

**IMPACT OF PROFESSIONAL DEVELOPMENT ON TEACHER EDUCATORS OF ELEMENTARY COLLEGES IN BALOCHISTAN**



Researcher

**ABDUL MAJEED**

(Reg. No. 149-FSS/MSEDU/S13)

Supervisor

**Dr. Muhammad Munir Kayani**

**Department of Education  
Faculty of Social Sciences  
INTERNATIONAL ISLAMIC UNIVERSITY,  
ISLAMABAD**





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Teachers - Training of  
In-service training - Teachers.

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By

**ABDUL MAJEED**

**(Reg. No. 149-FSS/MSEDU/S13)**

A thesis submitted in partial fulfillment of the requirements for the Degree of Master Studies in Education at the Department of Education, Faculty of Social Sciences, International Islamic University, Islamabad.

**Department of Education  
Faculty of Social Sciences  
INTERNATIONAL ISLAMIC UNIVERSITY,  
ISLAMABAD  
2016**



**In the Name of Allah, the Most Gracious, the Most Merciful**

## **DEDICATION**

I cordially dedicate my research endeavor

To

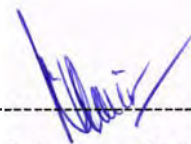
**Dr.Hameed Ulfat Malghani**

My elder brother, well known literary figure of saraiki literature and

acknowledged research scholar

## **FORWARDING SHEET**

This thesis entitled "Impact of professional development on teacher educators of elementary colleges in Balochistan" submitted by Abdul Majeed in partial fulfillment of the requirement, for the Degree of Master Studies in Education, under my guidance and supervision, is forwarded for the further necessary action.



---

**Dr. Muhammad Munir Kayani**

**Supervisor**

**Department of Education**

**Faculty of Social Sciences, IIUI**

# APPROVAL SHEET

## Impact of Professional Development on the Teacher Educators of Elementary Colleges in Balochistan

By

**ABDUL MAJEED**  
149-FSS/MSEDU/S-13

Accepted by the Department of Education, Faculty of Social Sciences, International Islamic University Islamabad, in the partial fulfillment of the award of the degree of  
"MS EDUCATION"

Viva Voce Committee

Supervisor: \_\_\_\_\_

(Dr. Muhammad Munir Kayani)

Internal Examiner: \_\_\_\_\_

External Examiner: \_\_\_\_\_

Chairman

Department of Education,  
International Islamic University,  
Islamabad.

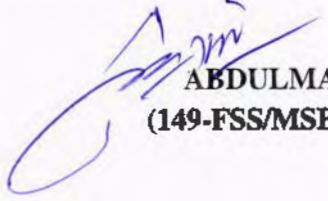
Dean

Faculty of Social Sciences,  
International Islamic University,  
Islamabad

## DECLARATION

I, Mr. Abdul Majeed S/O Ellahi Bakhsh, Registration No(149-FSS/MSEDU/S 13), a student of Master of science in education at International Islamic University Islamabad, do hereby declare that this Thesis entitled “Impact of professional development on teacher educators of elementary colleges in Balochistan” Submitted for the partial fulfillment for Master Studies in education degree in Education, is my original work and has not been submitted or published before and shall not in future be submitted by me for obtaining any degree from this or any other University or Institution.

**Dated:** \_\_\_\_\_



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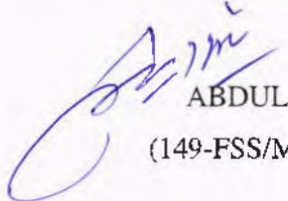
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ABDUL MAJEED  
(149-FSS/MSEDU/S 13)

## ABSTRACT

Professional development is formal in-service training to upgrade the content knowledge and pedagogical skills of teachers. It is widely viewed as an important means of improving teaching and learning. The purpose of the current study was to evaluate, how for the professional development affects the professional practices of teacher educators, serving in Government colleges of Elementary Education, Balochistan. This discourse also explored the nature of professional development in terms of its objectives, content, strategies and duration and its shortfalls. Mixed methods approach was applied to conduct the research using questionnaire, unstructured interview and class room observations check list as Data collection instruments. There are 15 Elementary colleges in Balochistan. All the teacher educators who were working in these colleges constituted the population of the study. The size of population consisted of 180 and the Sample size was 71 teacher educators belonging to six elementary colleges, selected randomly. Total 47 questionnaires were administered, 12 interviews were conducted and 12 classes were directly observed. Two teacher educators were randomly selected for interview; two for class room observation and remaining were selected for questionnaire. The quantitative and qualitative data yielded during study was analyzed through percentage, mean score and thematic appreciation respectively. The data founded the multiple affects of professional development on professional practices. The key effects were examined: collaborative teaching, use of multimedia, planned teaching, on spot feedback and assessment. Besides these positive effects, the shortfalls of professional development appeared in the form of English as a medium of instruction, follow up and duration. The recommendations showed that the professional development coordinator may conduct a survey for the needs assessment before starting the professional development of the teacher educators. Follow up always supports the trainees in the field, it may continue for the support of the teacher educators. Department of education, Bureau of curriculum and Extension center, Balochistan would plan for the follow up support. There is need of professional Development of teacher educators to enhance the capabilities of English language which can be enhanced through short trainings. Duration of the professional development may schedule according to the content level and learning level of the participants. Separate teacher education cadre in Balochistan may produce standardized teachers in future.

## **List of Abbreviations**

<b>ADE</b>	<b>Associate Degree in Education</b>
<b>Pre-STEP</b>	<b>Pre service Teacher Education Program</b>
<b>FM1</b>	<b>Foundation Module One</b>
<b>FM2</b>	<b>Foundation Module Two</b>
<b>FM3</b>	<b>Foundation Module Three</b>
<b>FM4</b>	<b>Foundation Module Four</b>
<b>P.D</b>	<b>Professional Development</b>
<b>SPSS</b>	<b>Statistical Package for the Social Sciences</b>
<b>IBM</b>	<b>International Business Machines</b>
<b>PTC</b>	<b>Primary Teacher Certificate</b>
<b>C.T</b>	<b>Certificate in Teaching</b>
<b>ICT</b>	<b>Information and Communication Technology</b>
<b>B.Ed</b>	<b>Bachelor of Education</b>
<b>NGO</b>	<b>Non Governmental Organization</b>
<b>A.V.Aids</b>	<b>Audio Visual Aids</b>
<b>CPD</b>	<b>Continuous Professional Development</b>

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## CHAPTER NO.1

### INTRODUCTION

Teacher professional development programs are conducted to improve the subject matter and teaching strategies of the teachers. Purpose of the training is to develop teaching learning process and ultimately to improve the learning of the students. (Johnson S. M., 2004). Desimone(2009) points out the fact that there is a growing consensus on the features of professional development that are believed to result in the changes in teacher knowledge and practice. She proposes that these common features of effective professional development are measured to assess the effectiveness of any professional development programs, no matter what types of activity they include. (Desimone, 2009)

The movement to improve the education in all over the world was to improve the student. Different stakeholders are responsible to achieve the goal of the movement. However, the teachers are responsible for the changes in classroom practices. The learning and change of the teacher is compulsory to change the student, which is impossible without professional development. A movement in USA “Teaching at Risk” Teaching Commission (2004), reported that “teaching is our nation’s most precious profession”. The professional enhancement of the teachers leads to the learning of the students which is our asset in human development. The Commission suggested a comprehensive effort for the professional growth of the teachers. The continuity of professional development changes the quality of a teacher. (Hilda, 2004)

According to the findings of the study to explore the impact of the Continuing Professional Development (CPD) in Punjab, the majority of the respondents like head teachers, peer teachers and students think highly positively about the improvement in the teachers' performance as a result of CPD program. There were significant differences among the districts yet the improvement in their teachers' performance was very optimistic. The district Sheikhupura was on the highest position while district Faisalabad was on the lowest footing with respect to their teachers' performance improvement. Though impact of CPD program was greater upon the teachers of urban areas than the teachers of rural areas yet their teachers' performance improvement was highly positive. No doubt, CPD program is extremely helpful in increasing teachers' performance at primary school level in Pakistan. (Shah, 2015)

### **Back ground of the Study**

National Education Policy 2009, focused on the development of the standards of professional qualification in pre-service training for enhancing the overall standard of education in Pakistan. "A Bachelors degree, with B.Ed shall be the minimum condition for teaching at the elementary level. Qualification for teacher of secondary level and higher secondary level must be M.A/M.Sc with B.Ed by 2018. Primary teacher certificate (PTC) and certificate of teaching (C.T) must be closed for the betterment of future teacher. The Pre service teacher education program (Pre-STEP) worked according to the Education policy 2009 for the enhancement of basic professional needs of teachers. The Government of Balochistan with the assistance of USAID funded Pre-Service Teacher Education Program (Pre-STEP), has started two years pre-service teacher education program

“ Associate degree in Education” (ADE), in all Government colleges of Elementary Education Balochistan. The main objective of this teacher education program was to prepare the future teachers according to the new teacher standards of a Pakistan. It was important for the future teachers to learn about the new teaching methods like collaborative strategies and asking higher order thinking. Before starting the ADE Program it was compulsory to develop the teacher educators as role model for prospective teachers. Government of Balochistan, cooperation with Pre-STEP, conducted professional development for all the teacher educators working in Elementary Education Colleges of Balochistan during 2010 to 2013. The modules were designed for this purpose. Foundation Module1 (FM1) was concerned with how people learn, Foundation Module2 (FM2) was about asking Questions, Foundation Module3 (FM3) was about assessment and Foundation4 (FM4) was concerned with practicum. The topic of this research is concerned with FM1, FM2 and FM3 to explore the impact of professional development on the teacher educators in Balochistan. Foundation Modules were designed for five days for each, the first four days were in a workshop with the facilitator. The fifth day of the professional development was in the class room, to practice what have the Teacher Educator learned. The objectives of the professional Development to enhance professional practices of teacher educators through FM1, FM2 and FM3 were: to provide an opportunity for participants to engage in active learning and experience a variety of active learning methods, to support participants to design and practice activities for trainee teachers that use active learning, to explore the idea that different types of questions produce different types of answers, to help participants make linkage between question types and the nature of thinking they provoke and to introduce the use of innovative assessment techniques.

I chose to research on teacher educators perceptions of the impact of professional development on their teaching practices as I often wonder the impact it has on my own practice. As a teacher educator working in Balochistan, I had been involved in various professional development programs. The professional development experienced had sparked the interest for me to find out what other teacher educators felt about the impact of their professional development experience on their teaching practice.

### **1.1 Statement of the Problem**

Professional capacity building programs of teachers have been center of focus for educationists around the world, in order to achieve educational goals. In this regard professional development program of teacher educators in Balochistan (2010-2013) was a part of teacher education. How far such practice was result oriented, how such program was disseminated and where this program lack in. This study has focused on these crucial issues in terms of impact of professional development

### **1.2 Objectives of the study**

The following objectives were formulated for the study:

1. To investigate the nature of professional development for teacher educators of elementary colleges in Balochistan.
2. To explore the effectiveness of professional practices of teacher educators in elementary colleges, Balochistan.
3. To find out the impact of professional development on teacher educators of elementary colleges in Balochistan.

