted to achieve the following objectives:

- i. To evaluate the current use of ICTs in teacher training institutions.
- ii. To ascertain the teachers' skills to use computer and its related technologies.
- iii. To assess the problems arise during the use of ICTs.

Research Methodology

Population and Sampling

It was a descriptive study therefore, survey approach was considered appropriate for this research. 300 B.Ed, M.Ed and MA Education students/learners and their 50 teachers/tutors were (conveniently) taken as a sample of the study from Islamabad, Rawalpindi, Sargodha, Faisalabad and Chakwal regions in 2009.

Instruments and Their Development

After an intensive review of the literature, survey type study was carried out to collect the data. Therefore, to elicit the opinion of the respective respondents, a questionnaire was constructed. Questionnaire was pilot tested on 30 students and 10 teachers. After incorporating observations given by the students and teachers, the questionnaire was finalized. In the questionnaire items about the usability of ICTs like computer, internet facility, duration of computer and internet utilization, skills to use existing ICTs, training for their utilization, digital library etc. were included. Problems in the use of ICTs were asked and finally an open ended question/statement was given at the end of the questionnaire to elicit their valuable opinions and suggestions about the utilization and role of ICTs and teacher training, especially their relationship with pedagogical skills etc. Questionnaire was focused on; 1) the utilization profile of ICTs. 2) Skills to use ICTs. 3) Problems faced during the utilization of ICTs. The overall reliability coefficient was .76 as shown in the table below.

Table 1: Reliability coefficient of the questionnaire

Focused Area	No. of Items	Mean	Standard Deviation	alpha
Utilization of ICTs	5	3.41	.78	.91
Skills to Use ICTs	2	3.21	.82	.98
Problems Faced	5	4.24	.61	.97
Knowledge Competency	5	4.52	.49	.93
Overall	17	3.85	.73	.94

Data Collection and Analysis

Questionnaires were administered personally and 37 out of 50 (74%) from teachers and 191 out of 300 (64%) from students were returned back. The data collected through questionnaires were cleaned, coded and analyzed by using percentage and mean formulas through SPSS XIV.

Table 2: Utilization of ICTs

Item	Respondents	OS		OM		OW		D	
		N	%	N	%	N	%	N	%
e-mails	Teachers	---	---	---	---	8	22	29	78
	Students	8	4	18	9	89	47	76	40
Word processing	Teachers	---	---	4	11	16	43	17	46
	Students	---	---	18	9	147	77	26	14
Creating Spreadsheets	Teachers	17	46	15	19	5	16	---	---
	Students	84	44	107	56	---	---	---	---
Creating presentations (PowerPoint)	Teachers	2	5	3	8	23	62	9	24
	Students	69	36	115	60	7	4	---	---
Academic related studies	Teachers	---	---	3	8	11	30	23	62
	Students	8	3	17	7	141	77	25	13

Scale value for this table is: OS=Once a Semester, M=Monthly, W=Weekly, S =Several Times and D=Daily

It is evident from table-1 that About three fourth (29 of 37) teachers are most fluent in the use of e-mails as they are creating, reading or sending e-mails daily and the remaining 22% are using technology on weekly basis. It is very interesting that 40 % students are also using their e-mails on daily basis and 32% are using it on weekly basis. Similarly about half (17 of 37) are writing documents (word processing) daily and 43 % are using this technology weekly. Students are slightly less inclined (77 %) towards the use of word processing. About half (17) teachers are using spreadsheets at the end of semester and 19% use this technology on monthly basis. Exercise of spreadsheets (MS Excel) is very poor among students (24% once a semester) and the remaining 75% students did not respond about their practice of spreadsheets. About two third (23 of 37) teachers are creating and presenting their lectures through power Point while about half students (47%) use power point on monthly basis. Similarly both are frequent user of these technologies for academic related studies as two third of the teachers are using ICTs on daily basis and 77% students are using these technologies on weekly basis for this purpose.

Table 3: Utilization of ICTs

Items	Respon- dents	Mean	sd	Rank	
				Stud- ents	Tea- chers
E-mailing	Students	3.22	.781	1	1
	Teachers	3.78	.471		
MS Word	Students	3.04	.479	2	3
	Teachers	3.35	.676		
MS Excel	Students	1.56	..498	5	5
	Teachers	1.70	.740		
MS Power	Students	1.88	.542	4	4
Point	Teachers	3.05	.743		
Academic	Students	2.98	.623	3	2
Researches	Teachers	3.54	.640		

It is evident from the table that in ranking of the utilization of these technologies students and teachers both give top priority to the e-mailing technology. However teachers placed academic related researches at second number while students gave second priority to

word-processing. Interestingly both teachers and students were least user of spreadsheets (MS Excel) as they ranked it at number five.

Table 4: Level of Skills

Item	Respondents	1	2	3	4	5	Mean
Computer	Teachers	1	9	15	8	4	3.14
	Students	67	42	39	32	11	2.07
Internet	Teachers	1	10	14	7	5	3.14
	Students	59	48	47	25	12	2.34

Scale value for this table is Poor=1, Fair=2, Good=3, Very Good=4 and Excellent=5

Table-4 indicates that computer and internet utilization skills are not very good in both categories. Teachers seem skilled to some extent (Mean score is 3.14 in both technologies) while students in both types of skills seems behind the required skills (Mean score in computer skills is 2.07 and in Internet skills is 2.34 and about 57% students' computer and Internet skill level is below good.

Table 5: Level of Skills

Respondents	Items	Mean	SD	df	Std. Mean Error	t- value	p- value
Teachers	2	3.14	1.01	4	.05	3.53	0.31
Students	2	2.24	1.77	4	.10		

It is evident from the table: 5 that there is a significant difference between the mean scores of teachers and students regarding skills to use computer and its related technologies. It is concluded that teachers have sufficient skill level while students have rather insufficient skills to use these technologies.

Table 6: Barriers in the utilization of ICTs

Item	Respo- ndents	SA	A	UNC	DA	SDA	%	Me an
Lack of hardware	Teachers	11	19	2	4	1	81	4.0 0
	Students	82	91	7	7	4	91	4.2 5
Lack of training	Teachers	15	17	2	2	1	89	3.7 6
	Students	79	89	16	5	2	89	4.2 5
Lack of software	Teachers	13	15	6	2	1	78	4.0
	Students	79	86	15	7	4	88	4.7 2
Lack of technical support	Teachers	14	17	2	3	1	84	3.6 5
	Students	67	54	25	28	17	59	3.6 6
Power failure	Teachers	12	16	1	6	2	81	3.8 1
	Students	78	77	13	15	8	81	4.0 6

It is evident from table: 6 that dominant majority of both academicians and students (more than 81%) were of the view that lack of hardware was the major problem in the use of these ICTs. Likewise dominant majority of both academicians and students (more than 81%) were agreed that lack of software and power failure are the barriers to uptake these ICTs. 89% academicians and 89% students agreed with the statement that lack of training was the key problem for them.

Table 7: Barriers to uptake ICTs

Respondents	Items	Mean	SD	df	Std. Mean Error	t- value	p- value
Teachers	5	3.67	1.12	4	.153	1.036	0.23
Students	5	3.89	1.03	4	.141		

It is evident from the table: 7 that there is no significant difference between the mean scores of teachers and students regarding problems faced by them during the utilization of these technologies, as p-value is 0.235 and t-value is 1.036. It is concluded that teachers and students both have similar opinion regarding barriers to uptake the computer and its related technologies.

Table 8: Role of ICTs in enhancing knowledge competency

Statements	Respon- dents	SA	A	UNC	DA	SDA	%	Mean
ICTs & subject knowledge.	Teachers	25	12	--	--	--	100	4.6
		106	80	4	1	--	97	4.5
Knowledge on internet.	Students							
	Teachers	29	8	--	--	--	100	4.7
Professional knowledge & ICTs.	Students	81	79	24	6	1	84	4.2
	Teachers	18	19	1	--	--	100	4.4
Access to knowledge curriculum	Teachers	93	82	15	1	--	91	4.4
	Students	28	9	--	--	--	100	4.7
ICTs help in professional development	Teachers	109	81	1	--	--	99	4.5
	Students	18	18	1	--	--	97	4.4
	Students	79	85	21	3	3	86	4.2

It is evident from table: 8 that computer and internet both are very useful in enhancing knowledge competencies i.e. subject area knowledge (mean score is 4.68 and 4.52), availability of immense liberal knowledge (mean score is 4.78 and 4.22) and professional knowledge (4.46 and 4.23) in the opinion of academicians and students. Mean score is more than 4.22 in each statement.

Table 9: Role of ICTs in enhancing knowledge competency

Respondents	Items	Mean	SD	df	Std. Mean Error	t- value	p- value
Teachers	5	4.68	.475	4	.1476	1.087	0.252
Students	5	4.52	.570	4	.1538		

It is evident from the table: 9 that there is no significant difference between the mean scores of teachers and students regarding their views about role of technologies in enhancing knowledge, as p-value is 0.252 and t-value is 1.087. It is concluded that teachers and students both have similar opinion regarding role of ICTs in enhancing knowledge competency of the teachers.

Conclusion

ICTs have attained paramount importance in the 21st century and these are very effective for pedagogical development of teachers. Recognizing the prime importance of ICTs AIOU has taken many steps to use latest information technologies like Wi-Fi Mesh to improve communication among all stakeholders (Vice Chancellor's Annual Report, 2007- 2008) Doubtless to say that Skills to use ICTs are indispensable for teachers in this information era and herein distance teachers have reasonable skills to use computer and Internet while students' skills to use these technologies were unsatisfactory. Both teachers and students were using e-mail and word processing frequently. Both were fluent were user of Internet for academic related studies. Teachers were slightly less users of Spreadsheets (MS Excel) while students' practice to use this technology was unsatisfactory. Teachers are fluent user of Power Point technology while students are less inclined towards the use of this technology. ICTs play very important role in increasing knowledge competency by providing access to the ocean of electronic knowledge. Teachers and students both were not using computer and internet properly and effectively especially students were not attaining proper benefits from these technologies due to lack of skills for their utilization. Lack of hardware and lack of skills to use these ICTs were the major barriers to uptake these technologies. Therefore, a more holistic approach may be used for the training of both groups. Emphasis may be given on the maximum deployment of computers and internet so that optimal benefits may be achieved to meet the challenges of 21st century.

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Women Differences in Seeking Educational Leadership and Management

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Abstract

The under-representation of women in positions of senior management within educational institutions continues to be a matter of some concern particularly as the teaching force is largely dominated nationally and internationally, by women. Studies on gender and leaderships have revealed a number of barriers to women seeking educational leadership and management positions. This paper is based on narratives drawn from women aspiring to leadership and management in different educational contexts from very different parts of the world. The study examines the "glass ceilings" and "glass walls"; that is, horizontal and vertical barriers faced by each of the women within their cultures and environments.

Introduction

Few institutions in society change as slowly as social relationships, and few, it would appear, more slowly than the systemic discrimination of women. Where there is a change it has tended to be for such pragmatic reasons as the need to tap into the extra resources that the female workforce represents for boosting a nation's economy. Women have, therefore, now become viable and valuable contributors to the workforce, not only on the "sticky floors" doing low-paid, menial but often essential jobs, pushing through the "glass ceiling" and pushing aside "glass walls" to become leaders in their own right. This is an exploratory study of women from different parts of the world and their description of barriers to their career trajectories.

This study examines the horizontal and vertical barriers faced by each of nine women from different districts of Pakistan and backgrounds in an attempt to identify commonalities and differences between women seeking to reach educational leadership positions in a range of cultures and societies.

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More specifically, this work seeks to determine the influence of familial history on women's career progressions across a range of backgrounds as well as their experiences of working and "managing" in bureaucratic and organizational settings. The study is located in a gender and management paradigm and draws on relevant literature from these discourses.

Conceptual framework

The teaching profession both in United Kingdom and European countries is, with few exceptions, predominated by women. However, a look at the statistics reveals that despite the large numbers of women in the profession, they are greatly under-represented in positions of management. The Kruger, M.I (1996, p. 447) devoted an issue to women in education management. The issue incorporated articles from a number of European countries, all but one of which focused on the under-representation of women in senior management as a major issue. Riley (1994, p. 88) notes that despite the variations in the pattern of representation of women in positions of educational leadership across Europe, what is common is: that "Educational leaders are predominantly male and white"; that women are under-represented at managerial levels in virtually all countries; and, that "the proportion of women employed in teaching declines as the age of the students rises". This feature has implications not just for women and the advancement of their careers within the teaching profession, but also raises issues of equality and opportunity for those being taught, regardless of gender. As Hall (1999, p. 159) puts it:

Analysts of education management acknowledge the disparity between women's numbers in the teaching profession and their representation at senior levels. We have all become sophisticated in interpreting and explaining these figures. We are less proactive in rigorously thinking through the consequences of this disparity for the educational and employment opportunities of girls and boys, men and women.

Teaching has traditionally been seen as a "suitable" job for women. Newman (1994, p. 193) describes this association with a "caring profession" as one that offers women "quasi-familial roles and

identities around a core of male hierarchies and privileges". The fact that the teaching profession is relatively low paid and does not enjoy the same high status as other male-dominated professions may partly account for the fact that there are more women than men in this profession, particularly on part-time and short-term contracts. In addition, women's place in the workplace tends to be seen in terms of national economic productivity rather than in terms of equality of opportunity. The quality of nurturance and selflessness required of the profession is often thought to be more suited to women. Critics of the romanticized notion of the "caring professions", such as Acker (1995), points out that such sentiment about caring as a calling ignore the actual work involved in these occupations. That is, school teaching is work and the school is a workplace for teachers.

This notion may also explain why, even when women do achieve senior positions within the educational institution, they are often typecast into the same "caring, nurturing" roles. Women in middle management roles in education are often assigned pastoral duties; that is, they are cast in the role of "the senior mistress", while the men are given responsibility for areas such as curriculum and finance. Acker and Feuerverger (1996, p. 402) describe that the additional pressures imposed by the "caring expectation" on women university teachers to be intellectually inspiring yet endlessly nurturing. They caution that the fact that women have been seen as "naturally" suited to the work has served to disguise its potential for exploitation and to discourage women from expressing emotions that might be at odds with the caring script. Commenting on the implications of such stereotyping for their career progression, Coleman (1996, p. 322) reports that women were becoming aware of the dangers of such labeling and were taking steps to avoid these traditional roles.

Unfortunately, it has not been easy for women to cast off this quasi-maternal role bestowed on them and to enter into the perceived "masculine" world of managerial and leadership. That women have shown themselves to be extremely capable educational-leaders is without question (Cubillo, 1999, p.16). Discussions on the gendered differentiation of leadership have centered on the different qualities and styles of leadership of men and women; that is, the so-called masculine and feminine styles of leadership. The transformational, empowering

and collaborative style of leadership associated with women is compared with the more directive and authoritarian style traditionally associated with male leaders. The debate has progressed further to engage the concept of the androgynous leader which, rather than attributing the different qualities exclusively to any one gender, suggests that every good leader has available to them both sets of characteristics from which they are able to select the most appropriate for the situation (Singleton, 1993, pp. 167 – 76). Whichever model one subscribes to, there is little doubt that many women have a great deal to contribute to the changing practice of educational management in response to the radical global restructuring of education.

The problem that most aspiring women leaders face, then, is not in justifying their right to earn their place in senior management among the "great and good", but in gaining access to those positions. While it is true that more women now than ever before are slowly chiseling through the glass barrier to take on leadership positions, one can hardly claim to hear glass ceilings shattering around us. While the arguments for gender-neutral leadership may make some opponents to women as managers feel less uncomfortable about the threat to their masculine hegemony, it does little to ease entry into the male-dominated arena of management and leadership.

Women who get into leadership are ... trouble. In particular, strong women are difficult and dangerous because they trouble dominant masculinities and modes of management by being different (Blackmore, 1999, p. 107) describe them as "outsider insider". That is inside the institution, but out side and "boys club". Roles in and out of school should help boys feel more comfortable with the idea of women as leaders beyond the family and school (Nemerowicz and Rosi, 1997, p. 37).

A third model concerns the culture and traditions affecting the ways in which women can operate within society. We have identified three levels:

- i. the "macro" socio-political level;
- ii. the "meso" organizational level; and
- iii. the "micro" level which concerns the individual herself.

These levels are briefly explored as a foundation for this study of women across country boundaries.

The socio-political dimension focuses on the entrenched hegemonic traditions and culture of a region or country (often strongly influenced by religious customs and beliefs) which women, positioned by circumstances, are obliged to accept in their introduction to an international study of gender and management in education, Drake and Owen (1998, p. 1) draw attention to countries where women are both leaders and among the most appraised people;

There are countries where they "are cast as both bringers of change and guardians of the old cultures". Economic rationalization programmes in developing countries intended to liberate the market present their own contradictions. Discussing the effects of one such programme in India, Ghosh (1996, p. 116) argues that the economic policies and liberating market forces, which only take productive economy into consideration, are structurally biased against, and further disadvantaged women.

On the meso-level, attention is drawn to power relations within organizations and, in particular, the hierarchical and paternalistic nature of most educational institutions. Acker and Feuerger (1996, p. 417) present an analysis of the university as "a patriarchal institution inevitably favoring men". Heald (1997, p. 40) describes paternalism as "a tactic of power not only in the obvious sense of 'father knows best', but because it makes everyone else responsible for father's disfavor". In a study of primary schools, Court (1998, pp. 35 – 57) reported that despite the changing image of gendered leadership images, links persist between dominant forms of masculinity and authority and leadership. Garrett (1997, p. 43) reports' a conversation with a female head teacher who spoke of the difficulty local authority officers had in dealing with her as a woman and particularly as a woman in a "position of authority". Newman (1994, p. 193) points out that women managers seem to be accepted but often only in a traditional familial role; that is: as mothers, concerned with staff

welfare; as aunts, the older, single woman with a senior status but little real power; as wives, the supportive secretary or assistant; or, as daughters, who are "allowed some privileges on the expectation that they would eventually leave home and therefore present little challenge".

The third dimension, concerning the individual can be conceptualized in terms of women's perceived lack of self-esteem (Gold, 1996 pp.19-33); which may well be a consequence of the impositions of traditional male hegemony at the macro-level and the patriarchal culture and climate at the meso-level. There is also the added imperative of dutiful compliance to socialization and societal norms, values and roles. In their study of Ugandan women managers, for instance, Brown and Ralph (1996, p. 23) draw attention to the different experiences of males and females in education and "the additional social responsibilities that the majority of girls and women hold".

Within this contextual background, the authors conducted an exploratory study in order to:

- Determine the major influences on women's career choices and, in particular, their family backgrounds and history;
- Identify the positive or negative influences encountered by women as they sought to progress within their careers in educational leadership; and,
- Identify commonalities and differences between women seeking senior positions in education in a range of cultures and societies.

Methodology

Bruner(1990) states that over the past 25 years research has shifted from a predominantly logic scientific mode of knowing, to one that values narrative inquiry, or good stories, as equally significant epistemological tools for understanding human experience". This narrative, in turn, stems from our interest in understanding how people make sense of their lives and experiences. Coles (1989, p.64) says that it is only through stories that we can fully enter another's life. Through narrative, we can penetrate cultural barriers, give voice to human experiences and experience human intentions and actions.

All coherent life portraits and stories are tales of personal identity. Therefore, personal narratives must be understood within particular social, historical, cultural and political moments. Scheibe (1986, p. 131) explains this concept as:

“Human identities ... Evolving construction; they merge out of continual social interactions in the course of life. Self-narratives are developed stories that must be told in specific historical terms using a particular language, reference to a particular stock of working historical conventions and a particular pattern of dominant beliefs and values”.

Narrative inquiry in education has the potential of deepening our understandings of the human condition and making our research more successful and useful. However, the objectivist assumptions that prevail in many narrative inquiring projects can hinder our efforts to tap into the power of narrative as an epistemological tool. If narrative inquiry is to deepen our understanding of the lives of others and lead to better ways of responding to the social and educational problems plaguing us, then we would use processes of inquiry that enable us to enter the lives of those who share their stories. If we are to understand the stories we are told, we will have to undertake the clarification and interpretation of the meaning of stories as much as we value gathering them.

The project reported here was a piece of narrative research. In order to know what an experience can be like in general, it is useful to hear detailed descriptions of different variations of that experience (Weber, 1993, pp. 71 – 82). This idea led us to an initial study in Allama Iqbal Open University, Quaid-e-Azam University and International Islamic University. Which we asked nine women from different cultures and backgrounds to tell us the stories of their experiences as they sought positions of leadership and management in educational institutions and communities, and to describe positive and negative influences they encountered. As Connolly and Clandinin (1990, pp. 2 – 14) suggest, telling stories makes life experiences accessible in potentially relevant and meaningful ways. The very process of sharing enables the tellers to relive and reflect on their experiences as part of the ongoing research process.

The women came from nine districts, namely:

- (1) Lahore
- (2) Multan
- (3) Bahawalpur
- (4) Sukkar
- (5) Hyderabad
- (6) Karachi
- (7) Quetta
- (8) Peshwar
- (9) Muzaffarabad (AJK)

All the women were, at the time, engaged on masters' degrees in educational management at traditional UK universities. They had previously been in (or were aspiring to) leadership positions in their own countries. All the women had been employed, prior to the course, in a range of professions. Seven of the women had worked in educational institutions: two as heads of departments in schools; one head of department at a university, a head teacher, a local government education officer, an educational psychologist and a university administrator. The other two women were a lawyer and a senior level health care worker seeking to work as educators.

An initial questionnaire was designed to identify socio-demographic data such as age, religion, marital status and position attained in their careers up to this point. The major part of the research drew on the stories told by these women of their personal experiences in attempting to reach beyond the educational "glass ceiling". The individual discussions were conducted in the broad format of a semi-structured interview in order to ensure that certain issues were addressed, such as:

- Childhood and family experiences;
- Parental influences;
- Nature of early and higher education;
- Reasons for seeking leadership positions;
- Experiences within the workplace and peer support; and
- Perceptions of barriers, if any.

The women were allowed as much time as they required to recount their stories. The narratives were audio-taped and written transcripts were produced. Care was taken, as far as possible, to safeguard the integrity of each narrative in the representation of their stories.

The limitations of the study are acknowledged: it is a small-scale study with a sample size of nine; the data is self-reported; and, because the respondents were about to complete their masters' degree courses, it was not possible to conduct follow-up interviews at the time of reporting, in order to explore emerging issues in greater depth. Nevertheless, the study has raised some salient points, not least was the importance of trying to understand family histories and cultural experiences when attempting to identify capabilities for leadership and barriers to obtaining such a position.

Data and Discussion

As this study was of a relatively small sample of women, the findings must be taken as suggestive rather than conclusive. In our discussion of emerging issues, we have reflected on and drawn on appropriate literature from the field. International generalizations about issues associated with gender are difficult, as much depends on the cultures, traditions and values in each country and society. Nonetheless, some interesting issues have emerged from this initial study with a number appearing to be relevant across a range of cultural contexts. Broadly, the following factors were listed as important positive influences for the women in their pursuit of education and career progression: familial support, with particular emphasis on:

- Paternal support;
- Peer support;
- Self-esteem; and
- Confidence.

Common barriers identified were traditional, patriarchal cultures and perceived male dominance of management.

Commonalities

The narrative relating to family history revealed that paternal support was paramount to all the respondents, irrespective of culture or

society. In response to a question about their parents' roles in their education and the importance and influence of parental support on their educational development, all nine women identified their fathers as a deep influence in their early education and subsequent careers. Comments from three of the women were:

- My parents were very supportive, especially my father - he thinks education is really very important; he is my role model for my career
- My father was always saying in front of everybody that he wished all [his children] were girls- this may be the reason I felt encouraged
- My father was very, very supportive. I still remember him saying, "A woman's education is empowerment". My sister was the first child of the family and my father did all he could to educate her even though [the tribe] did not like girls to be educated. She was the first girl [of the tribe] to be educated,

This emphasis on paternal support may have been a consequence of the strongly patriarchal societies into which many of these women were born and socialized, wherein the supremacy of the father within the family is representational of the nature of the society itself. Hall's (1996, p. 44) study of six women head teachers in the UK similarly identified the importance of the father as the dominant role model: Over the years the relationship with their fathers had changed, but ... the fathers were still looked to for support and approval.