4. To identify the shortfalls in professional development of teacher educators of elementary colleges in Balochistan.

### **1.3 Research Questions**

The following research questions were examined in the study:

1. What are the characteristics of professional development for teacher educators?
2. What are the strategies employed for their professional development?
3. How do teacher educators provide an opportunity for prospective teachers to engage in collaborative learning during professional practices?
4. To what extent and how do the teacher educators use the higher order questioning techniques during professional practices?
5. Do the teacher educators focus on innovative Assessment techniques for the trainees?
6. What are the shortfalls in professional development?

### **1.4 Significance of the Study**

The findings of the study would be a guideline for professional development coordinators to develop strategies for professional development. Needs Assessment of the participants, objectives of the professional development, relevancy, duration, timing of the session ,content knowledge ,activities and the medium of instruction are the main strategies which could be integrated in the professional development. These strategies may be used according to the needs and level of the participants.

The study may highlight the presence status of professional practices of teacher educators in the Government colleges of elementary education. Balochistan. ADE is the

pre-service Teacher education program and teacher educators are teaching the prospective teachers. The finding of the study may help to enhance the interest of teacher educators to adopt the new methods of teaching practices.

The study could be significant to help curriculum developers and teacher educators to integrate subject matters with the teaching methodologies in ADE Program.

The results of this study might be significant for all stakeholders including NGOs working in education sector. Government of Balochistan Education department usually conducts the teacher trainings with the collaboration of NGOs. The findings could be helpful to conduct the professional development of the teacher educators.

### 1.5 Population and Sample

There are 15 Elementary colleges in Balochistan, all were selected for study. The teacher educators (180) of these colleges who had done the professional development, constituted the population of the study. I selected 71 teacher educators from Six Elementary colleges. The data was collected from the teacher educators who had done their professional development, conducted from 2010 to 2013.

### 1.6 Delimitation of the study

Keeping in view the constraints in terms of finances, time and remote areas of Balochistan, the study has been delimited to the following four districts of Balochistan.

Table: 1.1.Delimitation of the study

District Quetta	Government college of elementary education(Male) Quetta
	Government college of elementary education(Female) Quetta



District Pishin	Government college of elementary education(male) Umerabad Pishin Government college of elementary education(Female) Pishin
District Loralai	Government college of elementary education(male) Loralai.
District Kalat	Government college of elementary education(male) Kalat

### 1.7 Operational Definitions of Terms

**Professional development:** Professional development is learning to earn or maintain professional credentials such as academic degrees to formal coursework, conferences and informal learning opportunities situated in practice (Speck, M. & Knipe, C. 2005)

**Follow- up:** Piece of work that builds on or exploits the success of earlier work (oxford dictionary)

**Feedback:** Feedback is information about how we are doing in our efforts to reach a goal (Grant Wiggins2012)

**Strategies:** Strategies are patterns in actions over time. ( Henry Mintzberg 1994)

**Professionalism:** Lusch and Naylor (2001) explain the concept as a multi-dimensional structure consisting of one's attitudes and behaviors towards his/her job and it refers to the achievement of high level standards.

**Impact:** A way of evaluating changes from an intervention or development program (Wikipedia.com)

## **CHAPTER NO.2**

### **LITERATURE REVIEW**

#### **Introduction**

This chapter looks at the meaning of teachers' professional development and discusses its significance to the teaching profession and the notion of teacher educator professionalism. Several themes that emerged from the literature base reviewed such as teacher education, teacher education reforms, nature of professional development and teacher educator's professional practices are also discussed.

#### **2.1 Teacher Education**

Teacher education is main part of the education system which has strategies and guidelines to prepare the future teachers with the knowledge, approaches, behaviors and abilities. There is a need to enhance their abilities to perform efficiently in the classroom, school and among the people. The person who trains the teachers is the teacher educator. The key role of teacher educator is to increase professionalism in the training of the future teachers. In this paper the author has defined a Teacher Educator. According to him, teacher educator is the person who gives proper training and conducts research and makes efforts for improvement and refining the future and in-service teachers. Teacher educators give the professional education to the pre-service teachers and enhance the professionalism of the in-service employees. (Kareem, 2013)

Wolfe, 2001 has proposed the professional life cycle in the six-phases, in which a Novice teacher becomes an expert passing through a series of phases by experiencing reflection and renewal. The initial phases are: Novice Phase: This phase is basically the phase of prospective teachers who are the pre-service students, start teaching during practicum in the laboratory schools which is the part of the teacher education program. Apprenticeship Phase: It is the starting of profession as a teacher when a teacher receives a job and start teaching to the students without help, until confidence emerges in teaching methodology and content. Professional Phase: Due to experience of teaching practices, the teacher's confidence grows and the Pedagogical skills enhance. Teachers always learn from the feedback of students, which links the knowledge and development of the students. Expert Phase: According to the professional standards, such teachers gain the highest level standards. Distinguished Phase: In this stage a teacher influences or becomes a part of policy and decision making at city, state or national level. Emeritus Phase: This is the life stage of retirement and last stage of professional life cycle. (Wolfe, 2001)

Teacher educators are not ready to change the curriculum and teaching methods, there is no any standardized procedure to appoint a teacher, usually whoever does not get any other opportunity, the last choice becomes teaching. There is a lack of professionalism in teacher educators, isolated curriculum which has no connection with realities of classroom and school environment, lack of planning for teaching practice, political interference, lack of infrastructure and need to follow a line of investigation and enhancement in the field of teacher education, lack of promotion structure of in-service teachers and lack of incentives for teachers who participate in continuous professional development pro-

grams. The quality education is strongly related to the quality of teacher education in any education system. Today teacher education institutions are facing many problems. In order to compete these challenges we need complete renovation of our teacher education programs. The status of teacher education in Pakistan can be upgraded by certain measures in order to meet the challenges in teacher education field offering incentives for educators for successful implementation of any innovative programs of teacher education, developing the entry criteria into teaching profession, making teaching profession attractive , developing professionalism in teachers , teacher education curriculum may be made more practice-oriented rather just theory oriented, raising budget for education, stopping political interference in teachers' selection and transfer, introducing separate teacher education cadre and a national commission for teacher education, conducting research for resolving teacher education problems and bringing innovations in teacher education programs. (Malik, 2012)

Teacher Trainers, teachers, learner and politicians have been giving importance the role of schooling in the success of nation of Pakistan. Education is considered as a national basis but it is obvious that past governments have made a new education policy. Due to this effort they have promoted the values, but did not work on teacher education and the development of future teachers, but the institutions of Education in Pakistan are trying to improve the quality of teaching. The USAID-funded Pre-Service Teacher Education Program in Pakistan (Pre-STEP), worked to improve the quality of the teachers and teacher educators all over the country. National Education Policy 2009, focused on the development of the standards of professional qualification in pre-service training for enhancing the overall standard of education in Pakistan. "A Bachelors degree, with

B.Ed shall be the minimum condition for teaching at the elementary level. Qualification for teacher of secondary level and higher secondary level must be M.A/M.Sc with B.Ed by 2018. Primary teacher certificate (PTC) and certificate of teaching (C.T) must be closed for the betterment of future teacher. The Pre service teacher education program (Pre-STEP) worked according to the Education policy 2009 for the enhancement of basic professional needs of teachers. In the mid of 2010, Pre-STEP with the collaboration of the HEC and Education Ministry started the pre service teacher training programs named Associate Degree in Education (ADE) and B.Ed(Hons).This program is started in teacher training institutions like Government Colleges of Elementary Education (GCEE) and associated universities in all over the country. Teachers College, Columbia University, New York facilitated to Pre-STEP's associate universities for developing strategic, curriculum and research plan for the teacher educator in Education. (Pashaa, 2011)

## **2.2 Teacher Education Reforms**

Researchers focus the educational reforms for the modern skills, financial revolution, local and worldwide competition. Teacher education institutions in the Asia-Pacific region have made numerous learning development and reforms. Due to these reforms teachers are facing a lot of problems from their internal and external environment. So the role of teacher has been increased due to meet the challenges of new era. Now teacher is not only teaching in the class room but also has responsibilities of administration, syllabus preparation and guiding the novice teachers, employees professional enhancement and meeting with parents. The teachers could be equipped to develop the performance and practices according to new responsibilities to face the problems and expectations from education reforms in Asia-Pacific region. (Cheng, 2004)

The educationists of Asia-Pacific region have been practicing different models of educational reforms for twenty years. Each paradigm has a specific concept of learning and teaching for educational reforms and improvement for pre-service teacher education. This chapter of the book explains the nature of education and pre-service teacher education in each model and described suggestions for their improvement and applies in the Asia-Pacific region. 1- Internal Effectiveness (1980s-90s): The objective of this paradigm shift was to improve interior efficiency of educational institutions to get intended educational goals and purposes of program: professional content, learning and behavior for the future teachers. 2- Interface effectiveness (1990s). The aims of second paradigm shift were to enhance professionalism of administrators, policy makers, teachers, future teachers and society leaders. This was possible due to the professional development and outcomes of teacher educators. Outcome means to fulfill the expectations of the key stakeholders to improve the representation and ranking of teacher education institutions. 3- Future Effectiveness (2000s): In this paradigm shift there is a focus on the benefits of education reforms to the individuals of a society. In this period of learning focus on the triplication learning of teacher educators which means the knowledge should be without borders (Cheng., 2009)

For many years educators and researchers are discussing and arguing about the variables which influence the changes in the achievement of students. These changes are due to the quality of teachers, size of class, class heterogeneity, intellectual capability and student's hard work. But the teacher effectiveness is the main reason for the differences in student learning. The learning and performance of the students depend upon the effectiveness of a teacher, the teacher who is not aware about new teaching techniques and is inefficient,

the learning of the students will be low than the students who learn from the effective teachers. Thus the impact of effective teaching is the change in learning and increase the knowledge. (Faleye, 2012)

There are some problems facing by a lot of change efforts and professional learning efforts. The change agent always tries to implement the change but unfortunately do not bring about the kinds of changes in practice which they have designed. According to the implementation standards the successful implementation begins with adult learning providing ongoing support for individuals, teams and schools in different ways. More over change occurs due to constructive feedback and reflection to support continuous improvement in practice. (Brown, 2013)

Teachers and school success depends upon the student learning .The educational institutions and their teaching staff motivate the students to learn. The teachers cannot compel the students to learn and the students must learn themselves. Teaching methodology can motivate and create attention the students and provoke them to learn, and make good learning environments that attract the students to learn, but all the responsibilities of learning are on the shoulders of the students. So the institution can give opportunity, occasion, and resources to assist students by providing the best teaching staff. (Johnson, 2014)

According to the Policy Context of Government of Pakistan, different action plans have been made regarding teacher education. National Education Policy (NEP) 1998-2010 focused the problems of teacher education and also recommended the solutions. Teaching staff is responsible for the quality and application of reforms in the class room, where the learning occurs. The aims of the policy were consisted of, comparing need with supply,

successful institutions, offering inducement to attract the qualified and talented people, enhancing the pre-service, in-service teacher trainings and training for administration. Education Sector Reforms Action Plan 2001-2005/6: In this education action Plan, the major problem of teacher education is quality assurance. However, there are no aims and objectives to improve the quality of teacher education however this reform plan has different sets of actions to upgrade the qualification of teachers and to establish teacher resource centers at districts and tehsil level. The role of teacher resource center was to give a chance to the local in-service teachers for the professional enhancement. These centers were made in high schools. Education for All Plan 2015 .This plan focuses the issues of quality contribution under the Universal Primary Education (UPE) section. Availability of teachers, professional development and monitoring were the main issues. The “Education for All” suggests the following postulates for the teacher education: 1- qualification relaxation for teachers in remote areas with special financial benefit; 2- Professional development of teachers after every three years rather than every five years; 3- promotion of the best teachers; 4- improvement of pre-service teacher training; 5- review of curriculum and schoolbooks. The Education for All Plan 2015 has suggested new methods of teaching, including distance education, ICT based teaching, and training of administrators. (Jamil, 2004)

### **2.3 Nature of Professional Development**

Professional development is the change factor in the teacher education for the learning of the students. Conventional or traditional classroom teaching methods have been changed to non conventional or innovative method by using the audio-visual Aids to



encourage the interactive form of learning in students through active participation. Modern education can be defined according to the social and cultural needs and the values of community. Education is the only instrument which can be used to develop the characteristics of a nation and a community. Such tool can make a future citizen a good leading person. In our educational system the teaching and learning process is practiced by lecture method in which teacher explains to students without their active participation. But now market requires deep, flexible and transferable knowledge which is not fulfilled by traditional lecture method. In non conventional teaching method there is active participation of students through multimedia and internet, seminars, audio-visual Aids and so on. Students learn more when they are involved actively than when they are passive in the class room. Multiple intelligences can be used by a teacher for active learning of all the students. Students learn through different techniques. Different strategies can be designed by a teacher like visual learner learn through models and demonstration, auditory learner learn through discussion, debates and games, kinesthetic and tactile learner through models and role play. Teaching should be filled with a variety. It is a fact that the innovative and modern teaching practices would have a greater impact on the learning habits of students and consequently its influence on their performance in examinations, and daily life. In other words, the innovative practices of teaching help the students to achieve either desired level or enhance the learning capacities so as to excel in their examinations as well as equipping with better potential to seek either jobs or other professional performance in their life. (Mane, 2014)

Teachers participated in professional development as passive participant in the past. Short term trainings and workshops were arranged for the development of the teachers in

the content and methodology. Knowledge was transferred by the resource person but the participants were the attentive listener. According to new model, with the passage of time learning takes place and there was a connection between prior and modern knowledge. (Smith C. L., 2007) .

The differences between professional development of teachers and teacher educators were observed after the manuscript in the JTE (Journal for teacher education) which focused the teacher educator practices. The questions were posed to start arguments of teaching methods of teacher educators and conducted research about the teacher educators. The questions were about the status, job description, and knowledge of teacher educators and differences of teacher educators from the teachers. The writer posed the questions to know about the difference in the practices of teacher educators for pre service and in service teachers, professional development of teacher educators, and future of teacher education in the light of policies of government and preparation of future teachers from the teacher educators. According to Loughran, J., addressing the posed questions connected to the teacher educators. He said “a teacher educator is someone who works in a tertiary institution and teaches prospective teachers enrolled in a pre-service teacher preparation program.” successful teacher educators are those who are excellent user of research and its application. There is also need to examine the standards and thinking in the learning of teacher. The other related study by Lin Goodwin and her colleagues, focused on the professional work of teacher educators. Similar to Loughran, the findings of this study indicated that most teacher educators joined this field by chance and had no specific training .They mainly depend upon their individual teaching back- grounds (Knight, 2014)

There are different approaches to enhance the teacher education. Hargreaves and Fullan (1996) have explained three approaches in chapter one of their book, "Understanding Teacher Development" the approaches are as follow: 1- Teacher development as information and ability growth. This approach deals with the enhancement of professional knowledge and learning techniques which will give them the confidence in professional practices and enhance their capability. All the problems of teachers can be solved if they are prepared with the learning of new teaching methods. Students can achieve their learning out comes if the teachers teach according to modern techniques. 2- Teacher development as self assessment: usually teachers do not be ready to change their ideas and activities which they have. There are many factors involved which do not allow changing the ideas and beliefs for development. It is not easy to change because the. Beliefs run from centuries. 3- Teacher development as environmental adjustment. The environment of the professional development plays a key role for the development of teacher. The nature of the professional development is responsible for the development or destruction of a teacher. It is most necessary for the teachers to understand the environment and context. (Saleem, 2014)

Professional development techniques for teachers are same from several years.

1. Government schools trainings typically focus on workshops and short courses. There are no special courses and scholarships nor in practice for the development of a teacher. Some programs are conducted which enhance the teachers in basic content knowledge, methodology and experiences.
2. Usually the trainings are not scheduled according to the specific area of a teacher.

3. The follow up and evaluation process does not exist to know about the change and effectiveness.
4. Different training institutions only give the certificate of participation and shield, which is not enough to motivate the teacher for change. The shields and certificates are important but not every time. Professional trainings change the practices of a teacher but the main problem is financial which has importance to motivate the teacher for professional growth.
5. After getting training the teachers face problems to implement these changes in the class room, the teacher need guidance. In the absence of follow up and guidance teacher lose motivation to teach the class with modern techniques and after some time continues traditional method.
6. There is a need of proper conduction of introduction of novice teacher to explain the learning environment of the school. (Aslam, 2013)

There are five steps to complete high quality professional development implemented in a school of Maryland on July 2013. 1- Needs Assessment for professional development is the primary and first component for the completion of professional development cycle. Data Response Sheet from the audience is formed for the professional development decisions. Participants suggest the content knowledge, methodologies and different activities of the professional development. 2. It is the year long professional development plans for approval. Define clearly the expected results. According to the needs, develop and look briefly all the activities to achieve the objectives 3. After need development activities are designed, set the aims and objectives of professional development. Solve the problems which create hurdle the schedule and calendar. 4. In the start of professional develop-

ment registration of the participants occurs for the implementation of high-quality professional development, performance of professional development activities by the master trainers, reconcile attendance and access attendance reports 5-Observe the quality of implementation by immediate surveys, evaluate all the activities by conducting future professional development (Schmidt, 2013)

Author has suggested six principles for professional development which argue the difficulties here in the current changes in the professional development. There are some principles which criticize the current practices and suggested alternative ways.

1. Professional development presents significant, rational, public, and exciting performance with thoughts. The passive teacher roles have been observed during the professional development. Teachers have a partial approach to the scholar professionals of a community and specific knowledge. Usually inter teachers discussions and professional help remain continue.
2. This principle shows the professional change of experienced teacher with new ideas. Different methods in the professional development like Group work, student centered approach and follow up are the new ideas for a teacher. This principle arises the issue that professional development program do not care the context and level of the participants. One strategy fits in all the professional developments. The training is not conducted according to the experience of teachers.
3. Professional development solves the problems. Consensus over a dispute is a good quality in any school but extreme dispute paralyze the system. So that the school commitment enables the people to take a bold action, the close collabora-

tion and training experiences strengthen the group decision than individual choices.

4. According to this principle teachers can be trained to guide the children for their career in future.
5. This principle promotes the current knowledge based study to technical skilled training of teachers and use of applied and research based knowledge.
6. The professional development coordinators balance the resources and opportunities in the institution. (Little, 1994)

There are some factors which are responsible for effective professional development and connect teaching staff for the professional enhancement which are: helpful or supportive: such programs are helpful for the teachers for motivation and dedication to learn the new techniques of teaching. It is also helpful not only for teachers but also for administrators. Job related: teachers need the professional growth and improve the hard areas of the related content knowledge. Student centered: The successful training for teachers is student centered and group work with collaboration, in which the participants interact the experience with each other. The participant remained active physically and mentally through different activities like PBL, sharing, discussion, simulations, role play and visual representations. Continuous process: It is the ongoing process not stationary. with the change of the contents, research and modern techniques. Successful professional development is collaborative because the participants involved socially and share the professional issues, thinking and opinions to solve the problems. In different activities of school teachers learn from each other by sharing for achieving a common objectives like to plan, to instruct and to analyze the work of a student. The formal and traditional professional

development is not as such beneficial as the learning of teachers from each other and from colleague mentor. The continuity and constancy trainings remain effective. The teaching practice improved the learning of the teachers who involved and participated in the professional development. The active participation, task completion, group work in any workshop is valuable and useful for the teachers. According to another research when a teacher participated in even traditional type of professional development, obtained the positive results in the professional practices and the learning of students (Hunzicker, 2010)

Highly effective classrooms are directly related with the training, the teacher received. The useful training and professional development focus on the subject matter, teaching strategies and feedback because the teacher has to implement the same in the class room. In any professional development the learning of teaching strategies are more important than the subject matter, focus on how to teach. There are some techniques for useful training. 1. During training, when a teacher educator teaches about the teaching method, must apply that method in the session for example if you are teaching cooperative method but using lecture method in the session which will discourage the participants and trainees. 2. When you design the lesson plan which should be time bounded for the best professional development. 3. Use the Lesson and Receive Feedback: For the assessment and improvement of your professional development, use the rubric created for the class and take feedback from the head of institution and colleagues. 4. The school environment and employees should own and responsible for the sustainability of the change of learning. Any one teacher should take feedback for continuity. 5. When teachers are needed for the improvement that is the good time for the professional development. 6. Our abili-

ty will be increased to learn from each other. Some teachers are cooperative and share the new thoughts and techniques, but it should be the environment of the school. Teachers can share the ideas during tea break and peer- teaching. (Davis, 2015)

The student performance improved very little even educational reforms initiatives because professional developments have given very less attention to the ground realities of the class room environment. The author suggested the alternative approach for the in-service training that the teachers should practice the new teaching strategies during the workshop before to implement in the class room. Such approaches will be result oriented for the learning and improvement of the students. The standard and best training for the teaching staff to learn the new teaching methods, changes the teaching method of a teacher in the class room. The coordinators of the professional development develop the best strategies to improve the learning of the students. The main issue is that the performance of this professional development is contradictory because they mainly focus the issues of the traditional methods with little solution to improve the class room. They do not give a chance to the trainees for the practice during training which they have learnt. The main objective of the professional development is to change the learning of the students through the change of the teacher educators and teachers. (Harwell, 2002)

Wiley and Yoon (1995), Cohen and Hill (2000) found that the professional development of the teachers has a little effect on the learning of the students. According to Angrist and Lavy(2001), the effects of teacher training on the students with some limitations regarding the potential effectiveness of teacher training programs. Limitations were to fund the teacher training and to assist failing students after school. (Jacob, 2002)