"However, David (2001, p.8) expressed disquiet at a discourse that assumes a traditional patriarchal family form, without acknowledging the research evidence that demonstrates that: ...it is usually mothers who have the regular responsibilities for their children's education whatever their family circumstances and situations.

Even so, in our study, while the support of both parents was recognized by the women as being essential to the furthestmost of their careers, there appeared to be a pragmatic realization of the father's dominant authority in a patriarchal society. In addition, most of the women reported that their mothers' concerns for a daughter's

self-realization appeared to be at cross purposes with their concerns over her future domestic status; that is, her "marriage ability". Highly qualified and high achieving women, it would seem, had reduced chances in the marriage stakes. Conflictingly, although none of the women spoke of marriage and raising a family as a priority, great value was placed on family values and maintaining a nurturing role within the family, whatever their professional aspirations. Luke (1998, p. 248) reported similar findings in her study of women educators in Singapore.

The women interviewed emerged as extremely self-reliant and self-motivated in spite of having faced unwelcoming and often hostile male-dominated cultures and environments. The following comments were typical:

When I was chosen, the men didn't think I was capable of doing it. They waited to see if I would fall. This made me determined to prove them wrong. This was an incentive for me to prove not just to them but to myself that I could do it; that it does not matter what other people think, it's what I can do, and what I am going to do in the situation that is important. Things don't stop me. They are not barriers because I do not allow them to be. There are lots of negatives in everything — I just ride over them.

These personal beliefs were reflected in the work of Parry (1997, p. 224), who reported that despite unequal opportunities in the occupational structure on leaving school, women are motivated to achieve equally or surpass men in educational attainment. Describing the hostility and aggression that women encountered when working in such "male-dominated organizational cultures. Marshall (1995, p. 311) recounted stories of women developing strategies for coping and fashioning themselves in images they approved; thus actively creating "viable operating identities which fitted their values. All our respondents reported a lack of peer support, particularly from the men. In fact most felt that male colleagues found them threatening as highlighted in the following extracts from their conversations:
Some of the men saw me as a threat, like when I was picked to represent (the country in an international) competition, they suggested I had been chosen for "other reasons" [that is. other than ability].

Seeing me as a woman, they just cannot understand why I should be working with them. They say things like, "You're just a woman, and you can never be the same as us". Sometimes they create obstacles for you, you just can't progress and do the job the way you want to.

Although Marshall (1995, p. 300) warned against labeling cultural patterns as "male-dominated" and thus contentious and risking unhelpful stereotyping, she went on to do just that because, she said, "it is faithful to the women's stories". She suggested that women who had identified their particular organizations as being "male-dominated" were providing a descriptive account of interactions that "tended to fit negative stereotypes of men's behaviour and that there was considerable evidence of men banding together' in reacting to individual women" (Marshall, 1995, p. 301). Other writers (Mac and Ghail, 1994; Coleman, 2001) have drawn attention to the ways in which masculine culture was enacted to actively maintain power relationships between men and women.

Conversely, only one respondent reported a lack of peer support from other women. She commented: A lot of my female colleagues think I am too power-driven. They say, "It is unnecessary, you don't have to be that good". They feel it is okay to lose sometimes, but to me it is not.

The question arises, do women acquiesce in their desire to belong and adopt stereotypes of negative male behaviour; or are they simply being "queen bees" (Marshall, 1984) unwilling, or unable, to set equitable parameters for other women, further perpetuating gender inequalities in the workplace? Hall (1996, p. 22) suggested that "where women have been successful in reaching the top, their perceptions of expectations of them as women leaders influence their behaviour".

Five of the respondents reported fewer barriers than the other four to their acceptance into educational management. All five women displayed quite a high level of self-confidence, self-esteem and, a "personable" appearance. In fact, one of the women identified her "looks" as a barrier in itself; as on more than one occasion, she had

been offered positions which were not justified by her qualifications and experience, while other better qualified and more experienced candidates had been rejected. She attributed this "success" to her physical appearance and confident personality. We might ask if the reverse could also be true: that the apparent lack of such attributes could be a disadvantage. Was this the case for the other four respondents? Perriton (1999, p. 296) spoke of women educators having "to face up to the fact that they are a semiotic item that is purchased and consumed", and of the "branding and aestheticisation of the event, of ourselves as women". Hasibuan-Sedyono (1998, p. 90) reports that "women managers [showing] early signs of leadership ... were personable and good at developing relationships with people"

Conversely, in her study on secondary head teachers Coleman (2001, p. 88) reported on aspects of femininity that were regarded as making women unsuitable for leadership. Blackmore (1999, p. 170) identified that women in management mask their gender and sexuality through how they dress, walk and talk in order to minimize their presence [and] manage the disturbance of difference they represent. Women leaders made frequent reference to being careful about dress ... of being different but not too different.

Differences

Few differences were identified in the stories of the women's career trajectories. This may have been influenced by a limitation of the study design, which requires further exploration. Although we drew women from a wide range of cultures, the discussions centered mainly on issues relating to gender equity, not ethnicity, as the women had all been in employment in their own districts. Brief cameos of the women and their perceptions of gender equity and related barriers to their career progressions are presented below as examples of differences.

The woman from Multan was unmarried youngest daughter of a wealthy father and a mother who enjoyed a privileged position in society. She stated that discussions with other students led her to believe that she was more advantaged than many from the other districts because she came from "a traditional matriarchal society,

where the woman's role in the home is greatly valued". She expressed her disquiet at what she felt were the "openly hostile attitudes" of the men in the class towards the women from their own district.

The Lahore and Karachi women generally exhibited a higher level of self-confidence than the other respondents. The Karachi woman attributed this to the "European culture and society" in which she was socialized. One woman commented that she did not "feel as different (in a Quaid-e-Azam University) as some of the other students". However, conversations with both women disclosed the existence of overt "sexism in the workplace and outside" in their own districts.

The women from the Quetta and Peshawar districts appeared to be remarkably resilient in the face of strong cultural and personal barriers. Although they had different economic backgrounds which affected their wants/needs for employment, both were pragmatic in their acceptance of the restrictions and obstacles that prevented them from even undertaking paid employment, let alone seeking career advancement. They believed that their societies were opening up to increase opportunities and equity for women but emphasized that "we have to be careful how we do it. My husband does not mind me working, but it must not affect our family life".

Conclusion

In this exploratory study, we have begun identifying common factors in and significant differences between the experiences of women during career aspirations to educational leadership and management in a number of countries across the world. The women provided insights into the influences that affected their early education and shaped their career paths. The main issue that emerged was the importance of their early histories and familial support in shaping their thinking and enabling them to aspire to higher education and role achievement. We were reminded again of the importance of historical and social influences, such as economics and the status of women within societies on women's occupations..

The women in this study displayed remarkable qualities of resilience, courage and self-reliance. Perhaps the selection process for the study helped ensure that the women were a privileged group, and so more likely to exhibit higher levels of self-confidence and independence. However, while they were privileged in their participation in an university higher degree, several of the women had to overcome major financial and personal hardships in order to do so. Most were motivated to achieve educational excellence and acquire positions of influence by both their needs for self-actualization and an altruistic desire to improve the lot of future generations of women. We wonder whether only women with a particular predisposition are able to break through the "glass ceiling and glass walls", or can most women be enabled to acquire the strengths to face such challenges?

Another issue that arose related to women's physical attributes. It seems that aesthetics are not the crux of this challenge, but the utilization of attributes for maintaining power-relations and in suppressing women's career advancement is the focus. Following Perriton (1999, p. 297), we ask whether there is an equity response that is possible or desirable to alter such projections made on women as educational leaders or managers?

No uniform "glass ceilings" or "glass walls" emerged during our discussions: they were not consistent across societies and cultures, nor were they homogenous within each society or culture. The barriers experienced by the women who have spoken here were determined not only by the more familiar institutional and organizational hegemonies, but also by specific cultural and religious beliefs and values, and socio-economic and political factors. It is only when we begin to look more closely at the inter-relation of all these factors that we will gain some understanding of the hurdles along women's career paths in educational leadership and management.

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Analysis of Text Included on Natural Phenomena in Grade-1 Textbook of Federal Board of Education in Pakistan

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Abstract

The present research was conducted to find out the representation of natural phenomena of moon in the primary school textbooks of class I. The study mainly focused upon the different modes of printed moon concepts in the textbooks. Total six textbooks are taught in class I. This sample was taken from the federal board of Islamabad. The main objectives of this study was to find out the psychological and educational properties of science concepts related with moon presented in the textbooks and to check out its different modalities. For this purpose a detailed account of multiple analyses of textbooks of class I was carried out. The results revealed that implicit and explicit moon concepts instantiated in the textbooks failed to be helpful in the better understanding of the concepts of the children. The findings also showed that textbooks are contributing at a minimal level in the transmitting and transferring of the knowledge of the natural phenomena. The presented concepts have been discussed in terms of space, volume, illustrations, and pictures in different forms and modalities in the textbooks. Psychological and educational implications, future directions of the research, and limitations of the study have been discussed.

Introduction

Children construct knowledge and explanations about natural phenomena and also develop beliefs or views of the natural world from different sources. One of the major sources is the textbooks,

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which are taught in the schools. Popular psychological theories assert that a child can be affected by many influences, from his/her parents, teachers, friends, TV shows, movies, commercials, and of course, books. Textbooks for children are widely recognized as having ideological, educational, socializing, and pedagogical implications and objectives. Therefore, this has been the area of interest for the researchers and educationists for the last several decades. The material produced for the very young children play an important role in (re)shaping in the understanding of science concepts. The material is produced in different forms of examples, analogies, pictures, and illustrations etc. Hill (1957) gave some reports from the research work of Beeler, which showed trends in the use of analogy in presenting science information to children through books and magazines.

The presentation of natural phenomena is a common feature of courses and curriculum in early classes. Moon is one of the natural objects which are frequently presented in the textbooks. Cohen and Lucas (1999) describe because the moon is probably one of the first objects to be studied thousands of years ago when astronomy was first being developed. In addition, this is one of the most common science topics taught throughout the world. Its constantly changing shape has lot of myths and every group of humans on earth has worked out the monthly cycle of the moon. This long-standing human interest in the moon is continued to the present. The basic purpose to introduce the natural phenomena in the textbooks is to give insight and scientific explanation of the phenomena to the children. However, sometime this information are misrepresented and eventually misunderstood by the children, which ultimately results in the poor understanding of the natural phenomena of the moon. Thus, children's literature is likely to include misrepresentation of the Moon. Ault (1984b) identified the problems associated with the misrepresentation of the moon in children's literature and stated that alternative conceptions about the moon often originate from literature. Trundle and Troland (2005) confirmed this when they evaluated 79 children's books that focused on the Moon as a topic or used the Moon prominently in illustrations; the results revealed that many books reinforce misconceptions about lunar phases and even misrepresent the Moon.

Conceptual understandings and related alternative conceptions about the moon have interested researchers for more than 70 years (Trundle, Atwood, & Christopher, 2002). Investigating the ideas and understanding about the moon can help in different ways for teachers, students, and teaching and assessment for the long-term pedagogical implications. This natural phenomenon presents an exciting opportunity to integrate science and other subjects like mathematics in the middle school (Thompson & Harrell, 1997).

Students are considered as active knowledge generators who are capable of thinking critically and creatively. So this is important to critically examine the textbooks, whether they are helping in better acquisition of the concepts or not. Then one should see whether, the curriculum and textbooks are providing such material, which is helping them in better understanding of the concepts. Researches show that if the students' linguistic and cultural backgrounds are represented in the curriculum and using culturally relevant texts can provide a crucial link between prior knowledge and reading comprehension (Alanis, 2007).

Learning science through listening or reading removes children from active involvement and makes abstract ideas difficult to comprehend. Elementary science textbooks that use pictures and diagrams of the Earth, sun, and moon system force readers to imagine that phenomenon from an outer space viewpoint (Foster, 1996). From educational and research point of view this is important to understand the text produced and presented in the books.

So, this was considered important to analyze the textbooks used in primary schools for classes I, to get a clearer picture of presented moon concepts. Therefore, the course books of class I have been analyzed, considering having sources of scientific knowledge of natural phenomena in them.

Objectives of the Study

The analysis of the textbooks was done to find out to which extent the science concepts particularly the natural phenomena of the moon:

- i. are instantiated that help in the better understanding of the science concepts of the children.

- ii. in terms of space and volume is presented in the textbooks.
- iii. in the forms and modalities these concepts have been presented.
- iv. in the forms of illustrations and pictures have been used to present such concepts.

Method

The course books were selected and analyzed for their representations of moon concepts using a content analysis methodology. The selection of the sample of books used for analysis, the units of analysis and coding scheme and its development will be discussed in this section.

Sample

The textbooks analyzed in this study were chosen on the basis of the criterion that these books were the main text for the children of primary schools. Such books contained a wider range of moon concepts as compared to other books found in book stores, libraries or elsewhere in Pakistan. This study sample is the truly representative of the total books taught in class I. All these books have been published after 2000. Total six textbooks are taught in class I, which were considered for the analysis on the basis of having any indication of moon concepts.

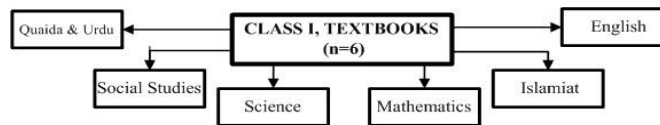
Procedure

Course Books Taught at Different Classes in the Federal Primary Schools of Islamabad.

Textbooks were purchased from the National Book Foundation. NBF is the responsible organization for the development, printing, publication, and distributing textbooks freely to the federal schools. These books are given to the children without cost.

The below mentioned diagram show the commonality of the subjects taught in class I. These subjects vary in the course contents, volume, text, material, knowledge, vocabulary, and illustrations.

Figure. Subjects taught in class I



Six subjects (courses) are taught in the class I. In all these six textbooks, evidences for moon concepts were found. There are two different books for Urdu. One is called *New Quaida* (Primer), this is taught as a first book of language learning. Once the child finishes it, then s/he is taught the more difficult one, which is called a book of Urdu. However, we consider it one subject having two separate books.

Selection of the Text Material for Content Analysis

Two-steps analysis was done for the analysis of the books. As a first step, books were sorted into those including explicit or implicit representations of the science concepts of natural phenomena of moon, and those not having such concepts.

As a second step, each remaining textbook was read, line-by-line, by the researcher to examine the presented science concepts therein. The researcher read completely through the main text to identify the concepts with which students could be expected to come in contact in their academic life. Such material was marked with pencils and pointers. Then each identified material was entered into the database by the researcher for further analysis.

Member Check

After the main text identified by the researcher, this was presented to a team of three senior psychologists and researchers of the field to have a feedback, suggestions, and input on identified moon concepts. After the consultation and discussions with the experts final themes were identified. The researcher kept on consulting with those experts at the each step and level of analysis to avoid the subjectivity.

This is important for research related with textbook analysis, that how the moon concepts have been presented in the textbooks, to keep the interest of the children in the subject matter. For this

purpose, through a mixture of quality writing, excellent photography, engaging graphics and layouts, and topic selection, the books directly address children's interests. The ways in which moon concepts have been presented in books; the ways in which the books delineate and or integrate content areas; and the extent to which they encourage scientific thinking, understanding, and appreciation is important to examine (Ford, 2006).

Results

Style and Presentation of Pictures/Illustrations Related with Natural Phenomena of the Moon

To explain certain concepts, the writers use the pictures and illustrations. So pictures and illustrations are considered to be an important component of any school or textbooks. Therefore, this is necessary to examine to what extent and how such types of pictures and illustrations have been used in the textbooks of primary schools in Pakistan.

Total fifty six diagrams, pictures, and illustrations were found in all the textbooks of classes I, Out of these fifty six, ten pictures, diagrams, and illustrations are directly related with the moon. Eight pictures are related only with the Pakistani flag. One star and one moon (crescent) is the part of the flag. So, we think, these types of pictures do not help in better understanding of scientific phenomena. However, children may know the picture of the moon only. There are eighteen other pictures and diagrams that merely show the moons or crescents.

Apart from the natural phenomena of the moon, there are few other pictures and illustrations that can be related with the natural phenomena. Most of them are related with sun. There are thirteen pictures, which are showing the sun.

There are five other pictures, showing different natural phenomena, like, rainbow, clouds and raining, a cascade and process of evaporation, stars in the sky.

Topics, Titles or Heading Indicating a Relation with Natural Phenomena of the Moon

This was considered important to see the explicit and implicit representation of moon knowledge in relation to natural phenomena of the moon in the textbooks. The analysis has been done from each and every aspect to find any sources presented in any form in relation to science concepts, whether in the forms of sentences, words, phrases or paragraphs.

There are five topics, which contain the word moon. The titles or topics are like this; Sun, Moon, Stars (Muhammad, 2008, p. 49); The Sun, The Moon, and The Stars (Hussain, 2003, p. 53);

There are few other topics, which are related with natural phenomena apart from the moon. Though they do not contain directly any title related with the moon, however, such topics may contain some how the text or material related with the natural phenomena. The topics are like this; Fairy's Stair (Muhammad, 2008, p. 44); Pre-Numeric Concepts, Concept of Numeric, Geometry (Rashid, 2003, pp. 16, 17, 96); Dua (Prayer) (Muhammad, 2008, p. 33); Islamic Beliefs, Allah and His Oneness (Mustafa, 2004, p. 1); Directions (Hameed, 2005, p. 9); Living and Non-Living things, Energy, Earth and Space (Hussain, 2003, pp. 26, 48, 53-55); Look and say, Work book, Writing Skills (Ajmal, 2005a, pp. 9-11, 16, 19, 21).

Classification of Textual Material Related With Science Concepts (Natural Phenomena of the Moon in Particular) Presented In the Textbooks on Heuristic Characteristics and Critical Comments on the Text

The main body of information or material related with science concepts is presented in a lesson or chapter, therefore, a lesson or chapter of the book is considered as the unit of analysis. To capture a holistic picture based on scientific basis, the written material has been classified into three different categories. Each category is attributed with some characteristics, containing a set of certain information in it, which are presented in the main body of text. It could be a sentence, a paragraph or a whole lesson etc. these three categories are as follows; Methods, Individuals, and Context. Detail of each such category is presented in the table-1.

Table-1: *Classification of Textual Material and Critical Comments on the Presented Science Concepts in Textbooks of Class I*

Heuristic characteristics of the textual content	Description of sentences & paragraphs in the main body of text content	Critical comments on the content
Individuals:	Narrative; one boy & a girl talking about rainbow. (Jalalpuri, Raja, Parveen, & Muhammad, 2003, pp. 44-45, 49-52).	A good depiction of natural phenomena of rainbow, showing alternate conceptions about the natural phenomena. Natural phenomena of light, brightness, and shapes of moon, stars, hotness, and sun have been described.
Methods:	Cardinal points. Four directions are related with the rotation of sun. (Hameed, 2005, p. 19).	Simple concepts of four directions have been introduced with the identification of Kaba.
Science Knowledge:	Sun, Moon; Torch & Electricity are the sources of Light (Hussain, 2003, pp. 26, 52, 53).	Sun and Moon have been described as sources of Light Very basic concept of sun, moon and stars have been illustrated.
Context:	Hamd (Poetry) Praise of Allah. (Jalalpuri, Raja, Parveen, & Muhammad, 2003, p. 33).	A girl and a boy sighting moon and praying, one girl sitting and praying.

Table 1 shows detailed description of the textual material regarding how the science concepts related with phenomena of the moon is presented in the textbooks. A reasonable pool of material exists in the textbooks of class 1.

Space Covered for Science Concepts in the Examined Textbooks

Textbooks carry a wide range of different types of concepts including science concepts. The area and space allocated for each type of concept determines that how much particular set of concepts has been regarded by the authors and writers of the textbooks. The textbooks have also been examined regarding to what extend the concepts have been displayed on how many number of pages.

*Table- 2: Number of Pages Dedicated to the Science
Concept Topics in Textbooks of Class I*

Textbooks	Class I
Urdu	14
Islamiat	6
Social Studies	5
Science	11
Mathematics	6
English	6
Total	48

Table 2 shows the concepts related with natural phenomena are presented in the class I. The most prevalent subject is Urdu (14) and science (11). However, other subjects show a similar trend.

Categories of Images Related with Science Concepts Found in the Textbooks

The images related with science concepts specifically natural phenomena, were found in the class textbooks have been classified in 4 categories.

Figurative images or figures (photos and drawings) including science as well natural phenomena (FI), second figure related with communicating conceptualizations (CC), third figure related with socially & culturally embedded images (SE), and fourth figure reporting empirical data (ED). The results of these categories have been mentioned in table 3.

Table- 3: Categories of Images Dedicated to the Science Concepts in the Sample of Examined Textbooks of Class I

Textbooks	Class I			
	<i>FI</i>	<i>CC</i>	<i>SE</i>	<i>ED</i>
Urdu	14		2	
Islamiat	1			
Social Studies	5	2		
Science	7	4	1	8
Mathematics	5			
English	6			
Total	38	6	3	8
Grand Total			55	

Note. FI = Figurative images or figures,
CC = Communicating conceptualizations,
SE = Socially and culturally embedded images, ED = Empirical data

Table 3 shows that the dedicated images of science concepts specifically concepts related with natural phenomena in textbooks of class 1. Among the *figurative images* (38) show high scores as compared to the other three images.

Levels of Content (Themes within Topics) Relating To Science Concepts in Textbooks

Special attention is required to analyze the ‘contents’ of the science concepts presented in the textbooks to assess against certain criteria of levels. Thematic analysis of the published and written material in the textbooks has been carried out to see the qualitative properties of the presented science concepts. These contents have been formulated in seven different levels, ranging from 0 to 6, not possessing science concepts to high level of science concepts. The following abbreviations will explain the phenomenon appropriately.

Levels of Contents

LC 0= No evidence of science concepts

- LC 1=some indication in title or diagram, that this page can be related to science concepts at some level.
 LC 2=Description of naturalistic phenomena, that can be related to science concepts at some level.
 LC 3=Naturalistic phenomena with some scientific explanation in imaginative context.
 LC 4= Material that contains a pure scientific explanation.
 LC 5= Combination of the levels 2 and 3 (description and explanation of naturalistic phenomena in imaginative context).
 LC 6= Combination of the levels 2, 3, and 4 (description, imaginative, and scientific explanation of science concepts).

Table-4: Frequencies Showing Criteria Levels (Themes within Topics) Related to Natural Phenomena of Moon Found in the Examined Textbooks of Class I

Levels of Content	Textbooks Class I
LC 0	7
LC 1	46
LC 2	9
LC 3	2
LC 4	3
LC 5	
LC 6	5

Table 4 shows that contents of science concepts are most prevalent at LC 1. LC 1 means, some indication in title or diagram, that this page can be related to science concepts at some level. Whereas, the textbooks showed a least representation of higher levels of conceptual understandings like; LC 5, a combination of the levels 2 and 3 (description and explanation of naturalistic phenomena in imaginative context)., LC 4, material that contains a pure scientific

explanation., LC 6, combination of the levels 2, 3, and 4 (description, imaginative, and scientific explanation of science concepts)., and LC 3, naturalistic phenomena with some scientific explanation in imaginative context respectively.

Discussion & Conclusion

Analysis of the class I textbooks revealed both predictable and unexpected findings regarding the topic under study. Some of the results in the conducted study lend themselves to an easier interpretation than others, especially the unexpected findings.

One of the unexpected results was that the textbooks failed to provide information necessary for making sound knowledge of the concept of moon. However, majority of the text material provided only scant detail on this topic, which seemed to be insufficient for concrete scientific knowledge. While depth and breadth of coverage of represented science knowledge exhibited low and limited scope for learning and acquisition of moon concepts. Topics related with moon concepts were supposedly thought to be essential within 'science textbooks' were difficult to find.

Another important aspect which was missing in the textbooks was the absence of use of analogies. None of the textbooks contained description that how to use analogies for a pedagogical improvements and aids used with the features to promote meaningful learning of moon concepts in teaching methodologies. Science should be represented in such a manner in the books that it should help in better understanding of science concepts. The books should be in more appealing manner along with colorful photographs and illustrations (Ford, 2006). Throughout the sample books, important factual information related with science concepts had been presented in the forms of definitions, descriptions, and explanations of the content considered being appropriate for the children, whereas there is little within the books that could guide children to deeper understandings of the moon concepts.