All the professional development programs have the objectives to bring change in the class room by professional practices of the teachers for changing the learning of students. Many factors influence the teacher to implement the learning in the class room. The follow up program is the major influencing factor to bring change in the professional practices. The collegial support, Head teacher's encouragement and the school learning environment are also the factors to implement the learning. Follow up program not only helps the teachers to implement the learning but also is helpful to sustain such professional practices. (Qazi, 2007-08)

#### **2.4 Teacher Educators' Professional practices**

According to Slavin 1983, the mutual educational struggle among the students or teacher-students is the Cooperative Learning. It is necessary for the students to share, discuss and encourage completing the mutual assignment. Another cooperative learning approach is the Problem based learning (PBL) which has some fundamentals like: problem solving approach which has four components: exploration, communication, explanation and basic enthusiasm. According to Aronson et al, 1978, jigsaw is cooperative learning in which each participant of the group is important to complete the task with a focus group and after discussion on the assigned topic, returned to the basic group to unite the knowledge and to achieve the objectives. (Jolliffe, 2005)

Traditional method of teaching is continued for centuries. New teaching methods are better than the traditional methods for the learning of the students. The learning with mutual understanding, lack of limitations of power and pleasure are involved in the modern teaching strategies. This is the responsibility of a teacher to develop and to plan the topic. Spaced Learning is a learning technique in which the specific knowledge is fre-

quently repeated three times with two minutes space and relaxation. This repetition helps to memorize the knowledge. Flexible Fridays is a technique to solve the academic problems of a student in depth. If students feel difficulty in the learning of the content, then the complete day is fixed to improve the hard areas of the concerned subject. It becomes easy for the students to focus only one subject while in school. Engagement is the learning technique through which the students must visit the real situation of the concerned topic. The students realize and analyze the theory and its application. When the students visit the local factories and observe the specific knowledge practically. In the annual calendar the days are fixed to visit for practice. During traditional teaching methods teachers tell about the knowledge and teachers attach the knowledge with real world during engagement strategy. (Jackson, 2012)

The most important and technical is to set a task structure for a cooperative learning which has some steps which are to specify the goal of the activity in which the objectives are developed before to start the activities in the class room and to expect the outcomes after the cooperative learning, structuring the task in which you have to know about the different aspects like the number of participants in a group, to know how to make the group, to decide a time for a specific task or activity and decide the incentive for the group to motivate, the group size should be equal in size, there should be 4-6 members in the group; in the selection of group members you will form most groups heterogeneously with a representative sample of all the learners in a class. John and John (2005) provided suggestions for forming groups, to identify isolated students and build a group of supportive students around each isolated learned. Randomly assign students by having them count off, if five groups are desired in a class of 30, have students count off

by six. Use heterogeneous group having constructive relationship between the children of with and without disabilities, gender balance, or Share with students the process of selecting group member, alternating between your choice and student choice until the group is complete. The time devotion depends on the class complexity; there should be refined estimate as well. You have to plan the whole class discussion or group reports for next day. In addition to all these tasks establish a system of reward to keep your learner on task and working toward the goal, grades, bonus point, and social responsibilities.

The most important in the collaborative skill is to exchange the thoughts and feelings with each other at the same conceptual level. When the students share their ideas easily, they feel comfortable. During group work a teacher must observe and to get involve the learners to achieve the group goals. The role of teacher is critical to identify and solve the problems of students and also redirect the group when it is in a blind alley. Teacher should openly talk that how the group functioned. Ask students about the issues and opinions to improve the group activities. Get view points of the observers if already present. (Borish, 2012)

The sustainability of the professional development is compulsory. It is the responsibility of the coordinator of a program to sustain. Less duration and having no continuity are ineffective for developing the professional practices. Collaboration, shared inquiry and learning from each other are the backbone of the professional development. (Kathryn-Broad, 2006)

Teacher educators face mainly two difficulties for the development of professional practices which are teaching about “how to teach” and teaching about “how to learn” (Huberman,1993). Novice teacher educators cannot enhance their practices unless reflections

of the experts. Experts also share their stories of practices in their publications. Teacher Education is highly specialized and complex field of practice, where there is a vast difference between telling and teaching. It is compulsory for a teacher educator to take much attention about what they teach and how they teach. (Kitchen, 2009)

Discussing the complexities of modern teacher education programmes, Iqbal, Zafar, M. (2006) further added that new knowledge resulting from the research and studies of psychologists, sociologists, philosophers and other specialists had been continuously adding to the pool of professional knowledge, useful enough for inclusion in the teacher education courses by teacher educators. He added that highly expert educators are required for the elaboration of theories and practical demonstration of pedagogical strategies with full command over modern gadgets, enabling student teachers benefit from the contributions of the experts. In his opinion these theoretical and practical experiences are designed to provide them balanced and close to reality training exposures. (Iqbal, 2006)

Lortie (2005) expressed that teachers learn to teach and learn to put the theoretical knowledge into practice by emulating their own teachers. They imitate them with an urge to be like them. Lortie, focusing upon the role of teacher educators articulated that prospective teachers, on the basis of their own experiences as learners, and through observing their educators, internalized the amicable patterns of behaviour as teachers, which set a direction to their pedagogical patterns in the days to come. Different studies had proved that student teachers learned a lot from their tutors and from being socialized in schools, communities and education systems in which they worked.” (Lortie, 2005)

Reddy R. (2003) reported three surveys about exploring the use of innovative techniques for the pre-service teacher education programs, conducted in 2000, 2001 and 2002 re-

spectively. While concluding the findings it was realized that student centered approaches, where modern methodologies provided the students more active, critical and reflective role, were in a position to promote better concept clarity and stronger grip on the practical implementation of diverse teaching methods. Teacher educators by involving students in participative and reflective activities not only promote concept clarity but also develop confidence in prospective teachers to be interactive and reflective in their interactions in their future classrooms. (Reddy, 2003)

Foundation Module FM1, FM2 and FM3 have following strategies to achieve the objectives of the professional development of teacher educators conducted by Pre-STEP to launch the pre service teacher education program, named Associate Degree in Education (ADE) in Balochistan.

#### **1. Collaborative Learning**

**Jigsaw:** In this technique work is divided in different groups and then combines the learning of the work to finalize the task. Here is an example, how it works: The students in a Child Development class are divided into four groups. In each group, one trainee investigates physical development, the second trainee investigates cognitive development, the third trainee investigates social and emotional development and the fourth trainee investigates language development. After the investigation, each trainee gives presentation about the learning of the topic. **Think-pair-share (TPS)** is a collaborative learning strategy in which students work together to solve a problem. The teacher assigns a topic to the students to answer the question. The students are allowed to think individually about the topic and then share the learning with the class mates.

Another cooperative learning strategy is “Numbered Heads Together” that holds each student is responsible to learn the topic. Students are placed in groups and each person is given a number (from one to the maximum number in each group). The teacher poses a question and students “put their heads together” to answer the question. The teacher calls a specific number to respond as spokesperson for the group. By having students work together in a group, this strategy ensures that each member knows the answer to problems or questions asked by the teacher. Because no one knows which number will be called, all team members must be prepared.

## **2. Higher-order questions and thinking skills**

Questions serve many purposes in education. Asking questions helps teachers to know what their students have learned, and they help students to generate, form, test, consider, and clarify understanding, opinions and ideas. Being able to ask a range of questions, including higher-order questions is an important teaching skill but many teachers have not learned this skill, or they do not use it because the education or examination system requires only recall, low-level learning and thinking. According to the Foundation Module (FM2) of professional development, the session for the teacher educators begins with an activity having questions from real life. After the activity questions were asked starting from lower level to higher level. The lower level questions started from the words like how many, what and are .The questions of higher level started with why, where and when.

### 3. Assessments

Assessment is a continuous process to look at the performance of both learners and teachers as a part of the teaching learning process. It helps the learners to improve their skills and competencies. It also helps teachers to improve the instructions and pedagogical methods. It empowers the learners and the teachers by providing feedback for improvement. Assessment plan should be flexible. It should always be linked with instructions. (HEC, 2010)

#### 2.1 SUMMARY

Professional development for teacher Educators is essential to maintain the level of professionalism so that teacher educators are able to keep up with the changes in demand and expectation held by the nation and society in regard of the quality of education. Professional development for teacher educators is believed to be more effective in creating sustained change to teaching practice when it is designed to accommodate to the learning needs of the students. To achieve this, attention needs to be given to the processes of teacher change and other factors that enhance such change. Hence, several themes that emerged from the literature base review such as the nature of teachers' professional development, effectiveness professional practices of teacher educators, impact of professional development and teacher education reforms will shape the design of this research study.

TH-16936



## **CHAPTER NO.3**

### **RESEARCH METHODOLOGY**

It is a descriptive and exploratory study that concerns itself with comparative analysis of nature of professional development and professional practices of teacher educators of elementary colleges in Balochistan. Cohen and Manion (2004) stated that the descriptive method has proved to be ideal particularly for investigating a variety of educational problems, as typical descriptive studies were concerned with the explanation and assessment of practices, procedures, historical background and existing conditions of prevalent situations. (Cohen, 2004)

The study attempted to explain the nature of professional development and professional practices of the sampled population very accurately. Information was gathered at source through detailed and extensive study of the relevant literature and appropriate documents: FoundationModule1, FoundationModule2 and FoundationModule3 developed for professional development. Data had been collected with the help of interviews, survey questionnaire and class room observation check list fielded to the sampled population, for the purposes of comparing and contrasting, analyzing and interpreting the teacher educators practices in order to meet the objectives of the study.

#### **3.1 Research Design**

Creswell and Clark, 2007 suggested that the mixed method research is an approach to combines both qualitative and quantitative forms. Mixed method design is a



procedure to collect, to analyze and to mix both quantitative and qualitative data to solve the research problem. The importance of this method is as follow:

1. Researchers compare the Quantitative and qualitative data to find out the precise solution of a research problem.
2. Researchers use the mixed method when one type of research method (qualitative or quantitative) is not enough to solve the problem.

Mixed method design has an approach: the concurrent triangulation, in which the timing to collect the qualitative and quantitative data is same and then researcher compares both data bases to conclude the differences and similarities. (Creswel. 2009)

### 3.2 Population of the Study

There are 15 Elementary Education colleges in Balochistan. all were selected for study. All the teacher educators (180) of these colleges constituted the population of the study. The detail of the population as per each institution is given in table No.3.1 below.

Table 3.1: Institutions and Persons constituting the population of the Study

S #	Name of institution	Teacher Educators
1	Government College of Elementary Education (Male) Quetta.	14
2	Government College of Elementary Education (Female) Quetta.	11
3	Government College of Elementary Education (Female) Pishin.	12
4	Government College of Elementary Education (Male) Umerabad.	10
5	Government College of Elementary Education, Loralai.	15
6	Government College of Elementary Education, Killa saifullah.	10
7	Government Colleges of Elementary Education, Mastung.	14
8	Government Colleges of Elementary Education, JaffarAbad.	12

9	Government Colleges of Elementary Education, Kalat.	09
10	Government Colleges of Elementary Education(Female) Khuzdar	11
11	Government Colleges of Elementary Education (Female) Sibi.,	12
12	Government Colleges of Elementary Education, Uthal.	12
13	Government Colleges of Elementary Education, Panjgoor.	14
14	Government Colleges of Elementary Education, Kech.	12
15	Government Colleges of Elementary Education, Nushki.	12
	Total	180

### 3.3 Sample of the study

In this study, I selected 71 teacher educators from Six Elementary colleges out of 15 from four districts: Quetta, Pishin, Loralai and Kalat. I have collected data from the teacher educators who had done their professional development, conducted from 2010 to 2013. The percentage of sample size remained 39.44% which fulfills the set standards, for reference Gay (1987) suggests 10% of large populations and 20% of small populations as minimums sample size. (Yount, 2006)

Table: 3.2 Institutions and Persons constituting the sample of the Study

S #	Name of institution	Sample
1	Government College of Elementary Education (Male) Quetta.	14
2	Government College of Elementary Education (Female) Quetta.	11
3	Government College of Elementary Education (Female) Pishin.	12
4	Government College of Elementary Education (Male) Umerabad.	10
5	Government College of Elementary Education, Loralai.	15
6	Government Colleges of Elementary Education, Kalat.	09
	Total	71

### **3.4 Research Instruments**

Research instruments for this study were developed with great care. Self made survey questionnaire (Likert Rating scale) was prepared for collecting data from the teacher educators (**Appendix 1**). Semi structured Interview questions were designed for acquiring first hand information on the qualitative aspects (**Appendix 2**). Class room observation check list was made focusing on the professional practices of the teacher educators (**Appendix3**). Date and time was obtained in advance telephonically from respondents with the permission of the principals of the concerned colleges. Instruments were designed in line with the objectives and research questions of the study. During the finalization stage to check validity and reliability, the irrelevant, overlapping and ambiguous questions were revisited repeatedly and improved upon. Questions of the interview were kept short and to the point, in order to avoid unnecessary stressing, so nearly all of the respondents participated actively till the end.

During the process of development of tools for research, discussions for content validity of the items were carried out with the research supervisor and other teacher education experts to select the relevant items that would best facilitate the fulfillment of the objectives of the study.

#### **3.4.1 Validity of Research instruments**

According to Lawshe (1975), the panelists should respond in three categories for each of the question: Essential, Useful but not essential and Not necessary for the Validity of the research instruments.

The opinions from all experts were composed and the number indicating "essential" for each question were determined. When the experts make decisions, the question properly arises as to the validity of their decisions. If the experts do not have the opinion with the essentiality of the question then a problem can be increased. If all the experts have the same opinion, then all the questions are either "all wrong" or "all right."

With these assumptions in mind, the following formula for the content validity ratio (CVR) was used:  $CVR = (ne - N/2) / (N/2)$

CVR= content validity ratio, ne = number of SME panelists indicating "essential",

N = total number of SME panelists.

SME=Subject matter experts

1. According to 50 % declare "essential," the CVR is negative
2. According to 50% declare "essential" and 50% do not, the CVR is zero
3. According to 100% declare "essential," the CVR is calculated to be 1.00, (It is adjusted to .99 for ease of treatment).
4. When majority favors "essential" then the CVR is somewhere between zero and .99. (Lawshe, 1975)

To determine the content validity ratio, Research experts were selected from the International Islamic university Islamabad, Education department Government of Balochistan and University of Balochistan Education Department, Quetta. (**Appendix 4**). The selection of panel of experts was made on their qualification, teaching/administrative experience. The identified content was tabulated with 03 response options (essential, useful but not essential, not necessary) for the opinion of panel of experts. After the opinion of

panel of experts, content validity ratio (CVR) was determined to develop the research instruments. (Appendix 5)

### 3.4.2 Reliability of Questionnaire Items

Kahn, 1998 suggested that the basic requirement for a questionnaire to be valid is that it should ask the right questions, which should be clear, precise and properly worded. They also suggest that all the terms must be properly defined in the questionnaire so that all respondents are able to draw the same meaning from them. To determine reliability, the questionnaire was pre-tested on randomly selected participants from the population who were not included in the sample. Moreover, as the results of the pre-test were similar to those obtained from the sample, therefore, it is safe to say that the questionnaire was a reliable instrument. (Kahn, 1998)

The data collected from above said groups for pilot testing was entered in SPSS. For determining the reliability of questionnaires, Cronbach's Alpha was applied to calculate internal consistency of items which represented that all items are significantly correlated with each other.

Table: 3.3 Cronbach's Alpha

No. of Items	Alpha
Reliability of questionnaire items regarding Impact of professional Development on the teacher educators of elementary colleges in Balochistan.	
20	0.740

### 3.5 Data Collection

The data was collected from teacher educators working in Government colleges of elementary education, Balochistan through survey questionnaire, interviews and class room observation check list. The researcher visited all the institutions in person at all the cities. The survey questionnaire and observation check list with closed ended items were used as a primary source to gather quantitative data from the intended population. Likert scale was also incorporated into the questionnaires to objectively assess the degree of agreement with the provided options.

Interviews as a primary source of qualitative information collection were used to remain focused and structured in face to face interactions. The respondents at the elementary colleges were approached by the researcher through principals of the concerned colleges to get the willingness and appointment for interviews and class room observations.

The qualitative and quantitative data was collected concurrently during 1<sup>st</sup> and 2<sup>nd</sup> week of July 2015. The researcher visited all the selected institutions in person with the permission of Director Bureau of Curriculum and Extension Center, Department of Education, Balochistan. (**Appendix 6**)

Questionnaire with close ended items was used to gather quantitative data from the intended population. Likert scale was incorporated into the questionnaire to assess the degree of agreement with the provided options based on the five point (strongly agree=5, agree=4, undecided=3, disagree=2 and strongly disagree=1). Check list was used as

quantitative information for class room observation. Semi structured Interview as qualitative information was used in face to face interactions.

All the respondents were selected randomly, two teacher educators from each were selected for interview, two classes were observed by using check list and remaining all the teacher educators who had done professional Development were taken for questionnaire. The response of two out of 12 teacher educators was in Urdu language due to English speaking constraint. Confidentiality was ensured to the respondents and the purpose of the study was explained.

### 3.6 Data Analysis

I analyzed the collected data according to the mixed method design. Quantitative and qualitative Data was analyzed separately. Questionnaire was analyzed by calculating mean and percentage, the quantitative data of check list was analyzed by calculating the percentage. The Data collected from the interview was analyzed qualitatively through thematic approach by making segments and assigning codes after studying deeply. So the codes were explained in to themes. Themes were then tabulated to show the acceptance and rejections of the questions. According to the concurrent parallel analysis both the qualitative and quantitative analysis results were compared and merged for interpretation.

The mean value was calculated by the following formula.

$$\text{Mean score} = \frac{\Sigma((f*SA)+(f*A)+(f*UD)+(f*DA)+(f*SDA))}{N}$$

$$\bar{X} = \frac{\Sigma xi}{N}$$

Where  $\bar{X}$  stands for Mean score,  $x$  stands for score and  $N$  stands for total number of respondents. From the data, researcher calculated the percentage of the respondents.

For calculation of percentage formula is given:

$$\text{Percentage} = \frac{\text{Responses for an item}}{\text{Total responses}} * 100, \quad \text{Percentage} = \frac{f}{N}$$

$f$  stands for number of respondent and  $N$  stands for total number of respondent.



## **CHAPTER NO.4**

### **DATA ANALYSIS**

Mixed method approach was used to analyze the collected data. This chapter has been divided in to three parts as follow:

#### **4.1 Quantitative Data Analysis**

Survey Questionnaire and observation check list was analyzed quantitatively through Mean scale and Percentage. Tabulated data of questionnaire was analyzed and interpreted by using Likert scale with the help of the IBM SPSS Software (v.20).

#### **4.2 Qualitative Data Analysis**

Data collected through interviews was analyzed qualitatively by developing themes to achieve the objectives of the study. Ary (2006) suggests the use of a structure for analysis, referring to the set of ideas recognized from the literature that are used as codes. Once the deep study was done, then to identify the emerging categories where items with similar coding will be placed together. From there explore the relationship between the different categories and identify the major themes that have emerged. The next stage of data analysis is summarizing and interpreting. Summarizing is about making connection between the themes to make a story. (Ary., 2006)

#### **4.3 Mixing Qualitative and Quantitative Data**

This part is consisted of the integrating the two data bases by merging the quantitative data with qualitative data. The data results were mixed by comparing the findings of quantitative and qualitative data.

## **4.1 Quantitative Data Analysis**

The data, collected through the survey questionnaire and observation checklist was analyzed by the Quantitative analysis as follow:

### **4.1.1 Survey Questionnaire**

According to Verma and Mallick (1999), “a well constructed questionnaire is an economical data collection instrument that has the advantage of providing the answers to the research questions”. The most critical issue was the time factor; it would be difficult for me to arrange interview sessions for all the teachers at a time that is convenient to both parties as this research project has to be completed within the set period of time.

I intended to use questionnaire as the research instrument to gather baseline information of the teacher educators overall perceptions of the impact of teachers’ professional development on teacher educators and to gain better understanding of the research topic. The data was collected from 47 participants through questionnaire. The collected data was analyzed through percentage and mean score by using SPSS(V.20).

**Q.NO.1: Pre-STEP conducted needs assessment of the teacher Educators before starting the professional development program.**

Table 4.1 "Conduction of needs assessment"

Scale	Frequency	Percentage	Mean
Strongly Agree	6	12.76	2.85
Agree	8	17.00	
Uncertain	09	19.14	
Disagree	21	44.68	
Strongly Disagree	3	6.38	
Total	47	100.00	

According to table No. 4.1, majority (51.06%) of respondents were against the statement that Pre-STEP conducted needs assessment of the teacher educators before starting the professional development program. The mean score (2.85) indicates that majority of the respondents were against the statement. But 29.76 % respondents were agree that need assessment was conducted before the professional development.

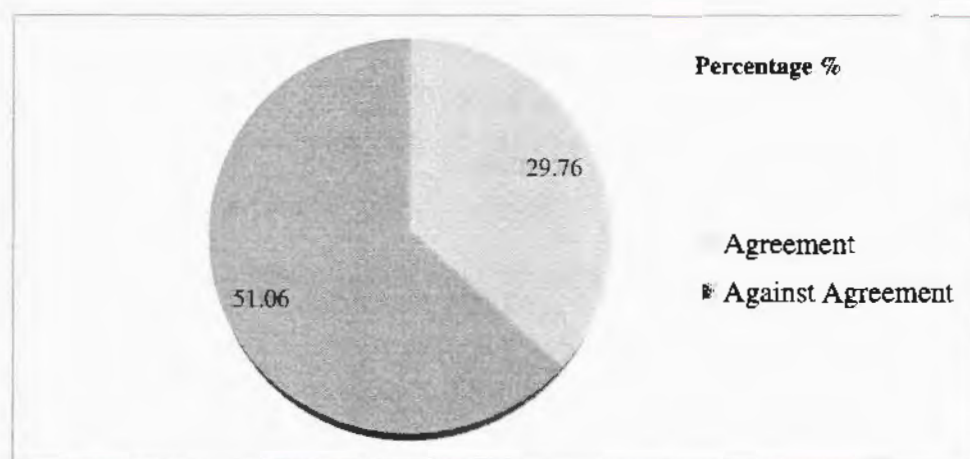


Fig.No.1 "Conduction of needs assessment"

**Q.NO.2: Professional development program was in accordance with your professional needs.**

Table 4.2 "Accordance with professional needs"

Scale	Frequency	Percentage	Mean
Strongly Agree	14	29.78	4.1
Agree	30	63.82	
Uncertain	0	0.00	
Disagree	0	0.00	
Strongly Disagree	3	6.38	
Total	47	100.00	

According to the table No.4.2, majority (93.6%) of teacher educators agreed that the professional development program was according to their professional needs. The mean score (4.1) pointed out that majority of respondents were agreed and strongly agreed with the statement. The respondents who negate the statement are 6.4%.