There are some passages describing scientific knowledge in the form of narratives---the statements in which are used to convey the science concepts in a best way. In such a passage, the father, not the

teacher or scientist, was shown as a guide who corrected the misconceptions of rainbow of the children. In the same book of class I, scientists, naturalists, and children were mentioned engaged in sociological activity embedded with cultural (dominant with Islamic religious) perspectives.

As it has been earlier mentioned that in most of the textbooks scientific knowledge has been presented in factual form, representation of science as facts would not be appropriate for models of explicit or historical instruction in the nature of science (Abd-el Khalick et al, 1998). Because, using only such type of textual material, there would be few opportunities to link process of production of knowledge in cultural or historical contexts (Brickhouse, 2001).

According to Ford (2006), in the public and many educational circles this is thought that everyone can do science, or that anyone who acts like a scientist is a scientist to encourage children to take on the identity of a scientist. This empowers the children as well as teachers to maintain their interest in science, and allow them to think of themselves as able to engage in scientific activity (O'Neill & Polman, 2004). In the examined textbooks, one thing was evident that there was little opportunity for the children to learn science by doing. In these books, science methods provide limited chances to involve in science activity. Therefore, it would be difficult for children to fully comprehend and understand the science.

One of the chief characteristics of the textbooks should be that they convey a sense of appreciation and awe of the beauty of the natural world; they should be visually appealing and use the familiar children's literature tools of art, poetry, and narrative to engage in natural phenomena (Ford, 2006). The artistic and aesthetic science knowledge blended with familiar and narrative form was found most frequently in the arts books as compared to science books. Narrative mode of representation of science knowledge was depicted more.

Regarding the space covered with the moon concepts in analyzed textbooks, results revealed that the majority of concepts are represented in the course books of Urdu. This was also supported by

the results in table 4, that the analyzed textbooks of class I did better in terms of depicting all types of images related with science concepts. The results showed most frequent concepts are related with figurative images (FI) from all the examined textbooks. FI indicated concepts comprising photos, pictures, and drawings etc.

The moon concepts represented in the textbooks were analyzed against the 'levels of content'. The results showed seven different themes emerged out of the contents of the science concepts. Table 4 indicated (LC 1) that most of the science concepts were indicated on pages (or spaces covered) in the forms of diagrams or in the title of the chapters etc. LC 1 (indication in title or diagram for science concepts) was represented quite adequately in the textbooks of class I (46). On the contrary LC 5 (no evidence of science concepts) was not found in the class I. The textbooks of class I also provided fairly complete and concise summaries of natural phenomena (see LC 2 in Table 4).

Finally, after viewing the results, this is analyzed that none of the examined textbooks either did not address or inadequately addressed the different types of science knowledge. Overall these textbooks continued to explicitly or implicitly convey naive representations of the science knowledge particularly the phenomena of the moon.

Recommendation & Suggestions

- i. Further textbook analysis may be done on other textbooks belonging from different classes.
- ii. Further analysis can be carried out including all kinds of science concepts.
- iii. Textbook writers should take a very special care in presenting the moon concepts according to the proper scientific explanations of the natural phenomena.
- iv. A methodology has been developed and it should be applied while analyzing the textbooks of other classes.

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Comparative Study of Instructional Strategy of Allama Iqbal Open University and Arab Open University

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Abstract

The Allama Iqbal Open University (AIOU) and Arab Open University (AOU) are providing education and training to the masses at large. In imparting education, the main instructional strategy of AIOU is distance education material which as only 25% correspondence material is used by AOU. This paper effort has, been made to highlight all the instructional strategies being used by both the universities.

Introduction

Education is directly related to the cultural, political, moral and socio-economic development of the country. In other words education provides people with the potential to learn, to respond to new opportunities and to participate in the political, cultural and social activities. So the education is an indispensable ingredient of human development and a basic right of every citizen. Education is essential for human development but formal system is not fully catering the demand of education. Kaur, A.S. (1996 p.1) supported this point of view in these words as “the conventional face to face system of education proved inadequate to accommodate the growing needs of the society.” That’s why there is need of best alternate of formal system of education. The best alternate of formal system of education is Distance Education. It is accepted as dominate approach to education in future. According to the National Education Policy (1998, p.12) “the distance and non-formal education system is now receiving a growing awareness and acceptance as a dominant approach to education in future.” Therefore, the distance education system is accepted as the best alternative of the formal system of

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education. Distance education is assumed greater relevance and acceptance in the world due to the facts of poverty and relative deprivation of people from education, particularly the females.

Different terms are used in the world for distance education so called family terms of distance education. In this connection Rashid, M. (1992, p.24) describes as:

“Distance education is a generic term that includes the range of teaching/learning strategies referred to as ‘external studies’ in Australia; as ‘correspondence education’ or ‘correspondence study’ at further education level; as ‘home study’ and ‘independent study’ at higher education level in United States and as ‘distance teaching’ or ‘teaching at distance’ by the open University of United Kingdom. In New Zealand the term ‘extra-mural studies’ is used at tertiary level. In French it is referred to as ‘tele-enseignement’ Fernstudium/Fernunterricht’ in German ‘education a distancia’ in Spanish and ‘teleducacao’ in Portuguese.

The main characteristic of the Distance Education, that there is not a continuous and immediate supervision of tutor, but the provision of tuition through planned and organized tutorials. In this connection Kaur, A.S. (1996, p.2) described as:

“a method of teaching in which the teacher bears the responsibility of importing knowledge and skill to student, who does not receive instruction orally, but who studies in a place and at a distance determined by his individual circumstances.”

Distance Education is that education system where there is a distance between the learner and the tutor. Simonson, M. (2000, p.7) is of opinion that “distance can mean geographical distance, time distance and possibly even intellectual distance. The term distance education has been applied to a tremendous variety of programmes serving numerous audiences via a wide variety of media.” The Open Universities adopts teaching strategies of face-to-face teaching in

addition to correspondence materials and mass media. Some courses require participation in-group training workshop normally arranged at the end of each semester.

Keegan, D.J. (1980, pp.13-14) made a detail analysis and synthesized various aspects of a number of definitions and produced six fundamental characteristics of distance education which he regarded as essential for any comprehensive definition is:

- i. The separation of teacher and learner that distinguishes it from face-to-face learning.
- ii. The influence of an educational organization, which distinguished it from private study.
- iii. The use of technical media usually prints media, to unite teacher and learner and carry the educational content of the course.
- iv. The provision of two-way communication so that the student may benefit from or even initiate dialogue which distinguishes it from other uses of educational technology.
- v. The teaching of students as individuals and rarely in-groups with the possibility of occasional meeting for both dedicated and socialization purposes.
- vi. The participation in a more individualized form of education (based on the view that division of labor; mechanization; automation; application of organizational principles; mass production, concentration and centralization characterizes distance teaching).

Distance education system conveys the lesson to their target students either by broadcast or through self-instructional materials or both. Some developing countries are also used satellites to reach students in the far-flung areas.

Teaching strategies of Allama Iqbal Open University (AIOU)

AIOU is located in Islamabad capital city of Pakistan, with a large campus. It has regional campuses/centers network all over the country. AIOU offers the educational programmes from grass root level to Ph.D in different disciplines like General Education, Social sciences, Natural Sciences, Technical, and professional fields. AIOU

was established in 1974 after passing of Act of Parliament being a second university in the world and first in the Asia and Africa. It is modelled on the lines of United Kingdom Open University (UKOU). The university has the firm belief in meeting the present and future needs of the population of Pakistan. In recent years, technical and professional education is becoming high costly due to the government policy to encourage private institutions in these fields. So, children of lower earning groups of the society have a little chance to acquire education in these fields. AIOU is committed to meet the challenge and open a window for these groups.

Objectives of AIOU

According to AIOU Profile (1999, p.2) the main objectives of the university as laid down in the act are as follows:

- i. To provide such facilities to masses for their educational uplift.
- ii. To provide educational facilities to people who cannot leave their homes and jobs.
- iii. To provide the facilities for the training of teachers.
- iv. To provide for instruction in such branches of learning technology or vocation as it may deem fit, and to make provision for research dissemination of knowledge.
- v. To provide for making of films and cassettes and other audio-visual material.
- vi. To provide for printing and publication of courses and teaching material.
- vii. To prescribe courses of study held examination and certification.
- viii. To make provision for research and development of educational technology and advisory services and to enter into arrangement with other institutions.

The university is provide the equal opportunities of education and training to the people who cannot get admission in the traditional institutions and who cannot leaves the home due to their jobs and social constraints, particularly the females.

Teaching Strategies of AIOU

The Allama Iqbal Open University mostly depends upon the different kind of media to reach its learners. It means Allama Iqbal Open University adopts different kinds of teaching strategies. According to the Vice Chancellor's Annual Report (2006-07, p.8) the main components of its multi-media package are the following:

- **Correspondence materials**
Correspondence materials including self-learning study package and supplementary study material, (Readers, textbooks, and study guides)
- **The Voice of AIOU FM Radio**
AIOU has begun to broadcast educational programmes on the national frequency of 91.6.
- **Satellite transmission**
AIOU is putting on air its educational media material on PTV-2 which is beaming out its transmission through satellite to more than 45 countries.
- **Online Teaching**
Various regions have already been linked for online education, and online classes through teleconferencing have been started for Computer Science Programmes.
- **Non-broadcast media**
It includes slides, audiocassettes, charts, and leaflets (generally for basic functional and literacy level courses) and also audio/video cassettes as integral part of learning material.
- **Tutorial instruction**
Through contact sessions and academic guidance facilities at study centers (mostly in the afternoon).
- **Face-to-face teaching**
It has recently been started for those courses, which require intensively practical/lab work or skill development.

- **Group training workshops**
For post graduate programmes, generally at M.A/M.Sc/M.Phil and diploma levels.
- **Internship**
Internship of short term and long term duration in industrial or business, concerns for some of the post-graduate programmes.
- **Courses assignments**
As an instrument of instruction, assignment and general academic guidance of students: they are evaluated by the tutors.
- **Final Examination**
Final examination held, for each course, at the end of each semester

Study Materials (Self-Instructional Materials) of AIOU

Development of course material in distance education is very important component. There are different kinds of materials AIOU has developed for students. i.e. written materials, Online material, Broadcast material, Non-broad caste material. The AIOU heavily depends upon the written materials. AIOU develops its own material. It adopts the different approaches to develop effective materials it may be written, broadcast and non-broadcast.

- **Course team model approach**
This approach is frequently used by the AIOU. This approach consists of a group of skilled professionals; it may be internal or external.
- **Contract Author/Faculty model approach**
This approach is also adopted by the AIOU. In this approach outside writers are contracted to write a course, with the help of university faculty members.
- **Author/Editor model approach**
In this approach a single professional writer write the whole course. This approach is also adopted by the AIOU.

There are many other approaches in the world but generally all above approaches are adopted by the AIOU frequently to develop the courses materials.

Broadcast and Non-broadcast Media Materials

Scripts for the Radio and Television programmes are normally written by the faculty members of the relevant departments. The university organizes workshops for script writing for radio, T.V programmes and for course productions time to time. For media facilities government of Japan has provided help to AIOU. He has started different project for this purposes. Different types of courses of the University ranging from functional literacy to graduation and post-graduation levels in various disciplines have been bring together with media as supplement. In the distance learning system of education, the different kinds of media play an important role to teach the students at large and scatted areas.

Student Support System of AIOU

AIOU has a sound student support system network. This system has been extended through the regional campuses/centers. There are 36 regional campuses/centers all over Pakistan. Student Support System means the provision of help other than the material provided. The student support may has variety of forms i.e. face-to-face teaching, Computer Mediated Communication, Counseling, Self-help, Workshops, Telephone Tutorials, Media Support, and Tutorials supports etc. All these supports services may or may not organized.

Arab Open University (AOU)

Arab Open University is a non-profit higher education institute based on open distance learning method. The AOU was established as a leading open university with branches in six Arab countries i.e. Kuwait, Saudi Arabia, Egypt, Bahrain, Jordan and Lebanon. The AOU provides open distance learning facilities for Arab students irrespective of geographical location, gender, age or other physical barriers. The AOU use the traditional face-to-face teaching and innovative state of the art technology.

According to brochure of AOU (2002, p.1) The AOU is closely associated with the UK Open University, thus enabling students to graduate with an Arab Open University degree and that of the UKOU, an internationally recognized United Kingdom degree. The AOU is subject to Acer edition and validation by the Open University validation Services (OUVS) and is thus the first university in the Arab World to obtain such a status from a worldwide organization.

Objectives of the AOU

The objectives of the AOU according to AOU Case Statement (2006, p.3) are as:

- Offering opportunities of quality higher education to a large community of students.
- Providing special opportunities of higher education to women and students residing in remote areas.
- Providing continuing education in the various disciplines of knowledge.
- Providing opportunities of professional training in response to market needs.
- Participating as a contributing partner in research and scholarly activities in areas of immediate development interest to Arab Countries.
- Fostering humanistic values and ethics as integral components of its learning and education processes.

Government universities offer their programmes at relatively low fee, but there is limited seat capacity and other restrictions to admission. On the other hand, private universities are beyond the reach of many students because of high rate of tuition fee. AOU provides the education to students at low fee rates than other many private universities in Arab countries. Age may be the other barrier to entering the traditional universities. The AOU caters such problem. Mostly traditional universities are situated in the cities areas. So, the students belong to the rural areas has not easy access to these universities. The AOU also provides the education to these students at their doorstep. Students with disabilities are specially catered for in all AOU branches.

Teaching Strategies of AOU

The AOU adopts the combine teaching and learning techniques i.e. 25% face-to-face tutorial support and other high tech delivery methods i.e. Course websites, e-TMA (Tutor Marked Assignments), e-Testing, e-Tutoring, and an integrated Computer Mediated Communication programme which offer video, voice and text based communication to gather with written learning material that tailor-made to promote self-learning. This environment provides the potential to “make the best of both worlds” by combining “traditional” approach with technologically supported one (AOU, 2007, p.2).

Study Materials of AOU

The AOU adopts and utilizes tried and tested course materials from the UKOU. In this regard, the AOU established an educational partnership with the UK Open University (UKOU) in 2001 and its programmes are validated by the Open University Validation Services (OUVS). AOU is the first university in the Arab World to be accredited by such a worldwide organization. Students who graduate from the AOU receive a degree under the auspices of both AOU and UKOU. It wishes to develop its own learning materials and academic programmes. AOU Brochure (2007, p.2)

Broadcast and Non-broadcast Media Materials

The AOU has a close link with UNESCO since 2001. UNESCO provides the help and assistance to AOU in the development of its technological needs, a dedicated satellite link, multimedia courseware material, videoconferencing, and a web-based Open Distance Learning Platform. Recently, AOU successfully utilized course materials from the UK Open University and other educational suppliers. Now the AOU wishes to develop its own learning materials and academic programs; thus offering more degree options to students.

Student Support System

The AOU provide the conventional and technological based support system to students. Only 25% face-to-face tutorials support and other technological based support system i.e. e-Tutor Marked Assignment, e-Testing, Video, Audio and Text-based communication together.

Conclusions

The following conclusions are drawn on the basis of the literature:

- Both universities have same major objectives.
- Both universities provide equal opportunities to students on equal footing.
- AIOU is considered as a mega university while AOU is newly established and still in the way to progress.
- AIOU mostly rely on the self-instructional material and AOU heavily depend upon the high tech delivery methods.
- AIOU mostly rely on the face-to-face tutoring while AOU provides assistance to only 25% students through face-to-face tutoring.
- In the case of On-line courses, AIOU provide only some computer related courses through On-Line while the AOU mostly offers On-Line courses.
- AIOU depends upon the tutors marked assignments while AIOU have the system of e-TMA (Tutor Marked Assignments).
- AIOU develops its own self-instructional materials but AOU adopt the UKOU' courses.
- AIOU follows the conventional Testing system except some computer courses while mostly AOU follows the e-Testing system.
- AIOU heavily depend upon the conventional tutoring while AOU provide the e-Tutoring system to their students.
- Both Universities provide the media supports to their respective students.
- AIOU awards their own degrees to students while AOU,s students receive their degree from the UKOU.

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Factors Affecting the Students' Academic Performance

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Abstract

The students' academic performance may be influenced by various external factors other than their personal characteristics. For the development of a society, it becomes necessary to provide quality education to its people. This study is being conducted to dig out the factors which are important for the effective learning of students and enhance the quality of education. In this study, a questionnaire was used for data collection and its reliability was assessed by Cronbach Alpha. For the purpose of data analysis, the descriptive and inferential measures (Stepwise Multiple regression model) are used. The indicators regularity and punctuality of teachers and graduation marks of the students are found to be significant by both techniques. Thus, without any hesitation, it can be concluded that these two indicators play an important role in enhancing the academic performance of students' performance.

Introduction

One of the basic responsibilities of state is to provide quality higher education to its citizens, in order to serve the needs of community, agencies, business, industry etc. The universities are fulfilling this responsibility by providing the higher education in almost all disciplines. To optimize, it becomes necessary to maximize the students' satisfaction in learning process. The factors influencing the achievements of young individuals expected to have great importance for the academic managements of universities. It is an essential tool for the public authorities and educational policy makers to improve the quality of education in the country.

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Hijazi and Naqvi (2006) observed that the student performance in intermediate examination is positively associated with mothers' education. Moreover, the time allocation for studies other than the class hours is found to be negatively associated with the students' academic performance. Motivation is an important ingredient and primary source of energy that leads to better performance (Becker, 1993). Institution's location (Urban and Rural) has found to be one of the significant factors contributing to students' academic performance (Glass, et. al., 1982; Mosteller, 1995). Sithole and Dlamini (1997) found the variables to explain and predict students' academic performance, are previous academic performance, gender, age, work done at home, time spent reading in the library, students' attitudes toward school, and involvement in peer group discussion. Durden and Ellis (1995) found that parents' educational attainment was positively related to their children's performance. Brooks and Rebata (1991) found that female students tend to sit in the front of the classroom, attend lectures regularly and obtained higher grades than male students. Skipper & Quantz (1987) observed that the teachers having formal preparation are found to be better able to use teaching strategies that respond to students' needs and learning styles and encourage them for higher order learning. Rosenholtz (1986) showed that inexperienced teachers (those with less than three years of experience) are typically less effective than more senior teachers; the teachers having experience at least three years. Doyle (1985) suggested that successful teachers tend to be those who are able to use a range of teaching strategies and interaction styles, rather than a single rigid formal approach. Aleamoni (1977) found that the past behavior is considered the best predictor of the future behavior. Past behavior can be determined most significantly by secondary GPA and graduating high school rank. Standardized college admission test scores are also an indicator of past behavior. Swell and Shaw (1968) found that the higher the parents' education level, the greater the success and graduation rate of their children who attend college. Washburne (1959) suggested that students from urban areas perform better academically than the students from less populated areas.

It is general belief that students' performance is directly influenced by the family profile, personal activities, teacher's performance, institutional impact and family's contribution. The problem under

study is to find the scientifically significant indicators of factors affecting the students' academic performance.

Research Methodology

The sampled population consists on the students of MA/MSc who have qualified the comprehensive exams of part-I. A simple random sample of 250 students consisting on 83 males and 167 females belonging to the 14 disciplines of the university was selected. The information about the study was collected through a well-defined questionnaire whose reliability was assessed by Cronbach's Alpha. The value of the Cronbach's Alpha was 0.702. The data collected by the questionnaire was of nominal, ordinal and quantitative nature. The 5-points Likert scale was used for ordinal variables. The information about income and parent's education was also converted into 5-point Likert scale as given in table 1.

Table-1: Showing the 5-point Likert scale

Likert's 5-point	Income Ranges	Percentage	Category	Level of education
1	Below 10000	18.4 %	Very Poor	Under SSC
2	10001 to 20000	26.4 %	Poor	SSC
3	20001 to 30000	24.0 %	Lower Middle Class	F.A/F.Sc
4	30001 to 40000	08.4 %	Upper Middle Class	B.A/B.Sc
5	40001 and above	22.8 %	Rich	M.A/M.Sc and above

The dependent variable was the students' academic performance (% of marks), which was quantitative and continuous type while the independent variables were nominal, ordinal and quantitative in nature. Hence, the stepwise multiple regression model was run in order to test the significance of all explanatory variables. The F-test and the T-test were used for testing the significance of overall and individual parameters, respectively. In order to describe the explained variation of regressors, Coefficient of Determination (R^2)

was calculated. The SPSS version 13.0 was used. The significance of the explanatory variables was determined at 5% level of significance. The assumptions of the model

- i. normality (K. G Smirnov test and histogram with normal curve)
- ii. homogeneity (residual plot)
- iii. multicollinearity (Eigen analysis and VIF); and
- iv. autocorrelation (d-statistics)

were verified and no violation was observed. The data set was free from the outlier, leverage or influential observations.

Statistical Analysis and Interpretations

In order to investigate the effect of individual factors on the academic performance, descriptive and inferential analysis was performed. The Multiple Regression Model was run to obtain the factors affecting the students' academic performance significantly.

Descriptive Measures

The average, Standard Deviation (SD) and Coefficient of Variation (CV) of all factors of academic performance were computed. The factors having CV < 25 (Neuts, 1982) were described as important in order to enhance the academic performance of the students.

From the Table 2, it was observed that the male and female percentages in the sample were 33 and 67, respectively. The percentages of the students belong to the urban and rural areas were 79 and 21, respectively. The average education level of the fathers was much higher than that of mothers which was 3.38 and 2.81, respectively. The parents of the 35.2% students were govt. employees while the remaining 64.8% from the other professions.

Table-2: Description of Demographic Variables

Variables	Categories	Percentage
Gender	Male	33
	Female	67
Profession	Govt. Service	35.2
	Others	64.8
Residential Area	Urban	79
	Rural	21
		255

From the Table 3, it was found that the average marks in BA/BSc and MA/MSc were 57 % and 74 %, respectively. The average time spent in Cafeteria and Studies (other than class hours) were 39 minutes and 2 hours 50 minutes, respectively. The averages of the level of 'regularity & punctuality', 'maintaining class discipline' and 'well prepared for class' were 4.04, 4.01 and 3.90, respectively. The average level of the discipline strictly maintained in the institution was 4.21, which is very high. It is evident that discipline of the institution is appreciable. The averages of motivation, facilities and financial support from the parents are 3.98, 4.38 and 4.45, respectively. The facilities and financial support from the parents have highest average as compared to all others.

In the light of the coefficient of variation, the six variables including 'Graduation marks', 'regularity and punctuality of the teacher', 'maintaining class discipline', 'institution's discipline is strictly maintained', 'facilities' and 'financial support' from the parents are important.

Table-3: Summary of the Descriptive Results

	Personal activities	Mean	SD	CV
1.	Performance(Marks MA/MSc Part_1) (Dependent variable)	73.84	8.41	11.4
2.	Graduation marks	57.21	8.68	15.17
3.	Participation in co- curricular activities	1.83	1.03	56.78
4.	Participation in sports	2.01	1.17	58.21
5.	Use of internet for studies	3.27	1.20	36.91
1.	Father's Education	3.35	1.346	40.18
2.	Mother's Education	2.81	1.317	46.87
6.	Health condition	3.78	1.03	27.25
7.	Cafeteria hours (daily)	.654	0.72	110.67
8.	Daily studies hours other than class work?	2.83	1.62	57.02
	Teacher's performance			
1.	Regular and Punctual.	4.04	0.92	22.65
2.	Maintain class	4.01	0.99	24.74

	discipline			
3.	Well prepared for classes	3.90	0.99	25.46
4.	Present material in clear and attractive way	3.67	1.02	27.90
5.	Explain material in slow and regular steps	3.57	1.03	28.80
6.	Encourage student's participation	3.70	1.15	30.95
7.	Behave decently with students	3.76	1.10	29.31
8.	Introduce new ideas and discoveries	3.33	1.19	35.65
9.	Individual assistance outside the class	3.40	1.04	30.50
10.	Course coverage	3.74	1.02	27.22
11.	Fair in marking	3.64	1.06	29.12
	Institutional Impact			
12.	Discipline is strictly maintained	4.21	0.93	22.19
13.	Management solves the genuine problems	3.27	1.16	35.60
14.	Ethical values are appreciated	2.98	1.03	34.66
15.	Innovative thinking is appreciated	3.26	1.22	37.27
16.	Equality and equity is observed	3.08	1.11	36.01
17.	Market oriented program	3.18	1.05	32.92
18.	Updated curriculum	3.44	1.03	29.80
	Family's Contribution			
19.	Motivation	3.98	1.02	25.58
20.	Career guidance	3.67	1.18	32.07
21.	Facilities	4.38	0.88	20.18
22.	Financial support	4.45	0.92	20.63

Regression Model

The Multiple linear regression model obtained by using the stepwise regression is:

$$Y = 37.49 + 0.247 * GM - 1.930 * CAFE + 1.246 * SH + 0.822 * PCA \\ + 1.284 * RP + 1.29 * MSGP + 1.127 * ITA + 1.294 * EEO \\ + 0.886 * M + 0.751 * ME$$

From the Table 4, it was observed that the $R^2 = 0.792$, which means that the significant factors present in this model explaining the 59.2% of the total variation. Furthermore, the model is significant having $F = 31.384$ at 5% level of significance with mean square error 30.797. The significant factors are described below.