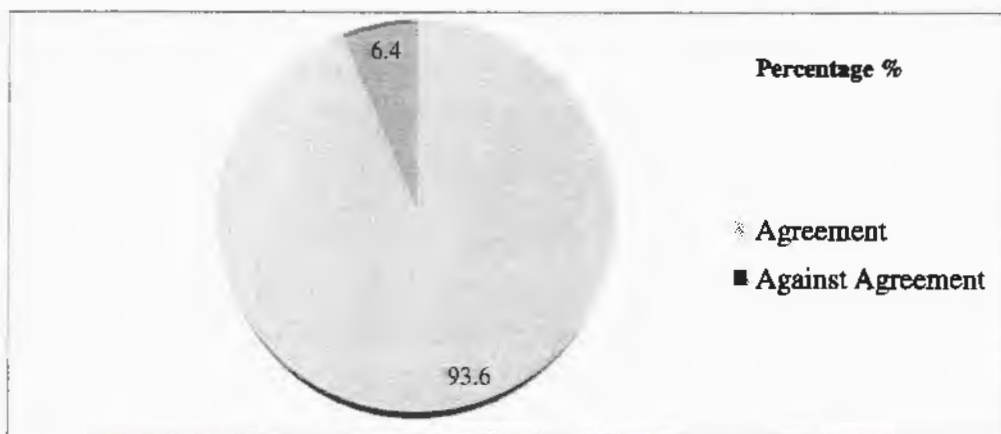


Fig.No.2 "Accordance with professional needs"

**Q.NO.3: Professional development program has improved your pedagogical skills.**

Table 4.3 "Improve the pedagogical skill"

Scale	Frequency	Percentage	Mean
Strongly Agree	13	27.65	4.19
Agree	32	68.08	
Uncertain	0	0.00	
Disagree	2	4.25	
Strongly Disagree	0	0.00	
Total	47	100.00	

According to the table No.4.3, majority (95.73%) of respondents agreed that the professional development program has improved the pedagogical skills of the teacher educators. The mean score (4.19) reflects that majority of the respondents were agreed and strongly agreed with the statement. The respondents (4.25%) were not agreed with the statement.

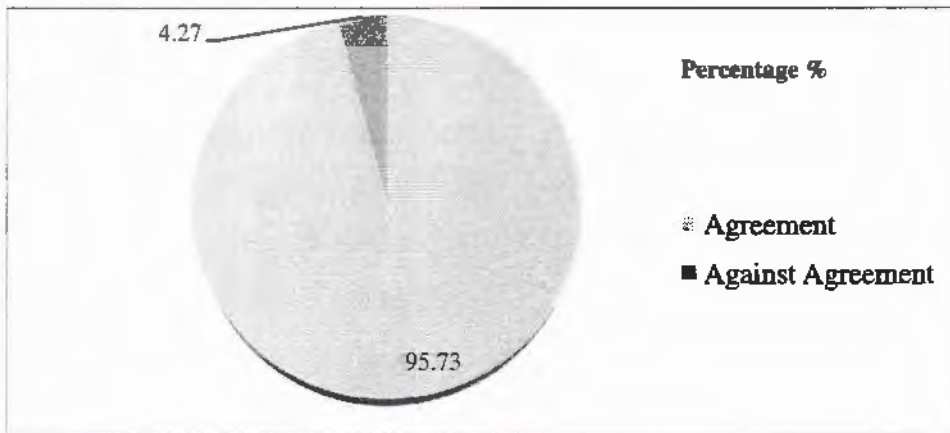


Fig.No.3 "Improve the pedagogical skill"

**Q.NO.4: Professional development program has improved your content knowledge**

Table 4.4 "Improve content knowledge"

Scale	Frequency	Percentage	Mean
Strongly Agree	7	14.89	4.0
Agree	30	63.82	
Uncertain	7	14.89	
Disagree	3	6.38	
Strongly Disagree	0	0.00	
Total	47	100.00	

According to the table No. 4.4, majority (78.71%) of respondents agreed that the professional development program has improved their content knowledge. The mean score about the statement (4.0) shows that majority of the respondents were agreed and strongly agreed with the statement. The respondents (6.38% ) disagreed the statement.

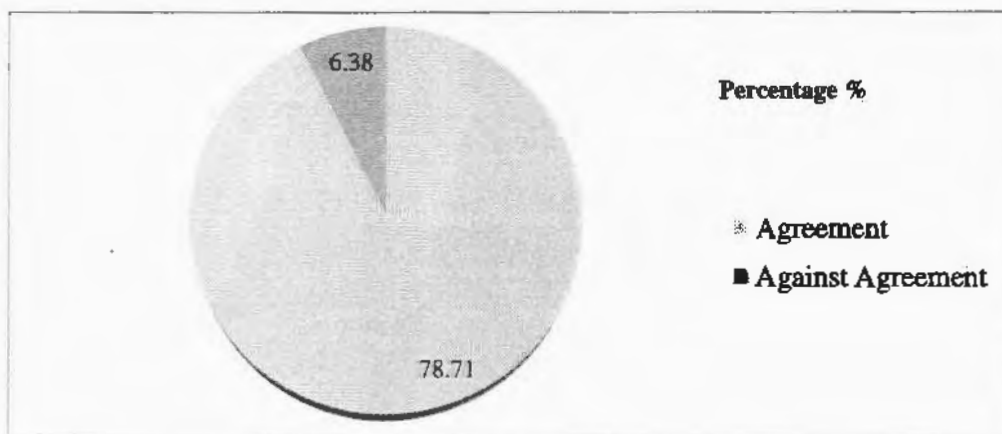


Fig.No.4 "Improve content knowledge"

**Q.NO.5: Professional development program included the usage of Audio-Visual Aids.**

Table 4.5 "Use of A.V Aids"

Scale	Frequency	Percentage	Mean
Strongly Agree	10	21.27	4.02
Agree	33	70.21	
Uncertain	0	0.00	
Disagree	3	6.38	
Strongly Disagree	1	2.12	
Total	47	100.00	

According to the table No.4.5, majority (91.48 %) respondents agreed that Audio Visual Aids were used in the professional development. The mean score about the statement remained 4.02 which indicates that majority of the respondents were agreed and strongly agreed with the statement. The respondents (8.50%) and strongly disagreed with the statement about the use of A.V.Aids in the professional development.

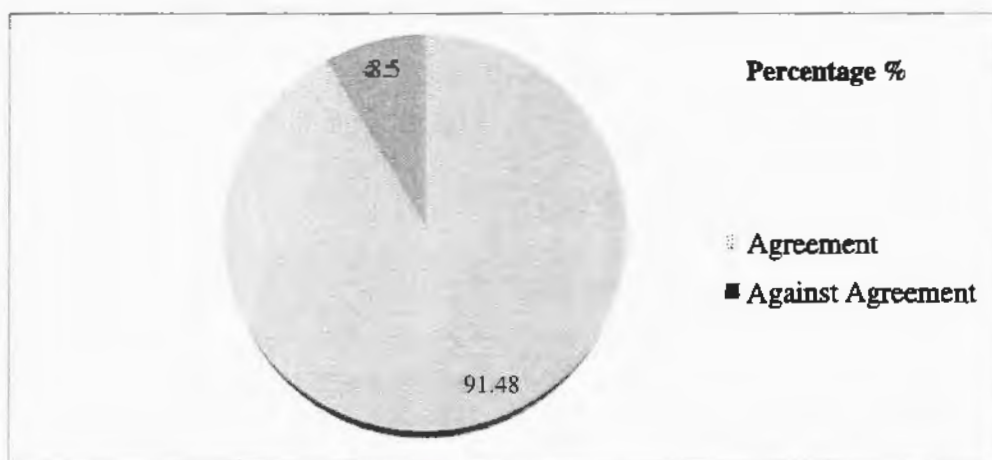


Fig.No.5 "Use of A.V Aids"



**Q.NO.6: Collaborative learning process has been introduced in professional development program.**

Table 4.6 “Collaborative learning in professional development”

Scale	Frequency	Percentage	Mean
Strongly Agree	13	27.65	4.19
Agree	32	68.08	
Uncertain	0	0.00	
Disagree	2	4.25	
Strongly Disagree	0	0.00	
Total	47	100.00	

According to the Table.N0.4.6, majority (95.73%) of the teacher educators agreed that collaborative learning process has been introduced in professional development program. The mean score about the statement (4.19) reflects that majority of the respondents were agreed and strongly agreed with the statement. The respondents (4.27%) disagreed with the statement.

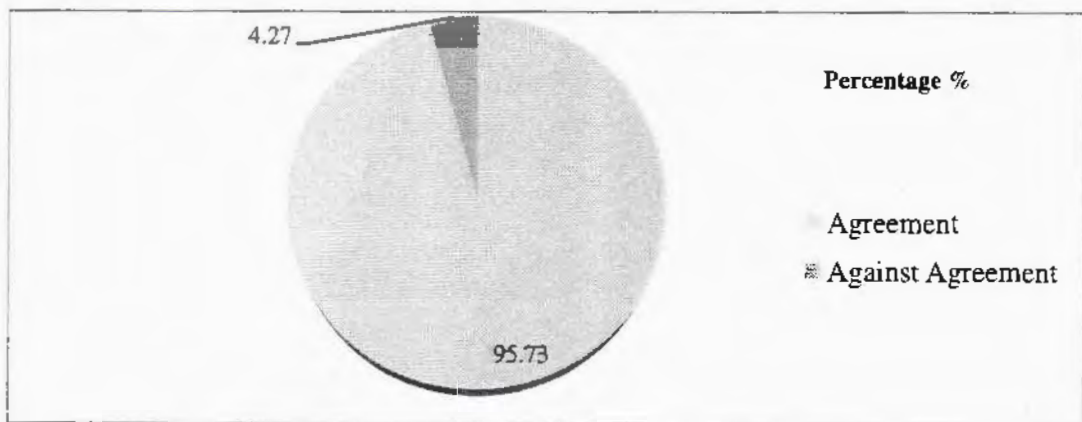


Fig.No.6 “Collaborative learning in professional development”



**Q.NO.7: Higher order questioning techniques have been incorporated in the professional development program**

Table 4.7 “Higher order questioning techniques in professional Development”

Scale	Frequency	Percentage	Mean
Strongly Agree	11	23.4	4.04
Agree	31	65.95	
Uncertain	3	6.38	
Disagree	0	0.00	
Strongly Disagree	2	4.25	
Total	47	100.00	

According to the Table No. 4.7, majority (89.35%) of the respondents were agreed that Higher order questioning techniques have been incorporated in the professional development program. The mean score about the statement (4.04) reflects that majority of the respondents were agreed and strongly agreed with the statement. The respondents (4.25%) strongly disagreed with the statement.

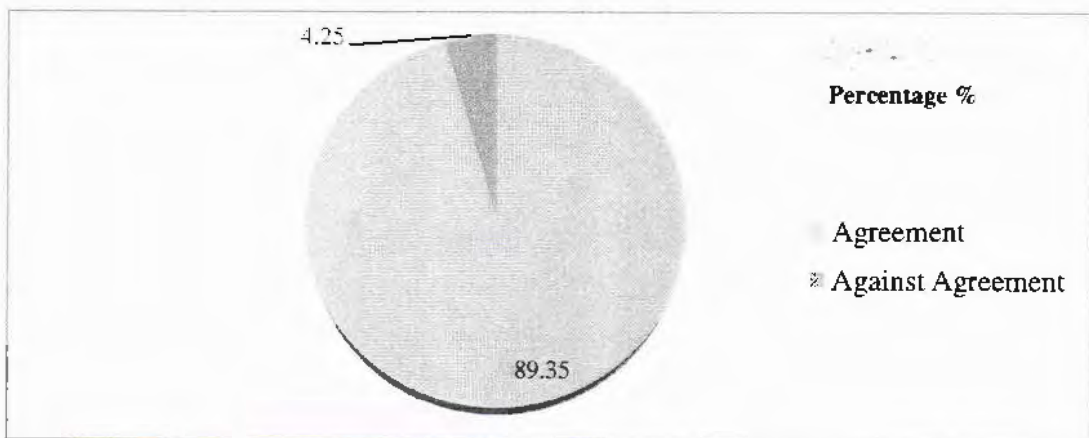


Fig.No.14 “Higher order questioning techniques in professional Development”

**Q.NO.8: Professional development program has improved your formative assessment skills.**

Table 4.8 “Improved formative assessment skill”

Scale	Frequency	Percentage	Mean
Strongly Agree	10	21.27	4.06
Agree	32	68.08	
Uncertain	4	8.51	
Disagree	0	0.00	
Strongly Disagree	1	2.12	
Total		47	100.00

According to the Table No.4.8, majority (89.35%) of the teacher educators agreed that Professional development program has improved their formative assessment skills.

The mean score about the statement (4.06) reflects that majority of the respondents were agreed and strongly agreed with the statement. The respondents (2.12%) strongly disagreed with the statement.

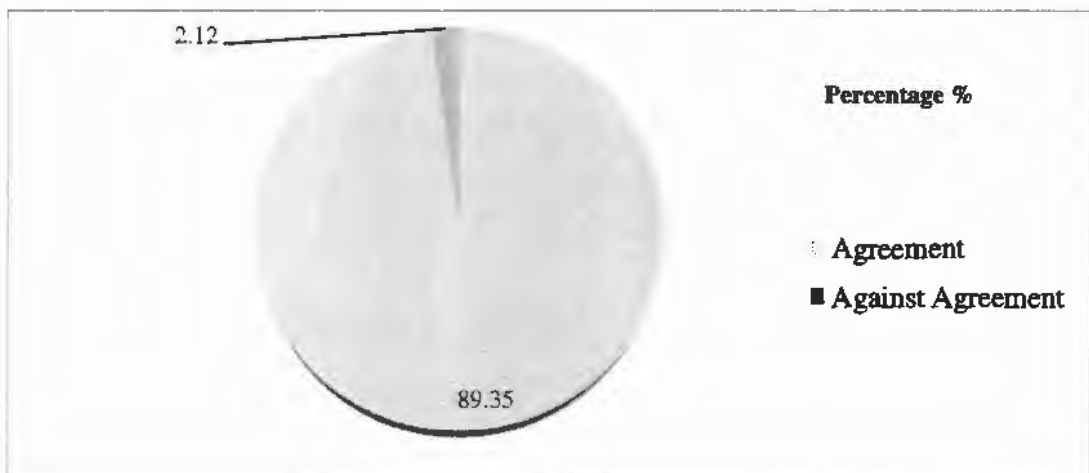


Fig.No.8 “Improved formative assessment skill”

**Q.NO.9: you develop the lesson plan to teach a particular lesson.**

Table 4.9 "Lesson plan to teach lesson"

Scale	Frequency	Percentage	Mean
Strongly Agree	10	21.27	4.1
Agree	34	72.34	
Uncertain	2	4.25	
Disagree	0	0.00	
Strongly Disagree	1	2.12	
Total	47	100.00	

According to the Table No. 4.9, majority (93.61 %) of the respondents agreed that they developed the lesson plan to teach a particular lesson. The mean score about the statement (4.1) reflects that majority of the respondents were agreed and strongly agreed with the statement. The respondents (2.12%) strongly disagreed with the statement.

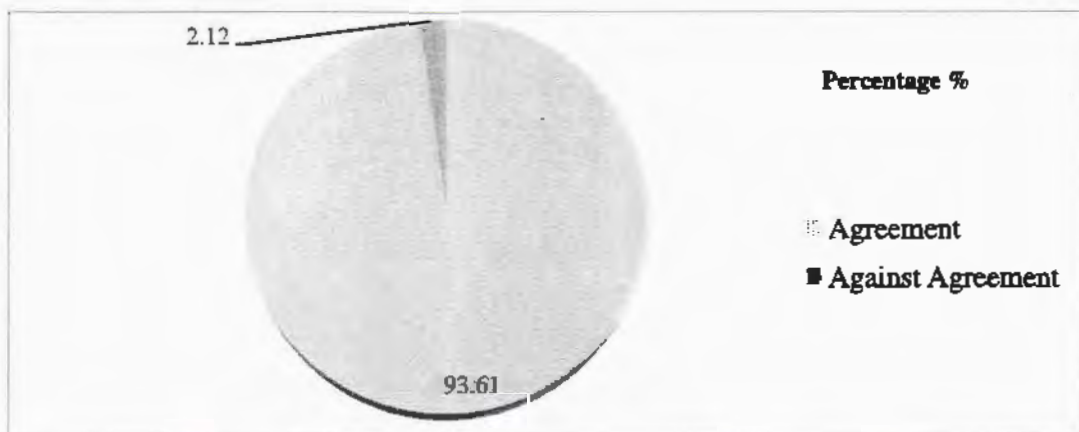


Fig.No.9 "Lesson plan to teach lesson"

**Q.NO.10: You provide the feedback to the prospective teachers during the group work and other learning activities.**

Table 4.10 "Provide feedback during group work"

Scale	Frequency	Percentage	Mean
Strongly Agree	15	31.91	4.25
Agree	30	63.82	
Uncertain	1	2.12	
Disagree	1	2.12	
Strongly Disagree	0	0.00	
Total	47	100.00	

According to the Table No.4.10, majority (95.73%) of the respondents agreed that they provide the feedback to the prospective teachers during the group work and other learning activities. The mean score about the statement (4.25) reflects that majority of the respondents were agreed and strongly agreed with the statement. The respondents (2.12%) disagreed with the statement.

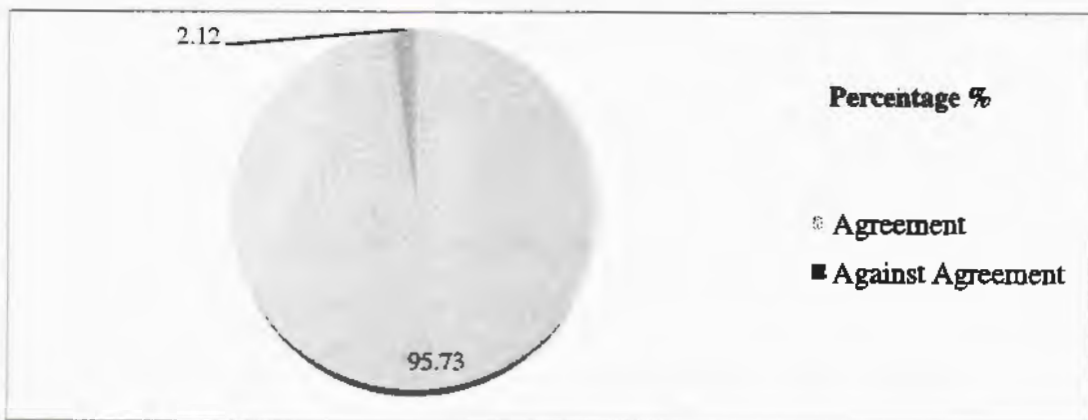


Fig.No.20 "Provide feedback during group work"

**Q.NO.11: Higher order questioning techniques are being used by you in the class room.**

Table: 4.11 “Higher order questioning techniques are being used”

Scale	Frequency	Percentage	Mean
Strongly Agree	7	14.89	3.82
Agree	31	65.95	
Uncertain	6	12.76	
Disagree	0	0.00	
Strongly Disagree	3	6.38	
Total	47	100.00	

According to the Table No. 4.11, majority (80.84%) of the respondent agreed that higher order questioning techniques are being used by them in the class room. The mean score about the statement (3.82) reflects that majority of the respondents were agreed and strongly agreed with the statement. The respondents (6.38%) strongly disagreed with the statement.

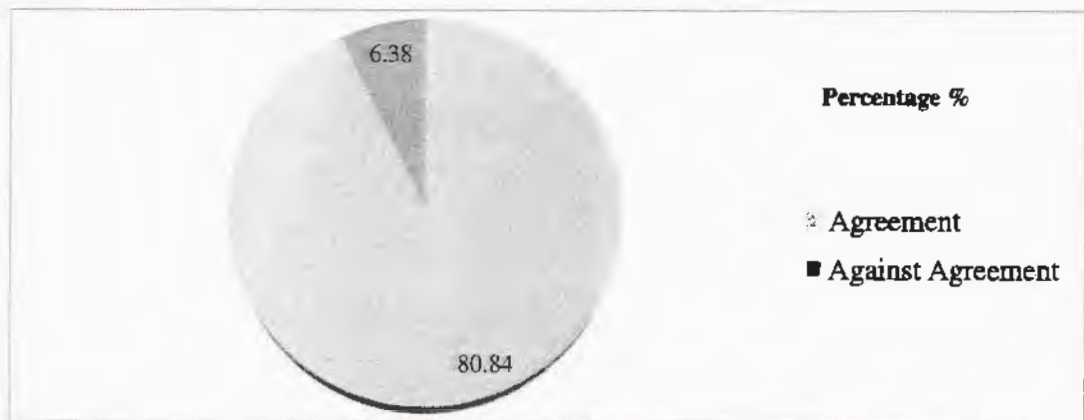


Fig.No.11 “Higher order questioning techniques are being used”

**Q.NO.12: You are focused to improve problem solving abilities of the prospective teachers.**

Table 4.12 "Focused to improve problem solving abilities"

Scale	Frequency	Percentage	Mean
Strongly Agree	6	12.76	3.89
Agree	32	68.08	
Uncertain	8	17.02	
Disagree	0	1.00	
Strongly Disagree	1	1.12	
Total	47	100.00	

According to the Table No. 4.12, majority (80.84%) of the respondent agreed that they were focused to improve problem solving abilities of the prospective teachers. The mean score about the statement (3.89) reflects that majority of the respondents were agreed and strongly agreed with the statement. The respondents (2.12%) disagreed and strongly disagreed with the statement.