The BA/BSc Marks are affecting the academic performance significantly with coefficient 0.247. It shows that the students who take good marks in graduation also have the better performance in MA/MSc. Thus the past behavior is the best predictor of the future behavior Aleamoni (1977). Sithole and Dlamini (1997) obtained the similar findings with university students enrolled in the college of agriculture in Swaziland, where previous academic performance and time spent in library were among the best predictors of academic performance.

The impact of 'cafeteria hours' is negatively significant with the coefficient -1.93 which means that the students who spend more time in cafeteria, their academic performance becomes lower. It has supported the general belief that more the leisure hours the less is the performance.

The effect of study hours is significant with the coefficient 1.246. It means that the students spending more time in their studies show better academic performance. The courses at MA/MSc level are very lengthy and time consuming, so only a student who pays more time to studies can handle these courses efficiently. Otherwise, it becomes difficult to meet the requirements. According to the general belief, more the study hours, the higher will be the performance. The study of Hijazi and Niqvi (2006) showed the negative effect of study hours on the students' academic performance. It is in contradiction of this study as well of general belief. The reasons for their impact being negative may be Multicollinearity in regressors or the presence of outliers, influential observations or leverage values in the data.

The impact of participation in co-curricular activities is positively significant with the coefficient 0.822, which means that the co-curricular activities improve the academic performance. This participation broader of the perception of the students leads to success in all fields of life.

The impact of Mothers' Education is positively significant with the coefficient 0.751. It means that higher Mothers' Education can helpful in enhancing academic performance. It is also a general perception that mothers play a crucial role in the enhancement of the academic abilities of children as compared to the fathers. Because fathers have to spend more time outside their houses in order to earn the livings. The findings support the results of Hijazi and Niqvi (2006) and Durden and Ellis (1995).

The impact of the teachers' Regularity and Punctuality is found to be positively significant with the second highest coefficient 1.284. It provides the strong evidence that the students' performance is highly affected by the regularity and punctuality of the teachers.

The impact of the management in solving the genuine problem of the students is positively significant with the coefficient 1.290. It means that when the students feel comfortable with managerial issues and they do not have to waste their time in the solution of their genuine problems then they can work with great zeal and devotion which causes to enhance their academic performance.

The impact of the observing the equality and equity in the GC University is positively significant with the coefficient 1.428. It shows that as the level of observing equality and equity increases then the students do not have to face the problems of the likings and disliking in the institution. This avoids a major factor that causes to create the frustration and tension among the students; and they can study with great commitment and enthusiasm.

The students' academic performance is also significantly depending on innovative thinking i.e. appreciation of innovative thinking in the institution. This factor is positively significant with the coefficient

1.127. It means that the appreciation of innovative thinking improves the academic performance.

The Motivation from Parents is positively significant with the coefficient 0.886. It means that motivation and inspiration from parents took their children to better academic performance and encourages for the hard work.

Table-4: Summary of Regression Results

Factors	Un standardized coefficients		t	Sig.
	β	Std. rror		
1. Constant	37.488	3.052	12.28	.000
2. Marks in graduation (GM)	0.247	0.045	5.51	.000
3. Mothers Education (ME)	0.751	0.284	2.64	.009
4. Participation in co-curricular activities (PCA)	0.822	0.350	2.35	.020
5. Daily Cafeteria hours (CAFÉ)	-1.930	0.502	-3.85	.000
6. Daily Study hours (SH)	1.245	0.243	5.13	.000
7. Regular and punctual(RP)	1.284	0.441	2.91	.004
8. Management solves the genuine problems (MSGP)	1.290	0.361	3.57	.000
9. Innovative thinking is appreciated (ITA)	1.127	0.403	2.80	.006
10. Equality and equity is observed (EEO)	1.294	0.388	3.33	.001
11. Motivation from parents(M)	0.886	0.390	2.27	.024
F = 40.005 (Significant at p-value = 0.000)			MSE =	
30.797			R ² = 0.792	

Conclusions

On the basis of descriptive measures, the six indicators

1. Graduation marks
2. Maintain class discipline
3. Regular and Punctual.
4. Discipline is strictly maintained
5. Facilities
6. Financial support; are statistically significant.

All these variables play important role in increasing the performance of the MA/MSc students. While the Multiple Regression Model recommends the following significant variables.

1. Mothers Education
2. Marks in graduation
3. Daily Cafeteria hours
4. Participation in co-curricular activities
5. Daily Study hours
6. Regular and punctual
7. Management solves the genuine problems
8. Innovative thinking is appreciated
9. Equality and equity is observed
10. Motivation from parents; are ten significant indicators.

The common significant indicators in both techniques are the 'graduation marks' of the students and the 'regularity & punctuality' of the teacher. Thus, it is strongly recommended that these two indicators play a significant role in order to enhance the academic performance of students.

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Retention of Basic Literacy Skills of Neo-Literates: An Unknown Reality

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Maqsud Alam Bukhari**

Abstract

Retention of literacy skills of 3Rs is a world phenomenon. The present study was conducted to evaluate the performance of neo-literates after two years of their graduation. The main focus of the study was to compare the performance of neo-literates from National Commission for Human Development (NCHD) and Department of Literacy and Non-formal Education (DLNEP) in Punjab. For the selection of sample, firstly six districts of the Punjab were randomly selected out of fifteen in three geographical regions of the Province. In the second step, random sampling techniques were applied for selection of neo-literates. From both of the organizations 40 neo-literates were selected from each sample district. Performance of 240 neo-literates was evaluated through a specially constructed achievement test. Test had three parts namely; reading section; writing section and; numeracy section. Test was administered and results were analyzed personally. The results were analyzed by paired sample t-Test through SPSS. The main findings of the study were; there was a significant difference in the performance of neo-literates of both the organizations. Neo-literates of NCHD performed better as compared to the neo-literates of DLNEP. As a whole, majority of the neo-literates of both the organizations relapsed into illiteracy.

Introduction

The word literate as an adjective means ability to read and write while as a noun its means one who can read and write, well informed and an educated person. Illiterate persons are those who can not read and write. Functional literate means a person who can read and write with understanding, use these skills properly in his/her everyday life and can participate effectively in the development of the society. While functional illiterate refers to those who can read and write to

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some degree but below a minimum level required to function in even a limited social situation or workplace or job setting.
www.freedictionary.com/literate

According to Earle (2005), discussions on literacy are often confused because its role in the development of language and thoughts. An ability to read and write simple sentences is not required to fulfil the demand of living in a literate society. The concept of multiliteracies has evolved e.g. digital literacy, media literacy, health literacy, visual literacy, computer literacy, emotional literacy etc. In this multi-sensory world, the traditional concept of literacy is only one way of communicating information and ideas. Other modes of communications like oral, visual, electronic, multimedia provide alternatives to those who find reading and writing difficult. Decoding and analyzing printed text is just one skill among many that we need to communicate.

Department For International Development (DFID), (2008) in a practice paper highlighted the term literacy as being able to apply the skills of reading, writing and calculations to the requirements of daily life and the term illiterate tends to imply ignorance and lack of social and other skills. The UNESCO institute for statistics is measuring the impact of literacy programmes through its Literacy Assessment and Monitoring Programmes (LAMP) which measures five component skills, considered the building blocks of fluent reading:

- i. The ability to recognize the letters of the alphabets and single digit numbers
- ii. Word recognition: common words, appearing frequently in print or expected to be in the listening/speaking vocabulary of an individual who speaks the target language.
- iii. The ability to rapidly produce plausible pronunciations of novel or pseudo words by applying sight-to-sound.
- iv. Sentence Processing: the ability to accurately and rapidly process simple, written sentences and apply language skills for comprehension.
- v. Passage Reading: the ability to process simple written passages and apply language skills comprehension with ease.

National Commission for Human Development (NCHD)

NCHD, an autonomous commission was established in 2002 at central level to boost the literacy rate in the country through Universal Primary Education (UPE) and Adult literacy programs. Apart from the components of educational development, provision of basic health facilities and capacity building of concerned line departments were also the focus of the commission in the country. Adult literacy programs were established in the country in consultation with respective provincial and district authorities. Following were the indicators for minimum level of learning of graduates of Adult Literacy Centres (ALCs):

1. **language:**
 - After 180 hours of course duration the graduates will be able to achieve the level of literacy skill to be able to read newspaper in understanding language at the speed of 20 words per minute
 - Able to write 7 – 10 sentences about their immediate environment with proper consideration to the use of pronouns, singular/plural, and conjunctions.
2. **Numerical:**
 - Manipulation of four digits figure,-able to add, subtract, multiply and divide.
3. **life skills:**
 - Knowledge about the techniques of tolerance and emotional control. (NCHD, 2005)

The duration of adult literacy program was of 6 months officially but operationally it was of 3 months. The content of the adult literacy program entitled “Pehla Qadam” of Urdu consists of 3 primers. In primer 1, the alphabets were taught in association with pictures and enough space was provided on individual pages for practice. In primer 2, words formation and sentence building was taught along with some topics like; Visit to the Garden p.55, Horse of Raja p.63, Marriage of Zara p.68, Bazar (market) p.83, Our Home p.96, Our God p.111, Our School p.113, and Kid of Dove at page 116. Primer 3, was designed for higher level of reading and writing skills and it included the topics of a poem, Naht (Praise of Muhammad Peace Be

Upon Him (PBUH), Our Dear Prophet (PBUH), Family of Marryum, What do people of a family do?, Health and Cleanliness, Etiquettes of Conversation, Visit to Forest, Be Healthy, How does a Plant grow?, Admission of children in School, Our Leader and Pakistan, Speak Truth, Letters, Application for sick leave, Age of Medicines, Monthly Bills, Cold Drinks, Domestic Tips, Care of a New Born Baby, and Vegetables growing at Home. It included exercises of combining and separating of words; fill in the blanks, dictation, sentence formation, and paragraph writing etc. Primer designed for numeracy skills included counting 1-1000 with space for practice, concept of addition, subtraction of single and multi steps having carry numbers, tables, multiplication and division of single and multi steps along with statement questions to solve, concept of time and currency notes. Primer of English included the alphabetical awareness with names, simple words and sentences of daily use. Phonic method of teaching was used to improve the basic literacy skills of adult illiterates.

Department of Literacy and Non-formal Education, Punjab

The department of Literacy and Non-Formal Education was created under Local Government Ordinance in 2001, Part “C” of the first schedule. It was established to launch literacy campaigns, basic education, continuing education and vocational education. The material for Literacy Programmes was reviewed to make it more functional, useful and poverty sensitive with the following components;

Reading: Reading directions, road signs, posters, etc. reading labels on medicines, food stuff and following instructions.

Writing: Writing down important names, numbers, addresses, making single note, filling out receipts, forms etc.

Speaking: Words which make sounds, Words which have meaning

Understanding: Finding out about basic weight, price, and differences; finding out about similarities, facts, etc.

Numeracy: adding, subtracting, multiplying, and dividing (Government of Punjab, 2005).

The proposed duration of literacy programs was 5 months but operationally it was of 3 months. The content of literacy programs of DLNEP under the title of “Roshan Rahian” included 3 primers. In Primer 1, the schedule of teaching given on page 4 for teachers was of 4 months but the schedule given on page 6 was of 35 days for its teaching. It included alphabets in association with familiar names of things, persons and professions. Counting was also taught along with reading and writing skills. The formation of words, combining and separating words, sentences making exercises were also included in primer 1. At the end of Primer 1, the learners were expected to learn counting up to 100 along with exercises of completion of missing numbers and different shapes of alphabets. Primer 2, included the topics of, Grow Vegetables & Increase Income, Stories, Growth of Fishes, Carpet Weaving, Health and Balance Diet, Cleanliness, Come to Plant Trees, We and Our Environment, Bee Forming and exercises of sums of addition, subtraction, multiplication and division with adopting the rule of simple to complex and easy to difficult. Primer 3 designed for higher level of reading and writing skills. It included essay writing, How to write a letter with example? Writing Applications with examples, Making record of savings and expenditures, loans, Filling of a Money Order Form, Withdrawal and Deposit of money in Bank, How to write a Cheque? Filling of NIC form, Marriage form, Use of Calculator, Vote casting, Tables, concepts of addition, subtraction, multiplication and division, etc. Alphabetic method of teaching was used to teach the lesson to the illiterate.

Purpose of the Study

The study was conducted to assess the retention level of neo-literate from National Commission for Human Development (NCHD) and Department of Literacy and Non-formal Education, Punjab (DLNEP). The second important purpose of this study was to compare of results of the neo-literate.

Methodology

The neo-literates of both the organizations that were graduated in the year 2006 in Punjab were the population of the study. Covering maximum geographical area of the province, six districts were randomly selected out of fifteen districts in Punjab where the literacy

programmes were launched. In the next step, the neo-literates were randomly selected from two target union councils (one for NCHD and other for DLNEP) in each sample district. The neo-literates were identified with the help of their respective adult literacy teachers and supervisors. Twenty neo-literates were selected to administer a test assessing their retention in literacy skills previously learned in the centres. During this course of action many neo-literate were found who had prior schooling experience of 3 to 5 years. In the sample only those neo-literate were included who had no prior schooling experience. Test was constructed after reviewing the specified content of both literacy programmes.

It was divided into three sections; reading assessment section, writing assessment section and numeracy assessment section. In each section of the test, those items were included which were commonly taught in both types of the literacy centres established by NCHD and DLNEP respectively. Test was personally conducted to groups of 3 to 4 neo-literates in the presence of their teachers and supervisors to increase the confidence level of the neo-literates and to minimize the chance of cheating. The test was properly checked and results were analyzed by using paired sample t-Test with the help of SPSS.

Results:

Table 1: Raw Scores of Neo-literates

Scores	Scores of Neo-Literates (NCHD)			Scores of Neo-Literates (DLNEP)		
	Read- ing 1	Writing 1	Num- eracy1	Read- ing 2	Wri- ting 2	Nu- m- era- cy 2
01	04	06	09	06	08	10
02	07	10	12	09	13	16
03	08	12	13	10	14	15
04	08	11	14	12	15	16
05	06	11	13	09	13	12
06	09	10	10	09	10	12
07	16	10	09	16	10	13
08	16	13	12	16	12	10
09	13	13	14	17	11	09

10	12	08	06	08	05	01
11	05	04	02	03	03	01
12	05	06	02	02	02	01
13	03	02	02	01	02	02
14	04	02	01	01	01	01
15	04	02	01	01	01	01
16	00	00	00	00	00	00
17	00	00	00	00	00	00
18	00	00	00	00	00	00
19	00	00	00	00	00	00
20	00	00	00	00	00	00
Total	120	120	120	120	120	120

Tables 1 reveals that 33 (27.5%) neo-literate of NCHD and 46 (38.3%) neo-literate of DLNEP could not read the alphabets properly, 50 (41.1%) neo-literate of NCHD and 63 (52.5%) neo-literate of DLNEP could not write the alphabets accurately, similarly 61 (50.8%) neo-literate on NCHD and DLNEP could not read, write and count up to 100. Table also reveals that 66 (55%) neo-literate of NCHD and DLNEP could read simple words and sentences, while 54 (45%) neo-literate of NCHD and 48 (40%) neo-literate of DLNEP could write simple words and sentences with more than 60% of accuracy. It is also clear in table 1 that 51 (42.5%) neo-literate of NCHD and 45 (37.5%) neo-literate of DLNEP could do simple single step calculations of addition and subtraction without carry number.

Only 17% of neo-literate of NCHD could perform better in reading skills, 13% in writing skills and 5% in numeracy skills of adult literacy program after two year of their study. In DLNEP only 6.5% of neo-literate could perform better in reading, 7.5% in writing, and 5.8% in numeracy skills. It was concluded that most of adult female neo-literates relapsed into illiteracy and resulted a huge wastage of educational and financial resources. The findings of this study have serious consideration for educational planners and policy makers also.

Table 2: Paired Samples Test

		Mean	SD	t
Pair 1	Reading1 - Reading2	1.058	.748	15.498
Pair 2	Writing1 - Writing2	.958	.600	17.507
Pair 3	Numeracy1-Numeracy2	.633	.549	12.637
Tabulated value of t=1.98				$\alpha = 0.05$

In table 2, means of score in reading, writing and numeracy were calculated along with standard deviation (SD) and calculated t-value. The results were compared with the degree of freedom (df) 119 at 0.05 level of significance. The above table shows that the mean differences in reading, writing and numeracy is clear and calculated t-values 15.498 in reading, 17.507 in writing and 12.637 are great as compared to the tabulated value of 1.98. It is concluded that there is highly significant difference in the performance of neo-literate of NCHD and DLNEP in respect of reading, writing and numeracy. The neo-literate of NCHD performed better as compared to the neo-literate of DLNEP. Apart from stark differences in the performance of neo-literates of both organizations, it can therefore be concluded that majority of the neo-literates of adult literacy programmes are functionally illiterate.

Discussions

The present study highlighted the fact that only focus of literacy programs on 3Rs could not be fruitful because in this way we were widening the gap between theory of adult learning and its practical application in adult literacy programmes. Theoretically adults wanted to engage themselves in a purposeful activity, their main concern was learning income generating skills. The second most important concern was social acceptance, self respect, confidence, continuing learning etc. through these types of content we could not achieve a single target of adult literacy. After completion of literacy programs we counted program graduates as literates persons of the society. The study proved that they were no more literate at all. It meant that it was totally an educational wastage. Developing countries like Pakistan could not afford such a huge loss of resources. This fact had serious implications for literacy rate on one

side and for planners, organizers, policy makers, and curriculum developers on other.

We may include income generating skills as a component to attract adult illiterates in literacy centres. We may also launch post literacy programs to strengthen the basic literacy skills of neo-literates and to make them effective members of the society. Nisa, (2008), Khan.H, (2008), and Adeeb, A. (2006) proved that the retention level of neo-literates is alarming in Pakistan. Internationally, Abadzi, (1995, 2003a, 2003b), Wagner, (2005), Patel, (2005), Roger, (2006) also proved that relapse in adult literacy is common in the world.

Significant contribution of Study

The findings of this study brought the reality into light that behind the phenomenon of relapse into illiteracy, the role of content of literacy programmes cannot be ignored. Problems of relapse into illiteracy are commonly reported in developing countries of the world. Adult literacy programmes in India, Pakistan, Bangladesh, Nepal, Tanzania, Brazil, Batswana, other countries of sub Saharan region are facing relapse in literacy skills. Only one adult literacy programme entitled “Nigera Sheikhi” in Bangladesh was reported to be successful due to its variety of topics to learn for adults. If we offer variety of topics for illiterate to learn in literacy programmes based on their needs and aspiration, the results will be better.

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Need for Professional Training of Secondary Schools Heads

Naveed Sultana*

Abstract

Teachers can enhance the performance of schools but teachers' performance is conditioned with better organizational climate. Therefore the maintenance of congenial environment and organizational climate most suitable for the success of institution is the responsibility of the institutional head. The main focus of this article was to analyze the performance of secondary schools heads regarding the educational activities of the schools and on the basis of this performance to examine the need for professional development of heads. For this purpose hundred heads of secondary schools (50 males and 50 females) were selected as sample of this study. A questionnaire on three point scale was used for data collection. Collected data was analyzed through Chi-Square formula. Overall it was concluded that heads need training in management, motivation, leadership, decision making, evaluation, communication and technological techniques. As if they are competent and knowledgeable they will be able to run and lead the schools effectively and successfully.

Introduction

For the development of any country, quality education is considered an important factor but the quality education depends upon the quality of many factors such as, objectives, curriculum, quality teachers, examination, research, budget and management. All the factors are important, but this study focuses on management factor which makes the head of institution, efficient and effective and head can enhance the quality of institution as well. Adequate educational facilities and environment are essential aspects for improving the quality of education and achieving the national outcomes. But provision of these essential aspects is the responsibility of head. So the head should be knowledgeable, competent and effective to make

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the school successful. But for the successful role of school head, training is considered a key element. Training is considered essential for transforming the potential into professional competencies of the school head for assuring the efficiency and effectiveness of schools' programme.

Head as institutional leader can run and lead the institution effectively and successfully, only if he/she has the capabilities to interact well, attract well, affect well and communicate well within the institution. All elements of "well" require the in-service training of school heads. This training can extend and develop the individuals' capabilities for remarkable performance in their jobs. Training embraces the transfer of new knowledge, skills, behavior and attitudes to develop and sustain the professional competencies of trainees to perform their jobs. Professional or in-service training is the part of professional field of adult education whose central focus is the role performance of persons in organizational system. The heads of secondary schools are also adult person who have the portfolio of different responsibilities and professional skills. Their portfolio consists of different managerial skills such as conceptual, technical and interpersonal skills.

These skills present the dynamic personality of heads of secondary schools who are responsible to run the schools successfully. But it may be an unrealistic approach, as, a person with having less training of any task how can justify with his responsibilities professionally remarkable. So adequate and well planned training of heads of secondary schools may have many advantages for both, individuals receiving training and the schools in which they work. Training can increase, job performance and job satisfaction, as higher productive work can enhance the pay and prestige.

In Pakistan, mostly secondary schools teachers are selected or promoted as the secondary schools' heads without possessing sufficient experience of headship. For meeting the requirements of headship, in Punjab (Province of Pakistan), Directorate of Staff Development is imparting professional or in-service training to the heads of secondary schools for overcoming the deficiency of heads. But researcher felt this training is insufficient for meeting the

challenges of institution. Keeping in view this situation, the existing study was conducted, although this does not cover all the dimensions of the in-service training, secondary school life and all population of heads of secondary schools. But it gives the insight and food for thought to assess the need of heads for their in-service training aiming to improve and promote their professional skills.

Professional training may be divided into pre-service training and in-service training. In Pakistan, mostly secondary school teachers are Selected or promoted for the post of the heads and no in-service training is given to them before their posting. Keeping in view the needs of the heads of secondary schools, in-service training has got the special attention. So the main focus of this study to examine significant role of professional training of heads of secondary schools and its impact on their performance for analyzing the dynamic performance of institution and overall quality education.

Objectives of the Study

Following objectives were addressed during this study:

- i. To analyze the importance and prevailing efforts of professional training of the secondary schools' heads.
- ii. To examine the participatory role of heads through different essential activities of school life.
- iii. To assess the needs for professional or in-service training of heads of secondary schools.
- iv. To give recommendations of professional training of heads for enhancing the professional competencies, knowledge and skills of heads of secondary schools.

Conceptual Framework

Quality of education is conditioned with quality of teachers, but teachers as working in schools effectively and successfully need congenial environment and organizational climate, which is the responsibility of the head of the institution.

Regarding the posts of heads in secondary schools, mostly teachers of these schools are selected or promoted. Before their posting, no in-service training is imparted to them about management, administration, supervision, policy, planning, budgeting, human

relations, and leadership and evaluation techniques. It is established fact if the head is competent and knowledgeable, then he and she will be able to manage, guide, supervise and evaluate the performance of teachers and will also be in better position to show good results of the schools that affect the quality education. Keeping in view the links of quality education with quality of teachers and the responsibilities of heads, this study revolves around the importance of in-service training of secondary schools heads. For comprehending the significant role of training and its impact on the performance of institutions, the conceptual frame work of this study was chalked out under these aspects:

- Identification of the problems, on the basis of need of the professional or in-service training.
- Analytical approach for reviewing the literature and relevant researches, which provide the profound base for this problem.
- Hypothetical approach which may reject or accept the assessment of need for in-service training of secondary schools heads.

Overall the efforts of researcher may give the insight about the professional or in-service training of heads as integral part, which has the directly impact on the performance of teachers, and this performance will enhance the quality of education. Hence this study covered all the necessary aspects of educational management and job related portfolio of the heads at secondary level of education.

Review of Literature

It is an established fact that fundamental knowledge, professional skills and techniques become the sound base of successful institutional management and for achieving the targets of success. But for having the high level degree of success of institution, in-service or professional training of institutional management is necessary to obtain required professional knowledge, skills and attitude to perform duties efficiently.

For the success of any field of life or profession, some rules, laws, code of ethics, roles, services theories and history of development work as the fundamentals of any profession. Institutional

management also has its conceptual history. Daresh (2002) highlighted that full-time building administrators or heads were not typically found in schools until the end of the 19th century and the beginning of the 20th century. Hence the development of their roles in different times or periods is a story of development of those educational administrators or heads or principals for their administration or headship or principal ship.

As we entered in 21st century and Lange (1990) highlighted these characteristics of this century, knowledge based, social problems will be highly complex, increasing of information flow, rapid change and impermanence, decentralization of organizations, institutions or systems and people oriented.

So for meeting the challenges of 21st century the role of heads of secondary schools has become more crucial and dynamic. According to Harris et.al (2003) today the, prime and primary function of institutional head is as change agent within his institution. While focusing the head's role Certo (2003) pointed out the activities of management process of institutional head such as planning, organizing, influence (referred as motivating, leading, directing or actuating is concerned primarily with people within organizations) and controlling. These functions or activities are mapped as job of heads and they are responsible to perform their jobs effectively. Hence all these functions are interrelated to attain organizational goal.

Mohanty (1998) divided the duties of heads of schools in five categories such as (1) planning (2) teaching (3) organizing and administering (4) supervising and budgeting and (5) maintaining discipline and relations. Perera (2000) also highlighted the areas of the school as the role of heads such as goals, planning, leading, instructional leadership, guidance and counseling, motivation, communication, conflict management, supervision, morale and commitment. So to perform this role effectively heads of institutions need the professional training which provides the opportunity to learn. Jitendra (1999) argued that training covers these areas such as attitude or personal training, skill training and field training. He

further highlighted approaches to training: informative, participatory, and experimental.

One objective of the study is to examine the importance and prevailing efforts of professional training of heads so it is necessary to get insight thought review of literature about the nature of in-service training, methods, approaches and their selection and process. According to Griffen (2000) training enables the employees to do their job effectively for which they are hired. Bernardin and Russell (1998) training is considered an attempt to improve employee performance about his currently job. And Kreithner (1995) described that the behavior of employee may be changed through training as it shares the experiences.

Professional training can increase the potential of heads within the institutions in which they serve or in community in general. Hakimian and Teshomre (1993) pointed out these benefits of training for any individual of any institution:

- i. Training brings higher the skills, job performance and the output.
- ii. Quality of output and of any institution can be increased.
- iii. Training can make the heads well conversant about, how well to define the responsibilities of employees within the institution.
- iv. It can enable the heads to acquaint themselves with new knowledge, skills, idea and knowhow of technology.
- v. It may make faster the image of the institution as dynamic and forward looking.

Griffen (2000) highlighted to determine the need is the first step for developing a training plan for any individual. Rue and Byars, (2000) stated that need assessment is a systematic analysis of the specific training. Noe (1998) also argued to determine the need is the process for determining the need of training. Overall need assessment process may help to identity the needs in many areas, such as, systems, procedures, structures, resources or employee competencies. Hence the training needs can be met through learning

which the prime purpose of any training is (Millano and Ullius, 1998).

For identifying the need the of training following methods are recommended

- Diagnostic Documents.
- Different aspects of school
- Questionnaires or interviews used for data collection.

Hence Kydd et al. (2000) suggested methods for determining the need of training may answer these questions, such as , how much information is required, which kind of information is needed (quantitative or qualitative) and to what extent promptly the results are required. Hakinnrian and Teshome (1993) outlined the stages of training cycle while focusing the, need assessment, structuring, organizing conducting and assessing the training. Hence these entire stages make the systematic strategy to training contains the logical structure and sequence of training activities.

It is established fact that successful administration or educational administration depends upon fundamental knowledge, skills and discipline techniques to develop course of action for obtaining the targets. For this purpose in-service training becomes an instrument for meeting the required knowledge and skills which are essential for doing the job successfully. According to Harris et.al (1992) in-service training for leadership has pivotal and special place in secondary schools for the school's staff development efforts and performance as well. He further stated in-service leadership development needs special attention for developing the professional potentials of heads which will influence the work of teachers and promote overall quality education. Merseth (1999) argued that traditional educational administration or traditional style of leadership of secondary school heads does not cope with today's complicated and complex school environment. For having a deep and interactive understanding of both professional knowledge and skills, school heads need in-service training.

Therefore for enhancing the performance of institution it is recommended that a person who is working in institution must has

the competency to perform job assignment or task or task related activities and professional skills successfully (Walkin, 1991). Keeping in view the success of that person and institution, in-service training is considered an important factor. As Scheer (1993) highlighted the purpose of any training, pre-service or in-service is to develop the desire of learning in individual. Hence Perera (2000) pointed out those training needs to be practice-based, reducing didactic bias, enabling management theory and practice to go hand in hand. Noe (2000) divided in-service training method into two categories such as, traditional training methods which do not require new technology. Other new training methods include the World Wide Web, distance learning and virtual reality resulting from advance technology. Overall in-service training by using any method aims at the provision of training for those already in define occupational positions and performing clear functions within their organizations.

Research Methodology

Existing study deals with social problem in descriptive form so the nature of study was descriptive type and surveying approach was used for analyzing this problem. The study was delimited to the heads of public secondary schools of Lahore city. For surveying the subjects of study, 100 heads of secondary schools, 50 females (headmistress) and 50 males (Headmasters) heads were the sample and random sampling technique was used for the selection of this sample. Keeping in view the objectives of study, a questionnaire on three point scale was developed. By using the personal contacts, the questionnaire was distributed among the sample of 100 heads (males and females) of secondary schools. Hence the questionnaire comprised twenty items. Ten out of twenty items manifest the overview of professional skills as the portfolio of heads and necessary for becoming a successful leader. The remaining ten items assess the need of in-service training which advocates the cause and effect theory or relationship of any social problem. For quantifying the collected data chi-square formal was used for statistical purpose.

Data Analysis

The focus of this study was to assess the need of in-service training of secondary schools heads. Regarding this data were collected

through three point scale questionnaire. For analyzing and interpreting the data Chi-Square (χ^2) was used as it is an appropriate approach to get more sophisticated results. According to Munro (2001) Chi-Square is one of the most widely used statistical tests for nominal(categorical) data and where frequency data is involved in a wide range of issues and problems, Chi-Square has been applied. In this study the nature of the data was nominal (categorical) and researcher has relied on honest opinions of the respondents and their opinions were obtained through three point rating scale questionnaire.

Following formula of Chi-Square was applied for analysis of the data:

$$\chi^2 = \frac{\sum (fo - fe)^2}{fe}$$

fo = Frequency observed

fe = Frequency expected

df = Degree of freedom

P = probability of exceeding the table value of χ

Hence the level of significance used in the study was 0.05 and degree of freedom was 2. The calculated value of Chi- Square was compared with table value 5.991 and decision of acceptance or rejection was made. Following frequency table was used:

Items	Frequently NO%	To Some Extent NO%	Never NO%
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During the data analysis of questionnaire it came out that 15 statements were accepted and out of these 15 statements, 10 statements highlighted the need of in-service training for the heads of secondary schools about the different aspects of school life. The remaining 5 statements were about the level of performance of schools heads regarding their job assignments. While 5 statements out of 20 statements were rejected. Therefore following findings have been drawn from the data of study:

- i. The trend of the respondents was towards “to some extent” about the statement that the head is well aware about the goals of secondary education. Hence this statement is

- rejected from the respondents as the calculated value of χ^2 was 0.41, which is lesser than table value 5.991 at df 2. The difference is significant.
- ii. The calculated value of χ^2 came out 1.42 which is lesser than the table value 5.991 at df 2. The difference is significant which highlighted that the statement “the head helps the teachers to prepare the time table and activities” is rejected.
 - iii. The analysis of this statement “the head is efficient for using the educational resources” depicts that the calculated value of χ^2 is 2.23. This value is lesser than the table value 5.991 at df 2. Hence the difference is significant which proved that this statement is rejected by the respondents of this study.
 - iv. For analyzing the statement that head assigns the duties to the staff judiciously, calculated value of χ^2 is 4.45, which is lesser than table value 5.991 at df 2. The difference is significant through which it is analyzed that this statement is unaccepted.
 - v. The calculated value of χ^2 came out 2.83 which is lesser than the table value 5.991 at df 2. The difference is significant. Hence the statement “the head checks the performance of the teachers regularly” is rejected from the respondents of this study.
 - vi. The analysis of the data depicted that the head took initiative to enhance the quality of school. As the calculated value of χ^2 came out 18.99, which is greater than the table value 5.991 at df 2. The difference is significant, hence this statement is accepted.
 - vii. It is revealed from the data that the calculated value of χ^2 was 11.78 which is greater than the table value 5.991 at df 2. Hence the difference is significant which shows that the statement “the head is well aware about the rules, regulations and laws relating to school education” is accepted.
 - viii. The calculated value of χ^2 came out 7.45 which is greater than the table value 5.991 at df 2. The difference is significant, which highlighted that the statement “the head uses education code in school affairs” is accepted.
 - ix. The analysis of data depicted that the calculated value of χ^2 was 8.06 which is greater than the table value 5.991 at df 2.

- The difference is significant. Hence the statement “the head uses the purchase manual efficiently” is accepted.
- x. The calculated value of χ^2 came out 24.99 which is greater than the table value 5.991 at df 2. The difference is significant. Hence the statement “the head seeks help from the community for the development of the school” is accepted.
 - xi. The calculated value of χ^2 came out 104.87 which is greater than the table value 5.991 at df 2. The difference is significant, which shows that the statement “the head needs in- service training for running the school successfully is accepted.
 - xii. It is analyzed that the head needs training in planning regarding the all aspects of school as it is proved by the calculated value of χ^2 came out 71.6. This value is greater than the table value 5.991 at df 2. Hence the difference is significant which shows that the statement is accepted.
 - xiii. The calculated value of χ^2 came out 29.68 which is greater than the table value 5.991 at df 2. The difference is significant. Hence the statement “the head needs training in managing the school activities” is accepted.
 - xiv. It is inferred from the analysis that the head needs training in leadership styles to lead the school effectively as the calculated value of χ^2 came out 69.5. This value is greater than the table value 5.991 at df 2. The difference is significant. Hence this statement is accepted.
 - xv. The calculated value of χ^2 was 46.2 which is greater than the table value 5.991 at df 2. The difference is significant. Hence the statement “the head needs training in decision making process” is accepted.
 - xvi. The analysis of this statement “the head needs training in motivational techniques” highlighted that the calculated value of χ^2 was 59.11. This value is greater than the table value 5.991 at df 2. Hence the difference is significant which shows that the statement is accepted.
 - xvii. The calculated value of χ^2 was 30.39 which is greater than the table value 5.991 at df 2. The difference is significant. Hence the statement “the head needs training in communication techniques” is accepted.

- xviii. The calculated value of χ^2 was 30.39 which is greater than the table value 5.991 at df 2. The difference is significant. Hence the statement “the head needs training in evaluation techniques” is accepted.
- xix. It is depicted from the analysis of data that the head needs training in latest information technology as the calculated value of χ^2 came out 51.78. This value is greater than the table value 5.991 at df 2. The difference is significant which proves the acceptance of above mentioned statement.
- xx. The calculated value of χ^2 was found to be 63.45 which is greater than the table value 5.991 at df 2. The difference is significant. Hence the statement “the head needs the training about the rules, regulations and laws relating to school education” is accepted.

Discussion and Conclusions

Change is considered as everlasting process of life and education is an instrument of change. Education is not only instrument of change but it also develops the human resources through education for peace, progress and prosperity (Govt. of Pakistan, 2001). The system of education of any country comprises many steps from policy formulation to curriculum development to textbooks to teacher training to teaching to evaluation and to manage all these activities in institutions. Hence the training (pre-service or in-service) of all concerns of all steps of education system works as central point to make them proficient and efficient (Govt, of Pakistan, 1998). The results of this study also revealed the need and significant role of training aiming to develop the human resources in education and to enhance their professional competencies for improving the quality education. For empowering the quality of heads of secondary schools, the analysis of this study highlighted the main factors which need to be addressed during the in-service training such as professional knowledge, skills and behaviour. Bell and Gillbert (2004) also advocated that training package should update the knowledge, modify the attitude and modernize the skills required for the professional development of teachers and administrators.

Quina (1989) pointed out different aspects which are essential for training of professionals such as, awareness of professional goals,

participation in professional opportunities, co-curricular activities, improvement in academic and professional knowledge, skills and attitudes and assessment techniques.

The results of this study also highlighted that majority of the respondents opined that they need in-service training for having competencies to perform their duties successfully. For this purpose the respondent of study agreed that they required training to update their professional knowledge to increase the proficiencies in work skills and to develop their behaviour. As they admitted their inefficiency in these aspects, so they assessed their needs for their in-service training for all types of managerial skills such as conceptual skills, interpersonal skills, and technical skills and for managerial roles such as interpersonal or social roles, information roles, decision roles. Rue and Byars (2000) also argued that institutional management can increase the performance of institution only if that management is proficient in conceptual skills, human relations skills and technical skills of management.

Overall the results of study showed that in-service training of heads of secondary schools was essential for enhancing the quality of education through the improvement of the work, quality of the workers who are serving these schools, even academic, administrative and supportive staff. It can be inferred from the analysis of this study that heads may be proficient through proficient in-service training, while academic and supportive staff may also become proficient through proficient heads. Precisely in-service training, proficiency of heads and performance of staff in secondary schools make the triangular form and these elements work as concomitantly.

Overall the following conclusions were drawn in the light of objectives of the study:

- i. Keeping in view the objective NO two it was concluded that majority of heads were not well aware about the goals of secondary education. A large number of heads were not involved in preparing the time table, schedule and all types of school activities. They were not efficient in using the educational resources, for assigning the duties to the staff,

using the education code in school life and using the purchase manual. Hence they checked the performance of teachers and took the initiative to enhance the quality of school. For this purpose majority of the heads seek the help from the community for the development of the school. They were well aware about the rules, regulations and laws relating to school education.

- ii. For examining the objective NO three it is concluded that the heads of secondary schools needs the professional or in-service training aiming to run school efficiently and successfully. It is inferred from the review of literature and analysis of data that success of the school is based on planning, management, leadership, decision making, motivational, communication, evaluation and technological techniques. So the large number of the sample opined that they needed professional or in-service training in all above mentioned techniques. Over all the analysis of this study assessed the need of in- service training of heads of secondary schools.

Recommendations

While focusing the objective NO four of this study following recommendations are given:

- i. Periodic in-service training or after reasonable interval or time of posting may be arranged for the heads of secondary schools to update their professional knowledge in different administrative techniques for enhancing the quality of schools.
- ii. Provincial department of education may provide the documents of educational policies, rules, regulations and laws of services to the schools' heads for enhancing their job performance.

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A Cross-country Comparison of the Iranian Curricula for Translation Programme at the Undergraduate and the Graduate Levels

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Abstract

The present study aimed to investigate the effectiveness of the curricula for translation program (training translators) at the undergraduate and the graduate levels in Iran. Observations and experiences indicated that Iranian senior translator trainees at the undergraduate and the graduate levels were not competent enough to perform satisfactorily in real situations of translation/interpretation careers. The problem continuously remained for the newcomer trainees while the teachers were the same whose methodologies were, thus, unchanged. To investigate the traces of deficiency in the curricula, nine hypotheses were formed that questioned the curricula in different ways. The approach to test the hypotheses was triangulation: the data were collected via questionnaire, observation, interview and test. The participant of the study contained two groups of senior translator trainees at the undergraduate and the graduate levels, two groups of teachers for the undergraduate and the graduate levels and one group of translation experts. The data of the study were analyzed via the SPSS descriptive analysis and the results of the study indicated that there were more deficiencies in the curriculum for translator training program in Iran at the undergraduate level than the curriculum at the graduate level. Finally, an optimised model of curricula for training translators in Iran was presented.

Introduction

Research on second language acquisition (SLA) has been expanded enormously since its inception. Studies of SLA have increased in quantity as researchers have addressed a wider range of topics, asked new questions and worked within multiple methodologies. At the

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same time, the field has become increasingly bidirectional and multi-faceted in its applications. As new theories and research have emerged on language, and even more, so on learning, their application to the study of SLA has been fruitful. It has led to long needed explanations about developmental regularities and persistent difficulties, and has opened up new lines of research on the processes and sequences of second language (L2) development (Pica, 2005).

Achieving and applying newer findings from the study of SLA to educational concerns has been the focus of long standing debates about the role of different variables in the SLA process, specifically, about the nature of the learner's input needs and requirements. A modest, but increasing number of SLA research findings, has had direct application to instructional decisions. Most other findings have served as a resource to inform teaching practice. One of the significant applications to and from the study of SLA, Translation, is the focus of this investigation.

In Iran, shreds of evidence at least since Qajar era such as the foundation of Dar-Al-Fonoon (1847 A.D.), the attempts made in the Higher Institute (College) of Translation and Tehran University to extend the field of translation as a major of study via developing and introducing courses and methods of teaching (Karimi Hakkak 1999), and finally, offering courses of Translation Programme at the M.A. level in Allameh Tabatabaee University as well as the Islamic Azad University-Science and Research Campus and many other universities reiterate the significance of translation in Iran.

Evidently, training translators seems to be an important component of any comprehensive translation programme specifically in Iran. This is why the present study aims at evaluating the effectiveness the Iranian curricula for translation studies.

Curriculum Development: Basic Tenets and Evaluation Approaches

By definition, Curriculum Development is a comprehensive, ongoing, cyclical process “to determine the needs of a group of learners; to develop aims or objectives for a program to address those needs; to determine an appropriate syllabus, course structure,

teaching methods, and materials; and to carry out an evaluation of the language program that results from these processes” (Richards, 2001: 2). Language curriculum development process should reflect needs analyses and ideologies about language, language teaching and language learning.

According to Johnson (1989), there are four developmental stages in designing a curriculum namely: curriculum planning, specification: ends/means, program implementation and classroom implementation (Johnson, 1989: 3) Similarly, according to the Ankara Resource Centre report (2007), what is needed to be done in developing a curriculum includes: ‘needs analysis’, ‘situation analysis’, ‘specification of goals’, ‘objectives and outcomes’, ‘syllabus design and course planning’, ‘materials selection and development’, ‘course piloting’, and ‘curriculum evaluation’.

Curriculum, like any other sort of project, should undergo evaluation. At least one reason can be that curriculum is a plan to be implemented during an educational career. Thus, there are various viewpoints in this respect. First, according to Hargreaves (1989), evaluation is either formative or summative in purpose-or both. He considers formative evaluation as typically periodic or recurrent since its function is to check the progress of a project or programme and modifications if/where necessary. He, further, explains that summative evaluation assesses the effects or impact of a project when it is completed-or perhaps when a particular stage has been reached.

Second, there is a comparative model of curriculum evaluation. The development of international comparative studies of educational achievements dates back to the early 1960s and was made possible by developments in sample survey methodology, group testing techniques, test development, and data analysis (Husén and Tuijnman, 1994: 6). International studies of educational achievement usually have a variety of purposes such as to compare levels of national achievement between countries; to identify the major determinants of national achievement, country by country, and to examine the extent to which they are the same or different across countries; and finally, to identify factors that affect differences

between countries (Postlethwaite, 1999: 12). The functions of these studies have been analysed and described by Kellaghan (1996), Plomp (1998), and Postlethwaite (1999).

This study makes an attempt to survey and evaluate the Iranian curricula for translation programme at the undergraduate and the graduate levels in Iran via conducting a comparative study of the curricula with the corresponding curricula of translation programme in 28 universities outside Iran. The rationale behind such a comparative survey lies in the extensiveness of the course credits required for translation as a major of study and the variety of data that could be obtained from such a comparison.

The Study

This study aims at investigating the authenticity of the current curriculum for translation studies at national level (Iranian curriculum). Despite the pedagogically-acceptable situation of translation both in Iran and in the world, translator trainees' achievement has always been a matter of concern (here Iran): although Iranian Ministry of Higher Education has, for years, provided translator trainees with curricula (Appendix A) and course syllabuses based on specified objectives, there are still problems: some of such problems include the concurrency of translation teaching and language teaching, practices in translation from Persian into Foreign language, lack of teachers specialization and vagueness of the curriculum and syllabuses (Mirza Ibrahim, 2003). Mollanazar (2003), further, believes that the content of the current Iranian curricula for teaching translation is more compatible with 'Translation Studies' than 'Translator Training' which can question the appropriateness of such curricula.

Furthermore, Miremadi (2003), pointing to the problems of the current curricula, enumerates a number of characteristics for a competent translator including: a command in his/her mother tongue, knowledge of translation principles, familiarity with philosophical argumentations and question/answer principles, literary components.

Ziahosseini (2003) emphasises the importance of curriculum design in any program for training translators focusing on the fact that

linguistic knowledge is an inseparable element that must be taken into account in designing curriculum and syllabuses. Also, Heidarian (2003) points to the lack of agreement between the names of certain syllabuses and the syllabuses themselves and the lack of agreement between certain course credits and their corresponding reference textbooks as problems in translation M.A. courses. Based on the above-mentioned points, the study tried to investigate the following hypotheses:

H1&H2: The current translation programme for the undergraduate and the graduate levels does not help students acquire the skills meet the requirements stated by the Ministry of Higher Education in Iran.

H3&H4: The current translation programme curriculum at the undergraduate and the graduate levels shows shortcomings when compared with the curricula used in similar areas internationally.

H5&H6: The methods currently used for training translators lack the necessary theoretical backgrounds at the undergraduate and the graduate levels.

H7&H8: Students and teachers have negative views concerning Iranian curricula for training translators at the undergraduate and the graduate levels.

H9: Experienced translators in Iran consider the current curriculum to be deficient for training professional translators.

Method

Subjects

The subjects of the study consisted of five groups. The five groups, as described below, represent the population of the study, that is, the Iranian translator trainees in the Azad University (all branches nationwide) as well as translation trainers and professional translators throughout the country:

1. The first group of the study, the undergraduate (B.A.) group, consisted of 200 Iranian senior undergraduate translator-trainees (28-30 years of age) that were selected randomly from among the senior undergraduate students studying in

- the Islamic Azad University (all branches nationwide).
2. The second group of the study, the graduate (M.A.) group, consisted of 100 Iranian senior graduate translator-trainees (30-33 years of age). They were selected randomly from all those Islamic Azad University branches which offered translation at the graduate level.
 3. The third group of the study, the translator trainers for the undergraduate level, consisted of teachers whose classes were observed. Eight teachers who taught the undergraduate trainees of the study were asked to participate in the study: their classes were observed during four 90-minute sessions for each teacher. The courses observed included courses on theoretical and practical aspects of translation.
 4. The fourth group of the study, the translator trainers for the graduate level, consisted of teachers whose classes were observed. Five teachers who taught the graduate trainees of the study were asked to participate in the study: their classes were observed during four 90-minute sessions for each teacher. The courses observed were those on the theoretical and the practical aspects of translation.
 5. The fifth group of the study, the expert group, consisted of 5 professional experts in translation who participated in the interview of the study. There were two criteria for the selection of the professional translator group: the first criterion was: having at least 5 years of experience in teaching translation at different levels, and the second criterion was: having practical experience in translating different works including textbooks, novels, articles, etc.

Material (Instrument) and Procedures

The test of the study consisted of translating four short semi-specialised paragraphs with different genres. The genres were: 'Instructions', 'Journalistic-Economical', 'Social', and 'Journalistic-Political'. Paragraphs with scientific genres were not selected since there was no scientific course for translation practice in the Iranian curriculum and thus, if included, such genres would face the participant trainees with a complicated situation of translating technical texts they have never been exposed to. This, in turn, might question the reliability and validity of the test. Each paragraph

contained about 100 words and was selected from the teacher-made materials used in classes as well as reading comprehension textbooks.

Two points were taken into account at the time of selecting the text extracts: firstly, the difficulty level of the passages was calculated through using Edward Fry's index of readability. The readability degree of the passages was indicated to be highly correlated for the passages at the undergraduate and the graduate levels. Also, the cross point between the average number of sentences and the average number of syllables per each 100 words did not fall in the gray area of the graph. Secondly, the reliability of the translation test of the study was calculated through the KR-21 formula and was indicated as $R=0.6$.

The questionnaires for the trainees were made up of 108 questions for the undergraduate group and 89 questions for the graduate group of the study on the status quo of the current translation curriculum and methods. The questionnaires were used to elicit the trainees' needs towards becoming a translator. The points that were emphasised in the questionnaires for trainees covered different aspects of the Iranian translation programme including: translation theory, translation practice, translation methods, textbooks, course credits, interpretation, literature, culture and the subjects' knowledge of Persian as their mother tongue. These questionnaires were further used for the trainers.

The observation of the study was done through designing four observation checklists. These included a number of common and widely-used topics in Translation Studies, which were gathered from three main sources of "translation textbooks", "national and international syllabuses" and "experts' views on translation studies".

The interview of the study consisted of 15 questions which aimed to obtain the participants' insights, expectations and impressions concerning the Iranian translator trainees' achievements.

A number of curricula for translation programmes from 28 universities outside Iran (Appendix B) were selected through the

cluster sampling randomisation method and were used in this study. The rationale behind surveying over the foreign curricula was twofold: on the one hand, the researcher would be able to access to an acceptable amount of data in making the comparison with the Iranian B.A. and M.A. curricula for translation programmes since there was not sufficient information about the details of different translation programmes of foreign countries. The foreign curricula, used in this study, were obtained through online internet search.

On the other hand, surveying over the 28 international curricula could be done due to the reason that any analysis of the curricula at national and international levels would result in determining if the curricula were similar or different in terms of framework and purpose with the Iranian curricula. This would determine if the Iranian program for training translators was covering the standards and benchmarks and if there was any gaps in the curriculum.

Result and Discussion

The results obtained from the questionnaires of the study demonstrated that most Iranian B.A. and the M.A. trainees have chosen translation because they have been interested in the field. The B.A. and the M.A. trainees as well as trainers insisted on the importance of the four skills of language (listening, speaking, reading and writing) in addition to literature and culture. The results obtained from the observation of the study showed that the requirements for the practical as well as the theoretical course credits at both the B.A. and the M.A. levels were fulfilled by the participant trainers of the study. The findings from the interview analysis assisted to obtain negative insights on the experts' expectations and impressions concerning the achievements of translation studies graduates, nationwide (Iran). The results obtained from the translation test analysis indicated a weak translation performance by the B.A. and the M.A. trainees. Finally, the results from the foreign curricula analysis revealed that the Iranian curricula for translation programme differed in some aspects with the foreign curricula, namely:

- The admission conditions and the form of entrance exam
- Emphasizing specific courses
- Type of the courses offered

- Order of the courses offered
- Purpose of the program

Based on the above-mentioned results, the first hypothesis of the study addressing the deficiency of the B.A. curriculum in helping translator trainees acquire the skills for translating was shown to be supported. The second hypothesis which addressed the question of the deficiency of the Iranian M.A. curriculum for translation programme in providing the necessary skills to meet the requirements of translating at the graduate level was rejected. The third and fourth hypotheses of the study addressed the shortcomings of the B.A. and the M.A. curricula when compared with the curricula used in similar areas internationally were both supported. The fifth and sixth hypotheses of the study addressed the issue that the methods currently used for training translators in Iran lacked the necessary theoretical backgrounds at the B.A. and the M.A. levels were both rejected. The seventh and eighth hypotheses of the study addressed the trainees' and the trainers' negative views concerning the Iranian curricula for translation programmes at the B.A. and the M.A. levels were supported. Finally, the ninth hypothesis of the study, addressed the negative view of participant experts on the Iranian curricula for translation programs, was supported. All the findings, in their turn, represented the direction towards traces of deficiency in the curriculum rather than other possible factors such as the trainers' teaching methods.

Suggesting a New Model for Translation Programme in Iran

The findings of this study are evident to represent traces of deficiency in the current Iranian curriculums for translation programmes at both the B.A and the M.A. levels. Thus, the existing problems as well as the time limitation for implementing the Iranian translation curricula nationwide necessitate the suggestion of a modification in the B.A. and the M.A. curricula for the translation programme in Iran. As a modification, the following course credits are suggested to be added to the Iranian B.A. curriculum for translation programme:

English Culture: The Iranian curricula for translation programme lacks course credits on cultural issues between the Persian and the

English language. As cultures are increasingly brought into greater contact with one another, multicultural considerations are brought to bear to an ever-increasing degree. Also, universities such as Warwick (4 credits), Louvain (2 credits), and Brigham Young (3 credits) etc. have offered course credits on cultural studies. As a result, a course on English culture (at least 2 credits) is helpful for the Iranian trainees to obtain the necessary insights.

Scientific Translation: The current Iranian B.A. curriculum for translation programme contains no course credits on translation of scientific texts. Consequently, Iranian trainees fail to have any practice on texts such as biology, zoology, physics, chemistry or mathematics. This may result in the emergence of a problem in the trainees' future career: they will avoid translating such texts. The significance of scientific texts can be emphasized since some foreign universities have offered courses on this field of study. As instances, Universite de Moncton has offered in its curriculum a 3-credit course of theatre text translation as well as a 3-credit course of commercial translation. Louvain university has offered a 2-credit course titled: 'Scientific Text Problems and Translation Techniques' and Hacettepe University has offered a 4-credit course titled: 'Language Use in Different Fields' and a 2-credit course named: 'Medical Translation'. Thus, for the Iranian translation trainees at the B.A. level, a course of scientific translation (at least 4 credits due to the variety of scientific genres) is suggested.

Dissertation: The Iranian curriculum for translation programme at the B.A. level contains no actual and official dissertation as a course credit. There are term projects for various translation courses and the time restriction prevents the trainees to be able to translate a complete work into Persian. In the offered courses on translation (Appendix A), trainees have the opportunity to translate by themselves and check their own abilities in translating. However, the shortcoming of such an activity lies in the fact that most texts translated in these courses are not complete works; rather, they are mostly part of a work (e.g. a book) and there have been cases in which the assigned text has been repeatedly translated. Therefore, a course of dissertation (2 to 4 credits) can be suggested to be included in the B.A. curriculum for translation programme under the

following conditions: a) the assigned text should not be previously translated, b) the assigned text should be a complete work rather than a part, c) the assigned text genre should contribute to the language and the culture of the country (Iran), and d) if the assigned text genre is scientific, it should present a new phenomenon to the target language readership.

As a modification, the following course credits are suggested to be added to the Iranian M.A. curriculum for translation programme:

Practical Translation: the existence of the only two practical courses of translation in the current curriculum for translation programme at the M.A. level, i.e. 'Translation Workshop' and 'Criticism of Translated Works' in which the trainees get acquainted with practical aspects of translation and translation criticism means that the Iranian M.A. trainees do not actually translate texts of various genres as they have done during their B.A. education. In addition, a survey of the foreign curriculums for translation programme at the M.A. level reveal that they have emphasized the practical aspects of translation through offering several course credits on translation practice. If examples should be given, Universite de Moncton has offered 15 credits of various practical translation courses; London University has offered 10 course credits on advanced translation from various source languages into English; Kent University has offered Translation Practice (2 credits), Literary and Cultural Translation (2 credits), Scientific, Technical and Medical Translation (2 credits) and Commercial, Legal and Diplomatic Translation (2 credits). Thus, regarding the significance of practical translation skills, it is suggested that a course of Translation Practice of at least 2 credits be added to the M.A. curriculum for translation programme in Iran.

Oral Interpretation: According to Miremadi (2003), Iranian translation trainees have insufficient communication with the real context in which oral interpretation is implemented. The M.A. curriculum for translation program in Iran lacks course credits on oral interpretation that may be applicable to the trainees' future translation career, for example, conference interpretation. Regarding the trainees' future use of translation and due to most trainees' failure in their oral interpretation performance, it is suggested that a 4-credit course of oral interpretation be added to the current M.A.

curriculum for translation program in Iran.

Dissertation: There is a course of Dissertation (4 credits) in the current M.A. curriculum for translation programme in Iran. The trainees work on their dissertation topics descriptively (library research), experimentally or they criticise a translated work. Few M.A. dissertations in the field of translation is submitted in the form of translating a work. The course of dissertation can be suggested to be added to the M.A. curriculum for translation program during which the trainees take steps to translate a complete work (book) on various genres including literary, social, economic, technical, etc. from English into Persian or from Persian into English. However, the conditions mentioned for B.A. dissertations should be followed.

Conclusion

Based on what was discussed it may be possible to present an optimal model for the Iranian curricula for translation program. The optimized version of the curricula can include objectively-defined key terms such as goals, course credits, translator/interpreter and the entrance exams. Furthermore, adding certain course credits to the curricula both at the B.A. and the M.A. levels can help university teachers to better maneuver over the syllabus and classroom techniques in order to obtain more reliable results to train more competent translators.

The aim of this study is by no means focusing on the point that imitating other countries curricula for a certain field of study will necessarily result in an optimised curriculum. Rather, achieving a flaw-free curriculum for translation programme that can enhance more success in training translators is intended. Surveying different curricula opens a new window to experts' approaches toward developing curriculum from which the most compatible ones can be adopted, thought of, arranged, and implemented.

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Effects of Social and Educational Conditions on the Achievement of Position Holders at Higher Secondary Level in Punjab

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Abstract

The purpose of the study was to know the effect of social and educational conditions on the achievement of position holders at higher secondary level in Punjab. For this purpose first five position holders were selected from each pre-medical and pre-engineering group by consulting the results from the Gazettes of all Boards of Intermediate and Secondary Education of Punjab. By using simple random sampling technique, a sample of one hundred and twenty (120) position holders was selected. For this purpose a questionnaire, having twenty-seven (27) restricted response items with three options and one (1) open-ended question was developed to collect data. The researcher administered the questionnaire personally. To reach certain conclusion, Percentage and frequency was calculated to analyze effect of social and educational conditions on the achievement of position holders at higher secondary level. Data were analyzed statement-wise, Frequency and percentage were calculated. Open-ended question was analyzed by counting the frequency. On the whole, it was found from that that the respondents, showed better performance in the examination.

Introduction

The main objective of education is to make individual the best product possible and all the three components of educational system that is parents, students and teachers try to achieve this end. Parents do not educate their children only with the purpose to prepare them

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for their bright career but also to develop them as good human beings.

However, all this depends on the students achievements. Achievement means the successful finishing or gaining of something especially through skill and hard work in a given area of endeavor (Nikhat, 1994). To measure the progress of the students, examinations are taken as the major component of the educational system (Bhatti, 1987). Through examinations, the evaluation of the student's achievement is made. Similarly examinations can be used to incorporate necessary changes and improvements in the system of education (Bayti, 1987).

Different types and levels of examinations have specific objectives in addition to their general objectives. Importance attached to the achievement tests is mostly on account of their role in shaping students' future career (Govt. of Pakistan, 1973).

In the opinion of Shahid, et.al (2003) an achievement test has a great significance in all types of instructional progress of the individual. A classroom teacher depends upon the achievement tests for measuring the progress of his students in his subject area. Several decisions about students are taken on their performance in the achievement tests. According to the words of Wiersma, and Jurs (1990) "Achievement test is a measure of knowledge and skills in a content area."

A good achievement test is tried out and selected on the basis of its difficulty level and discrimination power (Grondlund and Linn, 1990). It is worth nothing that the achievement test is a way of measurement of the students' performance at any level. Higher secondary stage is considered to be the gateway to the practical life. The examinations at higher secondary level in Pakistan determine the future career of students on the basis of their examination results. At this stage, obviously, students and their parents have to take future decisions. Keeping in view of the importance of performance at Higher Secondary school level, students particularly students of science strive for obtaining good marks and better positions in the examinations.

Hard work, consistency of good study-habits, guidance and tuition are considered to be as the major means of success at this level. However, social and educational condition may contribute to receive better position in examinations. According to Mirza (1994), "Achievement or academic performance of an individual usually reflects his physical intellectual, emotional and social development"

It is generally expressed by the classroom teacher that the children with effective study habits those students who have the same I.Q. level but poor study habits. Many thinkers in education and psychology have tried to find the effect of socio-economic status on the achievement of the students in their researches. First of all, the term socio-economic status is a very complex one. It tends to include a large number of concepts are socialists; psychologists and economist have tried to describe it in their own way. Mirza (1994) quoted Loomis, and Beegle (1950), "Some of the indicators of socio-economic status are income, property, wealth, education and family background"

Mirza (1994) also express about the socio-economic status as, "Socio-economic status is the position of an individual or family that it occupies with reference to the prevailing average standards of the cultural possessions, effective income, material possessions and participation in the group activities of the community?"

Keeping in view the above definitions concluded that the socio-economic status of a person refers to his social standing or his position in the group to which belongs. It is determined by the combined affect of so many factors. These factors may be social as well as economic. The combined effects of these factors are the source of individual differences in behaviour, achievements and values of the people. It means that individuals belonging to different socio-economic status tend to differ in their values which influence their choice of occupations, their achievements, and level of aspiration (Mirza, 1994).

Educational background of the parents also affects the performance of the students in their achievements. Research has determined that

parental attitude and support has a great deal of influence on children education (Taylor, 2005). All the parents desire to make the life of their children successful and comfortable from future point of view. In this regard, education can play a vital role to achieve these targets. In this regard Humphries (1998) says, “No parent would choose to give his or her children an inferior gift, or a gift that would be harmful in any way. The gift of good education is the most valuable one”

When the child begins school, the parents’ role takes on new dimension, that of enhancing the “Formal education”. The parents with their domestic duties carry much more other responsibilities. These responsibilities include keeping the proper attitude towards education and school, supporting/helping child, setting healthy priorities, consistency in discipline, rewards and consequences, open communication, helping with work missed during sickness (Humphries, 1998).

According to Cotton and Wiklund (2001), “The research overwhelmingly demonstrates that parent involvement in children’s learning is positively related to achievement”. Further, the research shows that the more intensively parents are involved in their children’s learning; the more beneficial are the achievement effects. This holds true for all types of parent involvement in children’s learning and for all types and ages of students.

The research also shows that the earlier in a child’s educational process parents involvement begins, the more powerful the effects will be. Educators frequently point out the critical role of the home and family environment in determining children’s school success, and it appears that the earlier this influence is “harnessed”, the greater the likelihood of higher student achievement (Cotton and Wiklund, 2001). According to Imam (2005), children who received adequate parental concern were found to be much more confident in their academic desires and achievement than those who could not get the right amount of parental concern. So based on the above-mentioned effects of social and educational conditions on students achievement, the present study was conducted.

Present Study

The present study aimed at to investigating into the effects of social and educational conditions on the achievement of position holders at higher secondary school level in Punjab.

Objectives of the Study

The major objectives of the study were as under:

- To see the effect of educational conditions on the achievement of higher secondary school students.
- To see the effect of socio-economic condition of parents on the achievement of the students.
- To give suggestions to the parents, students and teacher achievement at higher secondary school level.

Significance of the Study

- It will help the students, teachers, parents, examination Boards and educational planners to provide the necessary conditions for the position holders.
- It will also help that how to improve the socio-economic and educational conditions of the parents for the best achievement of the students.
- It can provide necessary conditions needed for the position holders at the higher secondary school level.
- It will provide the motivation to the other students, teachers, to get position in their examination.

Research Methodology

This study was conducted by the following procedure of survey method. The population of the study was considered on all the position holder students from pre-medical and pre-engineering groups from all Boards of Intermediate and Secondary Education in Punjab. The sample of the study consisted of 120 students. For this purpose, first five positions from each group were selected. A self developed questionnaire was prepared by taking the advice by the experts in the field of educational testing and measurement. It was consisted on 30 (Annexure A) questions that is 29 questions were closed ended with three options and one question was open ended to know the technique to get position at higher secondary level. The frequencies were counted for every option and also the percentage

was calculated to know about much importance factors, which play crucial role to get positions in the examination.

Results of the Study

The different responses from the students were presented in the tabular form.

Table-1: Situation Analysis of Socio-Educational Environment

Description	Options	F	% age
Study Hours	3	46	38.34%
	5	41	34.16%
	More than 5	33	22.50%
Study Timings	Day	34	36.67%
	Night	39	32.50%
	Day & Night	37	30.83%
Best Place for Study	Home	89	74.16%
	Institute	18	15%
	Library	13	10.84%
Guidance at Home	Father	41	34.16%
	Mother	41	34.16%
	Sister & Brother	38	31.16%
Important Personality	Parents	53	41.16%
	Teachers	56	46.66%
	Fellows	11	9.18%
Method for Preparation	Verbal Memorization	22	18.34%
	Written Practical	42	35%
	Learn Important Points	56	46.64%

Conclusion

Weight-age given to the elements

(a) Above 50% (Superior)

On 17 elements (3,7,8,10,13,15,16,17,18,19,20,21,22,23,26,28 and 29), the percentage was above 50%, which shows that to the respondents, these elements were resulting better performance in the examination.

Elements could be ranked in descending order: better study plan, good behaviour towards class mates, best method of learning the subject with understanding, choosing best place for study, company of good people, teacher personality, encouragement to educate, dependence on textbook for success, essential attendance at institute, nice behaviour towards people, using both ways (preparation and recommendation) to get maximum marks in practical, complete satisfaction from teachers, interest in both arts and science subjects, to adopt best method to attempt papers, good classroom environment, to join friends in leisure time and remain free for two hours. Secondly, preference was given to the full concentration on text book and best method to solve papers. Another element to remember is the avoidance of selective study. Next important response was responding teaches, parents and elders and the last response was about avoiding cramming and learning of all topics with clear concepts.

(b) Between 20 & 50% (Moderate)

On six elements (1,2,4,11,12 and 24), percentage was lies between 20% and 50% which shows that to the respondents, these elements were moderately, resulting better performance in the examination. Elements could be ranked in descending order like leisure activities, expert teachers, appropriate study hours depending on suitable study time, teachers' role in success and parents' guidance was available at home.

(c) Less Than 20% (Below Average)

On six elements (5,6,9,14,25 and 27), the percentage was below 20% which shows that to the respondents, these elements were resulting less contribution towards the better performance in the examination. Elements could be ranked in descending order like method of preparation, suitable sleeping time, subject wise good teacher, students' level in their respective group, higher aim of life and important personality.

Moreover, suggested reasons to get higher position in the examination were also analyzed. Frequency for each reason was recorded and presented in descending order. According to the table

the most importance was given to the element of regular work and belief in God.

Second priority was given to full concentration on textbooks and choice of best method to solve papers.

Third important aspect was the avoidance of selective study and relying on reviewing full course.

Fourth response was about respecting teachers, parents and elder for success in examination to get position and the last thing noticed was avoiding cramming and learning of all topics with clear concepts.

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A Critical Review of the Impact of Educational Technology in Teaching Learning Process at Secondary School Level in Khyber Pakhtun Khawa, Pakistan

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Abstract

The study investigated into a descriptive research to critically review of educational technology at secondary school level in North West Frontier Province (Pakistan). Its impact regarding the availability, usefulness, problems, emerging trends and status of educational technology was manifested. The study evaluated the availability, usefulness, problems & emerging trends of educational technology. The following results were drawn by the researcher in the light of the analysis of data. The majority of teachers did not use educational Technology. In addition computer mediated communication for counselling was not used. Besides, computer was not used in science practical. Overhead projectors were not used, and educational trips and exhibition are not arranged. There is also shortage of skilled educational technologist.

Introduction

Educational technology covers two aspect in teaching learning process i.e. technology as a things and technology as a social process. Educational technology is the embodiment of the practical information which is the out come of the application, science of teaching and learning to observe it practically in the classroom together with the aids and teaching strategies developed to give a feed back in its application. In the field of education there are a number of products joint instructional procedures with instructional tools. Learning theories play a pivotal role in teaching learning process, which help teachers, and to integrate them in to teaching.

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Each theory of learning has its own procedures for instruction general and for the use of education technology in particular.

Evidently, the educational technology began to offer its services as early as the teaching started. In 1959 the term education technology yet to be introduced, however to pay share of educational television and instructional technology had already been commenced. In 1967 the word educational technology was recognized with the establishment of national council for educational technology in the United Kingdom.

The use of technology in education has witnessed many series of change from nearly a way of instructing to development of educational technology as a system. Aggarwal (1995, p.19) stated that: "One of the important components of education is teaching. Therefore, teaching technology is a special branch of education technology. Education technology involves teaching, learning technology and systems approach, etc. Teaching technology is related to systematization of the teaching process and in order to make the process of teaching effective and inspirational, it provides for necessary theory and practice for the teachers. Education is not restricted to just a teaching process and it much more than this similarly education technology is much more than teaching technology." Educational technology is correlated with the application of audio-visual aids. A trained instructor use these audio-visual aids to make his instruction effective. Electronic revolution is engulfed in educational technology, which has led to a stage of remarkable software and hardware. The audio-visual aids such as projector, tape record, radio and television has completely changed the background of education that why educational technology was given importance in teaching learning process.

Literature Review

Technology describes a process that is something that the people do to solve problems or to achieve objectives and products such as instruments and tool, something that can be touched and exists and can utilize to satisfy the community needs. Mohanty (1992, p.4): "It is believed that the application of different modern methods and instruments is needed for assisting the teacher to perform his job

better whatever he has been previously doing for a long time. In view of this objective the audio-visual movement has not been initiated for the past two generation. But because of the absence of coordinated and sincere efforts, the audio-visual material have not been utilize sufficiently. Many of this type of aids have been found lying idle and dusty and some have been out of order all the time. However there are some instructors who are keenly interested in the use of the audio-visual materials available to them.”

The idea of systematic technology for education and training is not a new one. But the last two decades it has got much attention. Researches have been carried out in developing scientific instruments for improving the educational and training programme. It is also be kept in mind that educational technology is not only a mechanical process but it is a social activity as well including human resources, ideas, methods, instruments and communications system. Venkataiah (1996, p.17): “The teacher has to play a fundamental role for the success of the Educational Technology The teaching aids either new or old just supplement the attempts of the teacher to improve the learning process. ET cannot be a substitute for the instructor. The technologies help him to perform his duty in an efficient way to achieve the educational goals.”

The area regarding the application of educational technology are concerned with mass media i.e. radio, tape record, TV and computer etc, and system approach which means the designing, carrying out and evaluation of teaching learning process based on research. Educational technology is concerned with learner behaviour and behaviour cannot only be resoled by biological technology. So in this regard physical sciences should also be given importance. In short the main focus of educational technology is to enhance the teaching learning process. Rashid M. (1998, p.45) stated that: “The traditional teachers depended too much on verbal exposition. The pupil hears and forgets, but how it is possible to see and do every thing in the classroom. Although it is very difficult, yet educational technology makes it possible. With the help of electronics, teaching and learning can be enriched and a number of scenes may be shown in the classroom in a short time which is impossible to see in actual position for every one.”

The usual explanation for ET is that it will take the place of teacher and the result will be unemployment. No technology can give new thing because out put is dependent upon the nature of input. The input side is more necessary and it is dependent on educator the instructional material cannot be made by ET therefore, ET will not replace the human teacher but will assist him in improving teaching learning processes.

Educational technology has the ability to improve the teaching learning process. Educational technology in use of self-instructional programme known as individualize instruction, to improve the quality of teaching learning process and helps us in using more varied, rich and motivating programmes through different media. It also helps in solving the problems of mass education. Education technology helps in using audio-visual aids for teaching learning process. These aids include TV, computer etc. it also helps in bringing equality in education regarding the economic, social and geographical status of the students. It also helps in the continuous flow of education through different materials. According to Hazemi (2007,p.54) “Economic development depends on national productivity which requires a work force with proper skills, knowledge and work ethics to match the needs of employers. In many developing countries, the education and training infrastructure has not been able to fully equip their work force with the skills and knowledge demand by industries of both domestic and abroad.”

Objectives

Objectives of the study were to:

- Determine the impact of educational technology in teaching learning process.
- Identify the range of use of educational technology at secondary schools
- Analyse the problems faced in the use of education technology at secondary schools.
- Point out the emerging trends in the use of educational technology at secondary schools
- Assess the status of educational technology in teaching learning process.

Methodology

Survey and questionnaires were the main means of data collection. Three different self assessment questionnaires were administered on sampled principals, teachers and students at secondary level in six selected Districts of North West Frontier Province (Pakistan) i.e. Mardan, Nowshera, Peshawar, AbbottAbad, Kohistan and Shangla. Chi Square was applied to measure the availability, usefulness, emerging trends, utilization, status and impact of educational technology. Heads of the schools, SSTs, students of secondary schools and GHS/GGHS schools total population 1,2,3 and 4 were taken as a sample 1,2,3,4 i.e. 25%, 25%, 25% and 5% respectively.

Results

The following results are presented after the data were analyzed statistically.

Table-1: Opinion of principals regarding the Availability of E.T

Statement	SA	A	UN	DA	SDA	□2
Principals' skills of educational technology	46	39	4	0	1	113.01
Collaboration with other organizationa	52	33	2	2	1	121.22
linkage with experts	27	39	19	2	3	55.78
Knowledge of E.T	14	45	18	6	7	56.11
System approach.	32	36	13	5	4	50.56
Training in use of E.T.	14	16	18	24	18	3.11
Promotes critical thinking	52	33	2	2	1	121.22
Refresher courses	9	14	15	35	17	22.01
Problems of access	9	24	21	26	10	3.11

It is observed from the above analysis that the calculated value of Chi-square is greater than table value of $\chi^2 = 9.488$ at $P = 0.05$. So as a whole the result is significant. Therefore, it is supported the statements that Educational Technology are not properly available at secondary level.

Table-2: Suggestions of the Principals

Suggestion	Frequency	% Age
Usefulness of educational technology	15	17.44
Trained staff	12	13.95
TeacherS' refresher courses	10	11.63
interaction with students	9	10.47
Budget allocatlion	8	9.30
Promotion of Educational Technology	8	9.30
Purchasing owers	7	8.14
Teachers' presence	6	6.98
Advance teaching methods	6	6.98
Use of models teaching learning process	5	5.81

Table -2 shows the suggestions of the principals about the utilization, status, emerging trends and availability of Educational technology.

Table- 3: Opinion of Teachers about the usefulness, provision and availability of E.T

Statement	SA	A	UNC	DA	SDA	□2
Problems of access	125	276	56	42	19	418.8
Problems of access of ETV	98	262	52	55	51	317.7
Encourages access	90	242	75	83	28	253.8
Cds	140	156	71	77	74	64.8
Teachers' training	94	119	80	163	62	59.32
refreshers courses	95	99	93	153	78	31.88
Benefits	74	124	81	186	53	107.6
Places for of ET..	70	61	154	154	79	83.30
Technical subjects.	45	59	139	157	118	93.97

It is observed from the above analysis that the calculated value of Chi-square is greater than table value of $\chi^2 = 9.488$ at $P = 0.05$. So as a whole the result is significant. Therefore, it is supported the statements that students faced problems in having in having access and use of emerging technologies.

Table-4: Suggestions / Comments of Teachers Regarding the Utilization of Educational Technology

Suggestion	Frequency	% Age
Computer as a compulsory subject	60	33.33
Spaces for educational technology	40	22.22
Teachers refresher courses	24	13.33
Proper lab should be established	18	10.00
Computer lab should be provided	15	8.33
Continues system of curriculum revision	13	7.22
Radio and television programs	10	5.56

The table No: 4 shows the frequency and percentage various suggestion / comments regarding the availability, usefulness, problem, emerging trends and status of educational technology at secondary school level of Khyber Pakhtun Khawa.

Table- 5 Opinion of students with respect to availability of E.T

Statement	YES	T.S.E	NO	χ^2
Access to radio	702	492	670	41.2
Educational television	1101	449	314	570.12
Latest information's on ETV.	84	66	1714	2882.5
Students' difficulty	792	370	702	159.02
Computer communication.	781	314	769	228.14
Facilities to remote areas.	1083	322	459	529.65
Internet	841	551	472	121.51
scientific laboratories	1696	77	91	2788.3
Access to scientific equipments.	943	684	237	410.58

It is observed from the above analysis that the calculated value of Chi-square is greater than table value of $\chi^2 = 5.991$ at $P = 0.05$. So as a whole the result is significant. Therefore, it is supported the statements that there was no provision of radio, television, computer and computer mediated communication.

*Table- 6: Suggestions / Comments of the Students Regarding the
Usefulness of Educational Technology*

Suggestion	Frequency	% Age
Utilization of educational technology	80	16.49
Computer should be provided	65	13.40
Proper guidance & counselling	58	11.96
Trained staff	52	10.72
Television channels should be launched	50	10.31
Internet facilities should be provided	45	9.28
Label should be managed properly	41	8.45
Science subject on experimental based	34	7.01
Teacher presence should be assured	30	6.19
places for educational Technology	30	6.19

The table No: 5 shows the frequency and percentage of various suggestion / comments regarding the availability, usefulness, problem, emerging trends and status of educational technology at secondary school level of Khyber Pakhtun Khawa.

Conclusions

- It was observed from the analysis of data that students in rural as well urban areas have no access to radio and ETV as a medium of instruction.
- From the data analysis it was also pointed out that teachers in general do not use audiocassettes in teaching learning process.
- The students faced the problems like scarcity of trained educational technology teacher, shortage of computers and Internet facilities.
- There is a wide range of issues relating to the lack of well-integrated media with content difficulties and learning from media and the lack of provision of guidance of counselling.
- The study identified that the teachers are not using computer-mediated communication for counselling, instructing and delivering lecture.
- The students pointed out that computer are not used in science practical, which could enhance the teaching

learning process tremendously.

- It was also found that refreshers courses and workshop are not arranged for teacher's regarding Educational Technology.
- It was also revealed that Internet facility is not available both in rural as well as urban areas.
- It was found that computer mediated communication is not used for counselling and science subjects both in urban as well rural areas.
- It was found that projected instructional technology is not used both in rural as well as urban areas.
- The students complained that the teachers do not use flash card, felt board, static model, sectional model, slides, opaque projectors and models both in rural as well as urban areas.
- It was noted that the teachers do not send their recommendations about the problems faced in subjects due to the lack of modern resources.

Recommendations

Keeping in view the restrictions with respect to in-adequate educational technology facilities the researcher presents a few general recommendations. The researcher is firm in his belief that if the existing in-adequate resources are optimally utilized and efficient management is corrected; the motivation for innovation in using Educational Technology would start in no time in the schools of rural as well as urban areas.

1. As computer promotes active participation of students therefore it should be included in curriculum as a compulsory subject.
2. There should be a continuous system of curriculum revision at all levels in accordance with national needs, market requirement and capabilities of students to improve intellectual level of students and pedagogical skills of the teachers.
3. School should devise flexible timetable to give considerable space for the use of Educational Technology.
4. Long term and short-term training should be conducted for teachers at secondary level.

5. School should be fully equipped with emerging technologies having up to date guidance and counselling facilities.
6. The course contents should be extensively assisted through radio and television programmes.
7. Systematic and advance teaching strategies should be adopted.
8. Computer should be used in science practical to promote objectively.
9. Teachers should be properly guided and counselled from time to time regarding Educational Technology.
10. In order to gain maximum benefits of emerging technologies teacher may be provided opportunities of refreshers courses in order to develop skills of using these technologies effectively.

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Opinion of the Teacher Trainers about the Gap between Skills Acquired during Teacher Training Programs and Skills required in actual Classroom

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Abstract

This research paper has been designed to cover the following objectives. (1) To identify the essential classroom skills being stressed during teacher training program. (2) To identify the problems in attaining and implementing the essential classroom skills. Five districts from Punjab and N.W.F.P (K.P.K) were randomly chosen. Hundred teacher trainers were chosen from these districts. A questionnaire was designed to get the response of the teacher trainers about the skills acquired during the teacher training program B.Ed & M.Ed and the skills required in actual classroom. Data collected through research instruments was analyzed by using mean score and t-test.

Introduction

Training and professional development includes imparting knowledge about content and skills in instruction, classroom management, assessment, and developing teacher knowledge and skill. Borish (2000) presents some teaching skills:

Personal Responsibilities

The teachers should take personal responsibilities for the student's learning and has positive expectations for every learner.

Students Ability

The teacher should match the difficulty of the lesson with the ability level of the students and vary the difficulty when necessary to attain moderate-to-high success rates.

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Opportunity for Practicing

The teachers should give the students the opportunity to practice newly learned concepts and to receive timely feedback of their performance.

Maximize Instructional Time

The teachers should maximize instructional time to increase content coverage and to give students the greatest opportunity to learn.

Proper Questioning

The teachers should provide direction and control of student learning through questioning, structuring and probing.

Variety of Instructional Material

The teachers should use a variety of instructional material and verbal and visual aids to foster use of student ideas and engagement in the learning process.

Students Response

The teachers should elicit response from the students each time a question is asked before moving to the next student or response. The objectives of teacher training in Pakistan national education policy (1998-2010) are as under:

- Skilled teachers, educational administrators, teacher educators, researchers, educational leaders in various areas of education.
- Creative teachers able to make constructive to the growth and development of individual pupil enabling her/him to learn how to learn how to live in a cooperative manner in society.
- Dedicated teachers able to play an effective role in teaching and learning activities.
- Zealous teachers capable of creating initiative and enthusiasm in their pupils.
- Well- oriented teachers who believe in national integration.
- Curriculum leaders who are equipped with effective teaching strategies and skills in their various subject areas.

Similarly, Munir (2006) has described some classroom skills

Allocation of Time:

Effective teachers know the principal of the time on task and can allocate proper and suitable time for various activities.

High Expectations:

High performance expectation is their symbol. They assigned more work and moved at a brisker pace. They exhibited a 'can do' attitude.

Clear Rules

The teacher should make Clear rules and procedures for making the classroom teaching and learning effective.

Use of Praises

The teaching and learning can be more effective if the teacher use praises for motivating the students to learn.

Clear Verbal Presentation:

The teacher should have clarity of verbal fluency and presentation.

Objectives of the Study

The following were the objectives of the study:

1. To identify the essential classroom skills being stressed during teacher training program.
2. To identify the problems in attaining and implementing the essential classroom skills.

Procedure

A survey was conducted to investigate the views of teacher trainers through specially constructed questionnaire.

Population and Sampling

The population of the study consisted of all the teacher trainers. Five districts of Punjab and N.W.F.P were chosen. Twenty Teacher Trainers were chosen from each District. The following table shows the details of the sample.

Table-1: Sample of the Study

District	Teacher trainers
Rawalpindi	20
Attock	20
Lahore	20
Haripur	20
Peshawar	20
Total	100

Data Collection

The questionnaires were delivered personally to the teacher.

Data analysis

Data collected through research instrument was analyzed by using mean score and t.test.

Analysis of Teacher Trainers Perceptions

Appropriateness of Teacher Training Program

From the statements of the appropriateness of teacher training program majority of the teacher trainers are in favour of the effectiveness of the Teacher Training Program. The Mean of means lies between uncertain and agreed showing a slightly positive trend.

Table-2: Quality of Teacher Trainers

<i>Statement</i>		<i>SDA</i>	<i>DA</i>	<i>UNC</i>	<i>A</i>	<i>SA</i>	<i>Total</i>	<i>Mean</i>
trainers' qualification	Frequency	6	17	9	43	25	100	
	Score	6	34	27	172	125	364	3.64
	Percent	6	17	9	43	25	100	
Needs of the society	Frequency	10	10	21	43	16	100	
	Score	10	20	63	172	80	345	3.45
	Percent	10	10	21	43	16	100	
Techniques and method-logies.	Frequency	10	18	18	48	6	100	
	Score	10	36	54	192	30	322	3.22
	Percent	10	18	18	48	6	100	

Mean of means=3.43.

From the above three statements of the quality of teacher trainer's majority of the teacher trainers are not fully satisfied with the quality

and performance of the teacher trainers. The Mean of means lies between uncertain and agreed showing slightly positive trend.

Table-3: Lesson Planning Skills

Statement		SDA	D A	UNC	A	SA	Total	Mean
lesson plans	Frequency	3	7	14	32	44	100	
	Score	3	1 4	42	12 8	220	407	4.07
Learning outcomes.	Percent	3	7	14	32	44	100	
	Frequency	9	3	10	52	26	100	
objectives of lesson	Score	9	6	30	20 8	130	383	3.83
	Percent	9	3	10	52	26	100	
Needs of students.	Frequency	5	7	5	47	36	100	
	Score	5	1 4	15	18 8	180	402	4.02
	Percent	5	7	5	47	36	100	
	Frequency	7	6	11	44	32	100	
	Score	7	1 2	33	17 6	160	388	3.88
	Percent	7	6	11	44	32	100	

Mean of the mean = 3.95

From the above four statements of lesson planning skills majority of the teacher trainers agreed that after training teachers can plan the lesson very well and according to the demands of the students.

Table-4: Lesson Presentation Skills

Statement		SDA	DA	UNC	A	SA	Total	Mean
Presenting material	Frequency	5	6	14	47	28	100	3.87
	Score	5	12	42	18 8	14 0	387	
learning styles of students	Percent	5	6	14	47	28	100	
	Frequency	6	10	19	44	21	100	3.64
	Score	6	20	57	17 6	10 5	364	
	Percent	6	10	19	44	21	100	
Introducing lesson	Frequency	5	11	12	36	36	100	3.87
	Score	5	22	36	14 4	18 0	387	
Learning	Percent	5	11	12	36	36	100	
	Frequency	2	10	13	42	33	100	3.94

activities.	Score	2	20	39	16	16	394	
					8	5		
	Percent	2	10	13	42	33	100	
learning	Frequency	8	8	18	42	24	100	3.66
experience	Score	8	16	54	16	12	366	
and					8	0		
instruction	Percent	8	8	18	42	24	100	

Mean of the mean=3.79

From the above five statements of lesson presentation skills, majority of the teacher trainers agreed that training develops good presentation skills in the teachers. The Mean of the mean lies between the uncertain and agree showing a positive trend.

Table-5: Lesson Management Skills

Statement		SDA	DA	UNC	A	SA	Total	Mean
Organizing	Frequency	4	5	11	54	26	100	
lesson.	Score	4	10	33	216	130	393	3.93
	Percent	4	5	11	54	26	100	
Student's	Frequency	5	7	1	48	39	100	
previous	Score	5	14	3	192	195	409	4.09
knowledge.	Percent	5	7	1	48	39	100	
Course	Frequency	0	5	24	48	23	100	
material.	Score	0	10	72	192	115	389	3.89
	Percent	0	5	24	48	23	100	
Material	Frequency	3	4	16	43	34	100	4.01
sequence.	Score	3	8	48	172	170	401	
	Percent	3	4	16	43	34	100	

Mean of means=3.98

From the four statements of lesson management skills majority of the teacher trainers agreed that teachers can perform very well on lesson management skills. Mean of means lies between the uncertain and agree showing a positive trend.

Table 6: Classroom Climate

Statement		SDA	DA	UNC	A	SA	Total	Mean
Class	Frequency	1	9	22	33	35	100	
climate	Score	1	18	66	132	175	392	3.92
	Percent	1	9	22	33	35	100	
pleasant	Frequency	4	9	7	40	40	100	
atmosphere	Score	4	18	21	160	200	403	4.03
	Percent	4	9	7	40	40	100	

Develop interaction	Frequency	7	5	11	42	35	100	3.93
	Score	7	10	33	168	175	393	
	Percent	7	5	11	42	35	100	
Develop trust	Frequency	4	5	11	45	35	100	4.02
	Score	4	10	33	180	175	402	
	Percent	4	5	11	45	35	100	
Develop interest in learning.	Frequency	5	5	9	46	35	100	4.01
	Score	5	10	27	184	175	401	
	Percent	5	5	9	46	35	100	

Mean of means=3.99

From the five statements of classroom climate skills, majority of the teacher trainers are satisfied from the performance of teachers on the skills of maintaining good classroom atmosphere. The Mean of means lies between uncertain and agree showing positive trend.

Table-7: Command over the Subject

Statement		SDA	DA	UNC	A	SA	Total	Mean
command over subject	Frequency	6	5	15	37	37	100	3.94
	Score	6	10	45	148	185	394	
	Percent	6	5	15	37	37	100	
Syllabi and knowledge	Frequency	4	10	29	19	38	100	3.77
	Score	4	20	87	76	190	377	
	Percent	4	10	29	19	38	100	
Subject information	Frequency	8	10	21	26	35	100	3.70
	Score	8	20	63	104	175	370	
	Percent	8	10	21	26	35	100	

Mean of means=3.80

From the above three statements of the skill command over the subject, majority of the teacher trainers are satisfied with the performance of teachers on the skill command over the subject. Mean of means lies between the uncertain and agree showing positive trend.

Table 8: Maintaining Class Discipline

Statement		SDA	DA	UNC	A	SA	Total	Mean
Classroom management	Frequency	0	12	12	39	37	100	4.01
	Score	0	24	36	156	185	401	
	Percent	0	12	12	39	37	100	
Students' behaviour	Frequency	7	11	16	38	28	100	3.69
	Score	7	22	48	152	140	369	

Disruptive behavior.	Percent	7	11	16	38	28	100	3.68
	Frequency	8	8	18	40	26	100	
	Score	8	16	54	160	130	368	
	Percent	8	8	18	40	26	100	

Mean of means=3.79

From the above three statements on class discipline skill, majority of the teacher trainers agreed that after getting teacher training they can maintain good discipline in the class.. The Mean of means lies between uncertain and agree showing positive trend.

Table-9: Teacher Classroom Behavior

Statement		SDA	DA	UNC	A	SA	Total	Mean
Teachers' behavior.	Frequency	4	4	18	44	30	100	3.92
	Score	4	8	54	176	150	392	
	Percent	4	4	18	44	30	100	
teachers experience	Frequency	6	5	14	37	38	100	3.96
	Score	6	10	42	148	190	396	
	Percent	6	5	14	37	38	100	
student's achievements	Frequency	2	5	18	48	27	100	3.93
	Score	2	10	54	192	135	393	
	Percent	2	5	18	48	27	100	

Mean of means=3.93

From the above three statements on the class discipline skill, majority of the teacher trainers agreed that teacher training develops the characteristics of good teacher. The mean of means lies between uncertain and agree showing positive trend.

From the above five statements of the class discipline skill, majority of the teacher trainers agreed that teacher training develops the quality of good questioning technique and also the quality to handle the students questions properly.

Table10: Inspiring Confidence in Students

Statement		SDA	DA	UNC	A	SA	Total	Mean
confidence	Frequency	3	10	11	41	35	100	3.95
	Score	3	20	33	164	175	395	
	Percent	3	10	11	41	35	100	
Student's	Frequency	6	10	9	34	41	100	3.94

efforts.	Score	6	20	27	136	205	394	3.69
	Percent	6	10	9	34	41	100	
Support	Frequency	11	11	14	26	38	100	
	Score	11	22	42	104	190	369	
	Percent	11	11	14	26	38	100	

Mean of means=3.86

It can be concluded from the above table that the trained teachers can reinforce the correct behavior of the students. The Mean of means lies between the uncertain and agree showing positive response.

Table 11: Evaluation Skills

Statement		SD A	D A	UNC	A	SA	Total	Me an
evaluation	Frequency	6	10	14	40	30	100	3.7 8
	Score	6	20	42	160	150	378	
	Percent	6	10	14	40	30	100	
Evaluate properly	Frequency	5	12	17	37	29	100	3.7 3
	Score	5	24	51	148	145	373	
	Percent	5	12	17	37	29	100	
classroom test	Frequency	8	11	8	44	29	100	3.7 5
	Score	8	22	24	176	145	375	
	Percent	8	11	8	44	29	100	
student's achievements	Frequency	5	11	9	50	25	100	3.7 9
	Score	5	22	27	200	125	379	
	Percent	5	11	9	50	25	100	
problems in learning	Frequency	5	13	24	36	22	100	3.5 9
	Score	5	26	72	146	110	359	
	Percent	5	13	24	36	22	100	
Identify strengths' weaknesses students	Frequency	8	13	19	40	20	100	3.5 1
	Score	8	26	57	160	100	351	
	Percent	8	13	19	40	20	100	

Mean of means=3.06

It can be concluded from the above discussion that teacher trainers agreed that teacher training equip the teachers with evaluation techniques. The Mean of means lies between the uncertain and agree showing positive response.

Findings

1. 76 percent teacher trainers strongly agreed or agreed that the teachers possessed good planning skills and prepared the lesson

objectives according to the needs of the students before going to class.

2. 71 percent teacher trainers agreed that the teachers had the skills to clearly and carefully formulate the course material and split the learning material into sequence.
3. 77 percent teacher trainers agreed that the teachers have the ability to develop strong interaction between students and developed the trust of the students in learning.
4. 80 percent teacher trainers agreed that the teachers made the classroom climate effective for teaching and learning.
5. 74 percent teacher trainers agreed that the teachers had full command over the subject and provided latest information about the subject.
6. 68 percent teacher trainers agreed that the teachers choose the teaching method according to the situation.
7. 74 percent teacher trainers agreed that the teachers have the ability to inspire confidence in the students by providing plenty of opportunities to students for practice.
8. 76 percent teacher trainers agreed that the teacher's maintained good order in the classroom and deal the misbehaviors effectively.
9. 74 percent agreed that the teachers used proper questioning during the lesson to stimulate the students thinking during instructions.
10. 70 percent teacher trainers agreed that the teachers conducted classroom test for evaluating the student's performance to identify the problems in learning.

Conclusion

The following conclusions were drawn on the basis of the findings:

1. Majority of the respondents agreed that the teachers had full command over the subjects they taught but very few of them provided knowledge beyond the course material or provided the latest information about the subject.
2. Majority of the respondent agreed that the teacher's inspired self confidence in the students related the previous lesson with the current lesson, aroused student's interest in the lesson, provided plenty of opportunities to students for practice and motivated the students towards learning.

3. Majority of the respondent agreed that the teacher's maintained good order in the classroom had the ability to deal with the misbehaviors and identify disruptive behavior.
4. Majority of the respondents agreed that the teachers had the qualities of flexibility, creativity and adaptability to influence the students achievement, used the technique of questioning during the lesson and used lower cognitive and higher cognitive questions to check students understanding and handled the students questions properly.
5. Majority of the respondents agreed that the teachers conducted the tests to evaluate the students, used evaluation skills to identify the strengths and weaknesses of the students, to determine student's achievements, used diagnostic evaluation for evaluating student's weakness.

Recommendations

Following recommendations are proposed for solving the problems of discrepancies between the skills acquired and the skills required in the classroom

1. Majority of teacher trainers expressed the view that the objectives of teacher training programs were not stated in behavioral terms. This indicates that specific skills that need to be developed in the teachers are not properly identified. It is recommended that objectives of teacher training programs be stated in behavioral terms reflecting the required skills.
2. Majority of teacher trainers expressed the view that the teacher training institutions were not equipped with latest technologies. The teachers were trained in the traditional methods. It is therefore recommended that the teacher training institutions be equipped with latest technologies to equip the teachers with latest techniques and teaching methodologies it would enhance teacher's knowledge teaching effectiveness.
3. Teacher trainers opined that the curriculum of teacher training programs was not revised frequently. It is recommended that the curriculum of teacher training programs be revised after appropriate gap to prepare teachers who could meet the challenges of 21st century.

4. Teacher training is mostly theoretical and functional aspects were ignored. There was a need to present model lessons for trainee teachers .It was recommended that the curricula of teacher training programs may be revised frequently because the present curricula are outdated.

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Comparison of Human Resources' Impact on Teaching Grammar to Second Language Learners and Developing Teachers' attitude towards Teaching of English Grammar at Secondary School Level

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Abstract

Concept of global language is developing in the world and English is taking its place as a global language. Due to its global structure people of different languages communicate with one another in English as it has become correspondent language. For communicative competency they need sound knowledge of grammar. Grammar is a scientific and logical knowledge that sometimes is difficult to sustain and manage its use in writing in English language. Present research brings out problems faced by the learners of Pakistan in acquisition of English as a second language. The researchers have adopted a strategy to apply in one group of students and see its affect on knowledge management and its sustainability in English writing skills. In this study access group was exposed to different technique of learning and later compared with non-access independent group. Results show that knowledge of English grammar can be managed and made sustainable with different learning techniques.

Introduction

Acquiring a second language is not an easy path to run on. It is a path where there are hurdles and barriers such as listening, speaking,

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reading, and writing. Language experts like Crystal and Chomsky have tried to uproot these barriers through adopting skills and several teaching approaches such as Audio-lingual Method (ALM) of the late 1940s and 1950s and Cognitive Academic Language Learning Approach (CALLA) of the early 1990 but situation in second language acquirer country like Pakistan English is treated as a subject not as a language. The public school teachers adopt conventional and out dated techniques of teaching that does not suit the modern techniques. In Pakistani public school still Grammar Translation Method (GTM) is used and learners are made to cram the rules for correction. Public school teacher seems unaware of the above mentioned techniques and skills to teach grammar and parts of speech. Public school teacher in Pakistan practices mechanical exercise of transformation and they take no interest in teaching grammar through error analysis techniques that are genuine way of teaching. They do not seem to have any training or refresher courses in this regard. This seems to produce poor result on the part of students. As learners are given mechanical exercises on grammar so they remain incapable of writing and speaking English language creatively and communicatively. It seems the need of the hour to teach English language as it is taught by a native teacher. This situation has been indicated by number of linguists like Chomsky, Dijk's, Brown and Levinsons and Bloomfield who have given theories and structure on teaching of grammar. A native teacher or a well trained teacher while teaching grammar keeps in mind all sub disciplines of linguistics starting from methodologies to theories of language study they occupy a basic position as a springboard for the judgment of language production and evaluation. The major conviction behind such teaching is that they provide valid and stable piece of judgment over grammar. (Chomsky 1965). Many linguistic schools of thought have based their finding on such teaching and they have given their system of producing an efficient teacher just like natives. As in this context Van Dijk's (1977) "P-system" is built on it; in politeness theory Brown and Levinson's (1987) "Model person" is the teacher who may come close to the native speaker. Same bilingualism theories of Bloomfield and other American linguists focus on native like competence in two languages. In the light of these theorists and linguists' discussion it is quite evident that teacher is the resource from where learner earns what has been

disseminated. If the resource person (Teacher) is unable to convey the rules of grammar the learner will make mistakes till the end and once these mistakes get place in the minds they will go on from one person to another person.

For a second language learner, targeted language is new set of utterances. He is unaware of language structure, Grammar and parts of speech of targeted language. He is familiar with the structure and grammar of his mother tongue. Structure and grammar of his mother tongue is totally opposite to targeted language. His mental mechanism is not designed to acquire two extremes at the same time. On the other hand language is means of communication and one needs it to fulfill ones daily communication needs. But second language learners do not speak targeted language in daily communication and he had not opportunity to speak targeted language in social surroundings so the learner of targeted language is unable to improve his skill in language learning. This results in poor learning and in the end disappointment on the part of learner. Grammar in English language may be made easily comprehensible and more practical in its approach. New methods of grammar acquisition may be introduced that are based on visual and verbal approach to attract and improve learner's interest.

Language learning is a complex process. It addresses fundamental issues such as components of language, cognition, learning behaviors, prior language experience, learner personality, classroom circumstance, culture, pragmatics, and inter-group relations.

A language achieves a genuinely global status when it develops a special role that is recognized in every country. This might seem like stating the obvious, but it is not, for the notion of 'special role' has many facets. Such a role will be most evident in countries where large numbers of people speak language as a mother tongue – in case of English, this would mean USA, Canada, Britain, Ireland, Australia, New Zealand, South Africa, several Caribbean countries and a sprinkling of other territories. However, no language has ever been spoken by a mother tongue majority in more than a few countries (Spanish leads, in this respect, in some twenty countries, chiefly in Latin America), so mother-tongue used by itself cannot

give a language global status. To achieve such a status, a language has to be taken up by other countries around the world. They must decide to give it a special place within their communities, even though they may have few (or no) mother-tongue speakers (David, 2003).

There is no doubt that English is communicative language in the world and in most of the parts of the world it is understood and spoken more or less. Whoever you are and whatever you do, you at least have to talk with someone or communicate with someone else and what source would you adopt other than your mother tongue. The answer is very simple you will communicate in a language that is understood by the world. In this regard you have English. English that has become global language now does not need to be biased and considered with its old colonialist feature where it was considered language of the rulers. With the fall of slavery this slavish notion may be reverting now. Still it is a dilemma in sub continent and especially in Pakistan that English is the language of The English. The facts now do recommend that underdeveloped countries must develop a sound knowledge of English language if they wish to proceed in the committee of nations. Latest knowledge and literature is published and translated in this language. So it is the need of the hour to have a sound knowledge of English language. When we talk about the language then most important factor that strikes in our mind is grammatical structure of language. And when it is second language then becomes very difficult for the acquirer Language structure is new to the acquirer of second language. These feelings are quite natural as this is new structure to the acquirer and he has less chance of acquisition. Pakistani language learner faces the same situation. Grammar of English language is not only new to him rather sentence structure is totally different too. In his mother tongue he follows subject, object and verb while in English it is Subject, verb, object. This situation not only results in failure of the acquirer but it is also producing a great bias against English language. Due to poor teaching methods and improper guidance English grammar of the students in Pakistan is not touching the standard where learners may be able to communicate easily.

Literature Review

Utilization of human resource in education seems to play an important role. A teacher who is mind maker and soul purifier needs to act as a role model for the learners. Thus, at the time of selection of a teacher there may be well defined standards regarding education, personality and character. Selection criterion seems not the end of all procedure rather it is the beginning of developing teaching human resource that can be made professionally competent by continues training. According to Dyer and Holder (1998) human resource management general goals includes

- **Contribution** (focuses on employee behavior)
- **Composition** (focuses on staffing needs and skills required?)
- **Competence** (focuses on performance employee's competence and desired skills)
- **Commitment** (focuses on employee job satisfaction and long term organizational commitment)

Considering the goals mentioned above for human resource management it seems quite clear that a teacher is desired to have good behavior and focused competency that should continue enhance with the growth of his profession. In such cases when teacher is teaching language and especially English language responsibility seems to increase in terms of developing professional competency. Language is a living entity and improves itself day by day. New changes are coming up and without proper training it seems quite difficult for the language teacher to cope with the modern and latest approaches. Specially, opting teaching second language is not an easy path to run on and transfer of targeted language skill among learners is most difficult skill. It is a path where there are problems a variety of skills such as listening; speaking, reading and writing are also required. Language experts have tried to uproot these barriers through adopting skills and several teaching approaches such as Audio-lingual Method (ALM) of the late 1940s and 1950s and Cognitive Academic Language Learning Approach (CALLA) of the early 1990 but still new teaching techniques are emerging as situation in second language acquirer countries do not seem to get better.

Capacity building of employees is a continuous process and core activity of an organization. Achievement of organizational goals and performance of the employees depends on their expertise and performance. Enhanced performance encompasses and relies on different factors including incentives, performance management, training and coaching and vision of the leader and/ or manager. Access programme selects appropriate & skilled personnel and equips them with suitable English language teaching skills through a series of training. It properly manages their performance according to their job description. Programme coordinator visits the Access centers for corrective supervision helping the teachers for facilitating students' learning. Teachers have to prepare and submit lessons in advance for finalizing after discussion in meeting prior to the commencement of classes. Such criterion may be implemented in public schools helping teachers for enhancing their performance.

Language learning seems complex process. It is cognitive as well as social process with a blend of mentalism and behaviourism. A child learns a language in home and society but processes it by using the cognition referring to intentional acquisition of language skills. Those who want to learn English as second language involve themselves actively through intentional acquisition of language skills. For the purpose, such people and/ or communities would decide to give it a special place even though they may have few (or no) mother-tongue speakers (David, 2003). It addresses fundamental issues such as components of language, cognition, learning behaviors, prior language experience, learner personality, classroom circumstance, culture, pragmatics, and inter group relations.

Intentional acquisition of English as second language needs resources both human and material. Human resources consist of different personnel like language experts, teachers, assistants, monitors and coordinators of language learning programme. The material resources include language laboratory, venue, language CDs and other logistics. Both of the resources play a pivotal role in learning English as second language. However, the former has greater importance because of its nature and significance. As human resources consist of personnel therefore, personnel management,

capacity building and training seems to be necessary for efficiency and productivity of the programme.

Pakistan is a developing country and like other developing countries it is questing for equipping masses with English language skills. But unluckily, there is lack of resources both human and material. Teachers seem lacking in proper training and pedagogical skills, inappropriate personnel management along with insufficient resources. It calls for an alternate to address the issue.

In this context Pakistan Reading Association (PRA) Bahawalpur and US Consulate Lahore have jointly launched a project named 'Access Micro English scholarship program' in Bahawalpur. Under this project five centers were selected in far flung areas of Bahawalpur district in Punjab. These centers are established in public schools and equipped with computers, latest audio visual aids. English language instructors teach and develop English language skill among the learners. The learners belong to 13-16 age group including boys and girls. These boys and girls belong to non elite (poor) back ground. They are given extra coaching after their school timing for two hours. They are given stipend as motivation for the two hours' session. Each group consists of 30 language learners and two language instructors. The language instructors teach to improve four basic skills (Reading, Writing, Speaking and listening) of English language among the learners. Therefore, it was reasonable to evaluate and compare the impact of human resource on acquisition of English grammar in Access and public schools of Bahawalpur.

Objectives of the study

This study was conducted with the following objectives

- To compare and contrast learning objectives of Access English Micro scholarship Program in Bahawalpur Pakistan (Punjab)
- To compare English grammar skills of Access and Non-access students in relation with provision of human resources
- To evaluate the effects of human resources on achievement of Access English and Non-Access English students in the subject of English

- To suggest suitable improvements to second language learners and teachers

Research Procedure

Population and sample size

The study consisted of two type of population: Access students and Non-Access students. Access students consisted of a total of 289 students whereas their counterparts consisted on all secondary school students in the same five schools. All Access students (100%) were taken as population whereas same number of Non-Access students was taken as sample through random sampling technique. Equal number of samples of each category was taken from each school comprising a total 578 students (Table 1.1).

Table-1.1: Population and sample size

Name of Access Center	Access students	Non Access students	Total
Govt Girls High School Muhajir Colony, BWP	60	60	120
Govt Girls High School Canal Colony, BWP	55	55	110
Govt Boys High School Cantt, Bahawalpur	58	58	116
Govt Boys High School Shadra, Bahawalpur	58	58	116
Govt Boys Elementary School Dera Izat, BWP	60	60	120
Total	289	289	578

Test construction and Data Collection

This research was conducted through an achievement test to evaluate grammar skills of students reading in the public schools and those who were given extra coaching in Access micro English centers. Data was collected by administering the test on access and non-access students. The test consisted of qualitative and quantitative questions in order to judge the ability and achievement level of the learners.

While analyzing data quantitative questions were analyzed in comparative way on three point rating scale in order to assess achievement level of comparative groups viz a viz Access and non Access students. The test was prepared according to syllabi of the access English program and comprised of basic conceptual questions to check grammar skills of the students. Test was conducted personally by the researchers in five access centers and non-access students of same school.

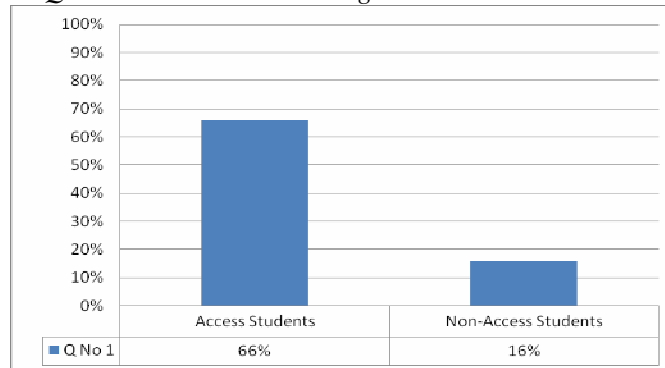
Data Analysis

Tests were marked and data were coded in Ms-Excel programme for analysis. Mark one was assigned to the access students while mark 2 was given to the Non-Access students of public schools. The Overall performance of Access and Non Access students were compared and presented in bar graphs for clear understanding of the comparison. The results of the study are given below.

Findings and Discussion

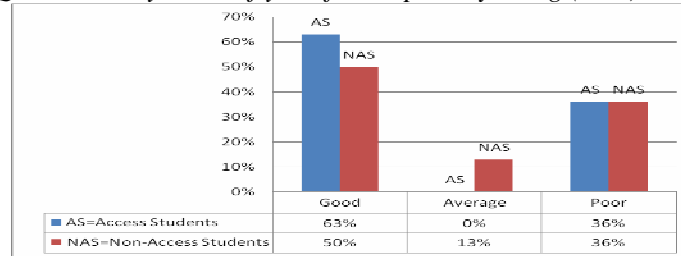
The test was developed from the syllabi of the Access and administered on both of the samples. The results show that the students of Access and non Access centers were unable to develop a standard grammar result. This happened due to teacher's attitude as they treat their learners as editors and not as monitors.

Q-1 Write down the missing sentences



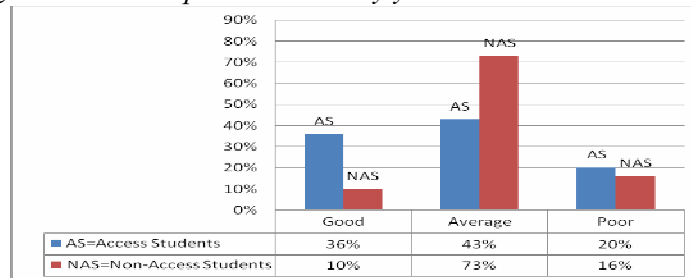
The question-1 tested the ability of students in sentence formation. Students were asked to develop positive, negative and interrogative sentences. The results indicated that Non Access students were unable to construct sentences (with overall 16% achievement score) while their counterparts who joined Access Centers were very good (with overall 16% achievement score) in positive, negative and interrogative sentences. This indicates if the group of students is small and the teacher stresses on the construction of sentences more along with drill then the result may be averted. Results of Access students in this case are quite significant and satisfactory.

Q-2 Write any three of your future plan by using (Will)



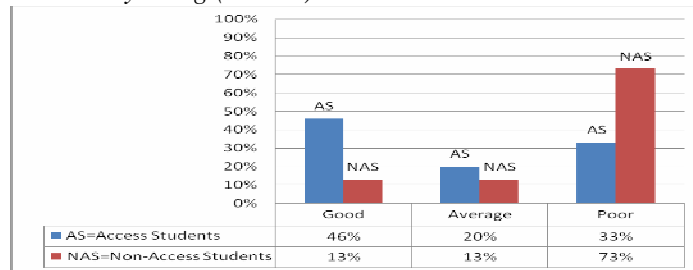
Question-2 evaluated the usage of tenses. Students were directed to write three sentence using 'will'. In Future tense a learner expresses himself for the coming or next events that are yet to be taken place. This let's the learner express about the situation that he has to explain to someone about the next day. The results indicated that Learners in Access and Non Access both performed well but Access students showed better performance than their counterparts.

Q-3 Answer the questions the way you like



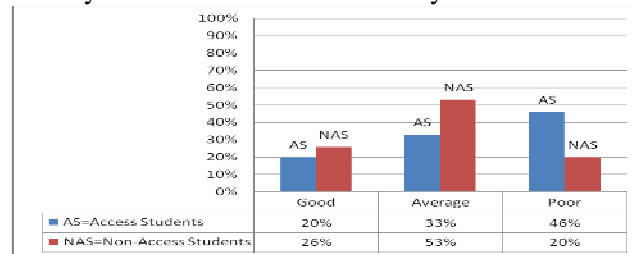
Question-3 assessed the self expression of students by using verb and tenses. The results indicated that Both Access and Non-Access students did show poor performance in using present indefinite tense. However, the performance of Non-Access students was marginalized low (10%). However, in using past indefinite tense, Non-Access students' secured greater scores (73%) indicating their better performance as compared with the Access students who secured 43% of the scores. However, in self explaining both of the groups of students showed poor performance achieving 20% and 16% of the scores respectively for Access and Non-Access students.

Q-4 Give any four pieces of advice to your younger brother or sister by using (should)



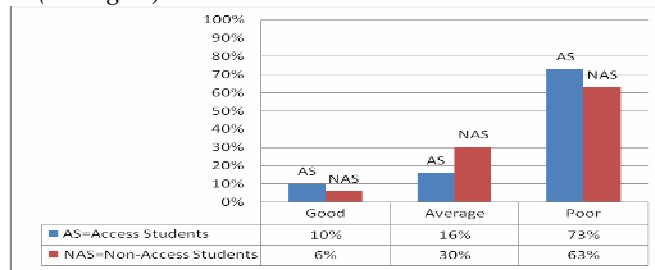
Question-4 evaluated the ability of students in using 'should' in self expressive way. The results revealed the poor performance of Non-Access students. According to the data analysis it was evident that 46% of the Access and 13% of the Non-Access students stood at the good scale whereas they were 33% and 73% respectively at poor scale. Non-Access students are not proficient in using 'should' in their daily life.

Q-5 There are many words present in the given puzzle. Pick out any five words and use them in your own words.



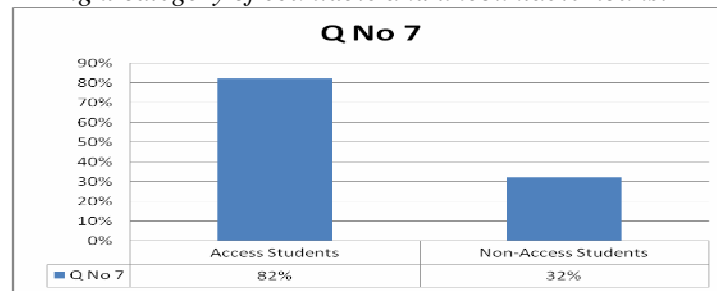
Question-5 judged the vocabulary of the students. There were jumbled words and students were asked to provide the synonym of any five. The data analysis revealed that 20% of the Access and 26% of the Non-Access students stood at good scale however, the ratio increased as they stood 46% and 20% respectively at poor scale. Both of the students satisfactorily stood at average scale (33% of the Access and 53% of the Non-Access students).

***Q-6 Answer the question asked in the given pictures by using
(Going to)***



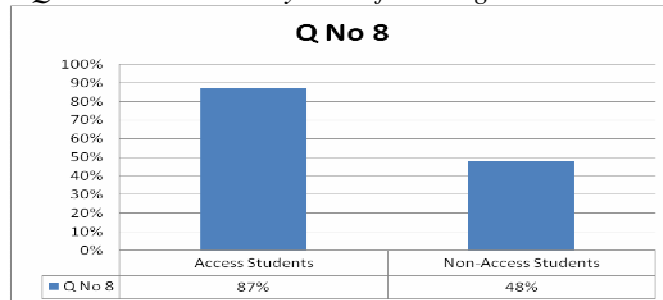
Question-6 consisted on story writing and describing actions by viewing the pictures. It consisted of three different pictures of actions. Learners were presented pictures and asked to give their perception about the pictures by using present continuous tense. The overall results showed that both of the categories of learners performed poorly (73% of the Access and 63% of the Non-Access students).

***Q-7 Fill in the blanks with how many and how much and tick the
right category of countable and uncountable nouns.***



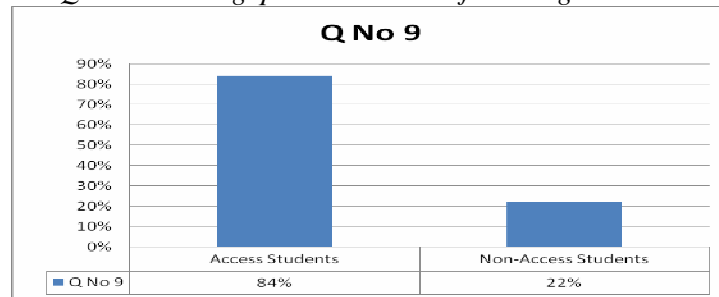
Question-7 evaluated the ability of learners in using parts of speech linked with the correct use of verb and other parts of a sentence. There were three sentences with missing words. Students were asked to fill in the blanks with suitable words either countable or uncountable. The results indicated better performance of Access students (82%) than Non-Access students (32%). Majority of Non Access learners were unable to find out the form of noun and even whether it was countable or uncountable. On the other hand Access students easily figured out what to use on the blanks. They appeared to be having the knowledge of parts of speech.

Q-8 Use some/ any in the following sentences



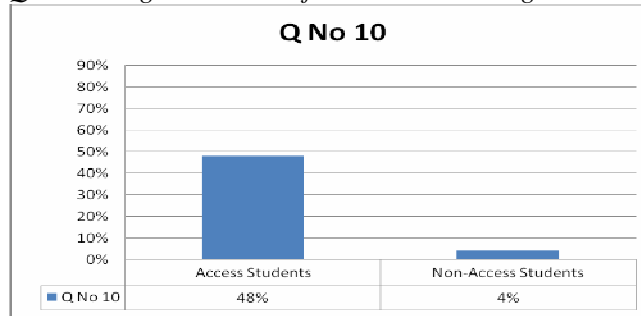
Question-8 judged the ability of students in using 'some' and 'any'. The results indicated that 87% of the Access and 48% of the Non-Access students used these words correctly. It indicated their command over the language in daily life. It is evident that both Access and Non-Access students were good in using these words.

Q-9 Add tag question with the following sentences.



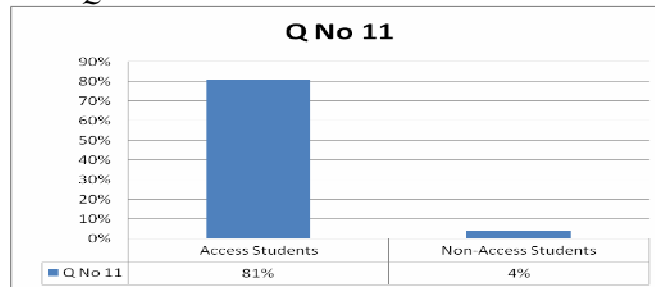
Question-9 consisted of tag questions giving stress in conversation. There were three affirmative sentences and learners were asked to construct their tag questions. The result indicated that 84% of the Access and 22% of the Non-Access students could formulate tag questions on the given affirmative sentences. The poor performance of Non-Access students may be due to the reason that teacher both do not give proper information about the use of tag question as the learners are unable to solve this situation.

Q-10 Change the order of the sentence using an indirect object



Question-10 analyzed the usage of indirect objects. There were two sentences and the students were asked indirect objects developing order of the sentence. The results indicated that 48% of the Access and four percent of Non-Access students could use indirect objects. The results revealed that Non-Access learners were unable to understand and answer properly. Use of indirect object to them was not clear. This can only be eradicated by giving them more and more drill on indirect object.

Q-11 Write down the contractions.



Question-11 consisted of contractions of modern language. There had to write the four contractions. The results indicated that 81% of the Access and four percent of Non-Access students could write the required contractions. It is evident that Access students showed good results in making contractions while Non-Access students were unable to develop these contractions.

Conclusion

It is evident from the results of the study that Access students performed in better way than their counterparts. It is due to the fact that Access programme has good infrastructure and human resources –performance criterion and performance management, and capacity building through a series of training. Teachers of Access programme are well versed and objective oriented having good communication skills, teaching aptitude & capacity, professionalism and intent to go ahead in coaching the students. Whereas, the government schools have poor infrastructure and less resources. Teachers are qualified but status oriented. They are not equipped with innovative teaching techniques having a fewer opportunities of training and capacity building. Their performance is not properly managed and therefore, they become relax in teaching which results in poor performance of students.

It is clear that provision of human resources have positive impact on the achievement of students and promotes professional attitude among teachers. Therefore, it seems appropriate to affirm that proper utilization of human resources and performance management of teachers have positive impact on students learning.

Recommendations

1. Students may be taught to differentiate between the structure of L1 and L2. Learners may be given more practice in grammar. Learners forget rules after exams so they may be given more practice in usages of grammar.
2. In countries where English is taught as a foreign language (EFL) Krashan's monitor model may be applied to teach grammar. Teachers while correcting learner's creative work may not underline grammar mistake as learner in this way would be discouraged.

3. Real life application for grammar may be taught to the student. How and where to use verb may be given by the teacher. In such cases clues may be given to the learner.
4. Learner may be asked to think critically, analyze and synthesize sentence by himself and draw construction and structure of English sentence so that he may come to know how to form a correct sentence.
5. Learners may be taught through direct method of teaching rather grammar translation method.

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