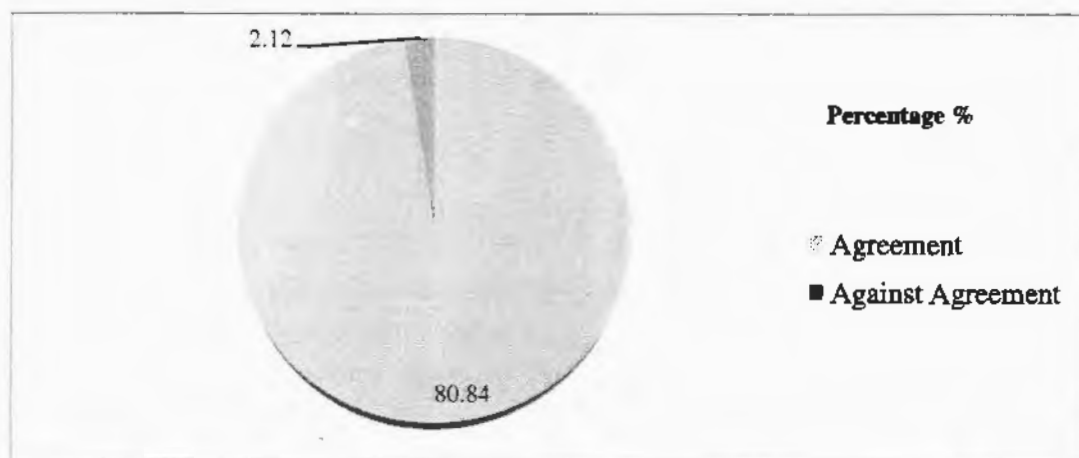


Fig.No.12 "Focused to improve problem solving abilities"

**Q.NO.13: you apply the formative assessment to assess the learning of the prospective teachers.**

Table 4.13 "Application of formative assessment"

Scale	Frequency	Percentage	Mean
Strongly Agree	9	19.14	4.08
Agree	35	74.46	
Uncertain	2	4.25	
Disagree	0	0.00	
Strongly Disagree	1	2.12	
Total	47	100.00	

According to the Table No. 4.13, majority (93.6%) of the respondent agreed that they apply the formative assessment to assess the learning of the prospective teachers. The mean score about the statement (4.08) reflects that majority of the respondents were agreed and strongly agreed with the statement. The respondents (2.12%) disagreed with the statement.

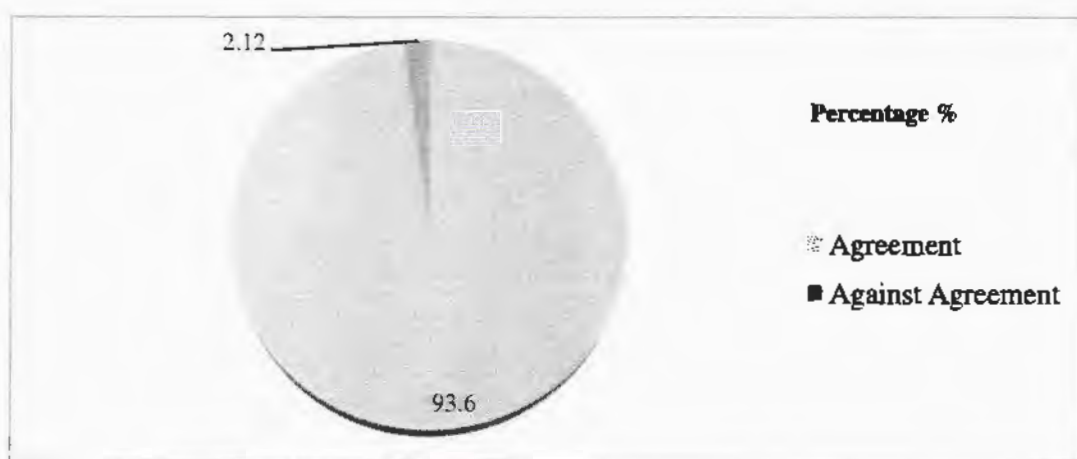


Fig.No.26 "Application of formative assessment"



**Q.NO.14: you use the Audio-Visual Aids in the class room to improve the teaching and learning process.**

Table 4.14 "Use of Audio-Visual Aids in the class room"

Scale	Frequency	Percentage	Mean
Strongly Agree	12	25.53	4.08
Agree	31	65.95	
Uncertain	1	2.12	
Disagree	2	4.25	
Strongly Disagree	1	2.12	
Total	47	100.00	

According to the Table No.4.14, majority (91.48%) of the respondent agreed that they used the Audio-Visual Aids in the class room to improve the teaching and learning process. The mean score about the statement (4.08) shows that majority of the respondents were agreed and strongly agreed with the statement. The respondents (6.37%) disagreed and strongly disagreed with the statement.



Fig.No.14 "Use of Audio-Visual Aids in the class room"



**Q.NO.15: The learning activities in Professional development program are applicable in your class room.**

Table 4.15 “Applicable activities”

Scale	Frequency	Percentage	Mean
Strongly Agree	5	10.63	3.78
Agree	34	72.34	
Uncertain	4	8.51	
Disagree	1	2.12	
Strongly Disagree	3	6.38	
Total	47	100.00	

According to the Table No.4.15, majority (82.97%) of the respondent agreed that the learning activities in Professional development program were applicable in their class room. The mean score about the statement (4.19) describes that majority of the respondents were agreed and strongly agreed with the statement. The respondents (8.50%) disagreed and strongly disagreed with the statement.

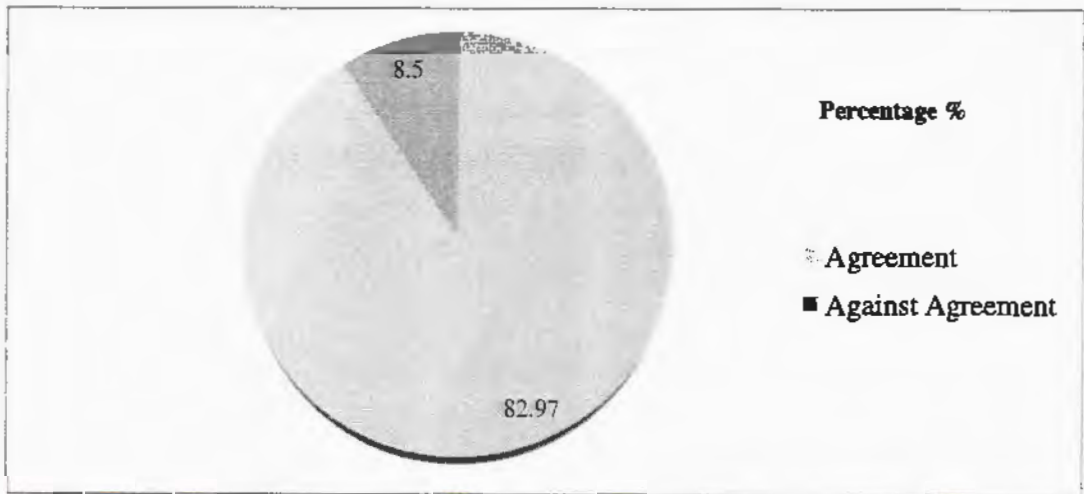


Fig.No.15 “Applicable activities”

**Q.NO.16: The duration of the professional development program is sufficient to strengthen your professional practices.**

Table 4.16 "Duration of professional development"

Scale	Frequency	Percentage	Mean
Strongly Agree	6	12.76	3.36
Agree	23	48.93	
Uncertain	2	4.25	
Disagree	14	29.78	
Strongly Disagree	2	4.25	
Total	47	100.00	

According to the Table No.4.16, majority (61.69%) of the respondent agreed that the duration of the professional development program was sufficient to strengthen their professional practices. The mean score about the statement (3.36) shows that majority of the respondents were agreed and strongly agreed with the statement. The respondents (34.03%) disagreed and strongly disagreed with the statement.

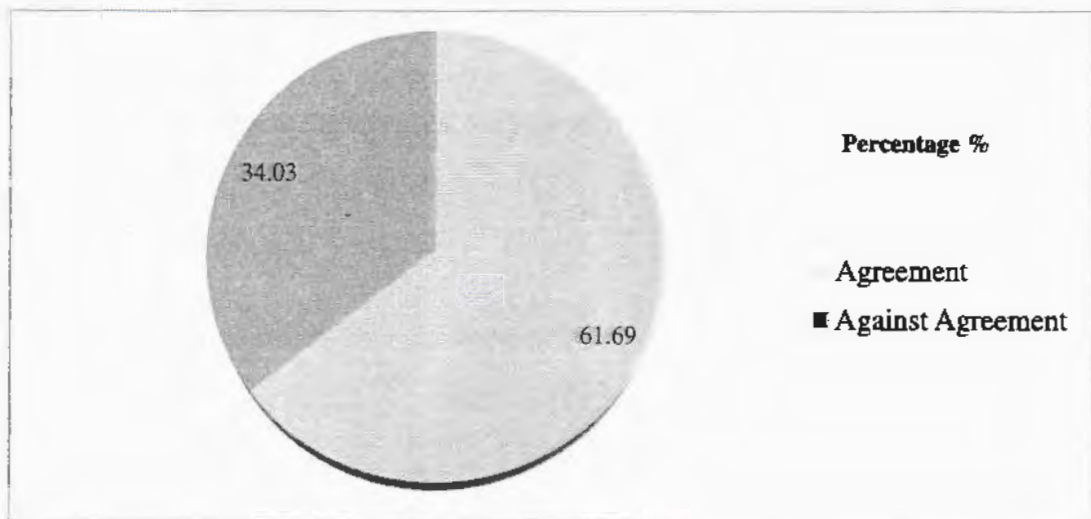


Fig.No.16 "Duration of professional development"

**Q.NO.17: The follow up mechanism of the professional development program exists.**

Table 4.17 "Follow up of professional development"

Scale	Frequency	Percentage	Mean
Strongly Agree	2	4.25	2.72
Agree	8	17.02	
Uncertain	14	29.78	
Disagree	21	44.68	
Strongly Disagree	2	4.25	
Total	47	100.00	

According to the Table No.4.17, majority (48.93%) of the respondent were against the statement that the follow up mechanism of the professional development program exist . The mean score about the statement (2.72) shows that majority of the respondents were disagreed and strongly disagreed with the statement. The respondents (21.27%) agreed and strongly agreed with the follow up of professional development.

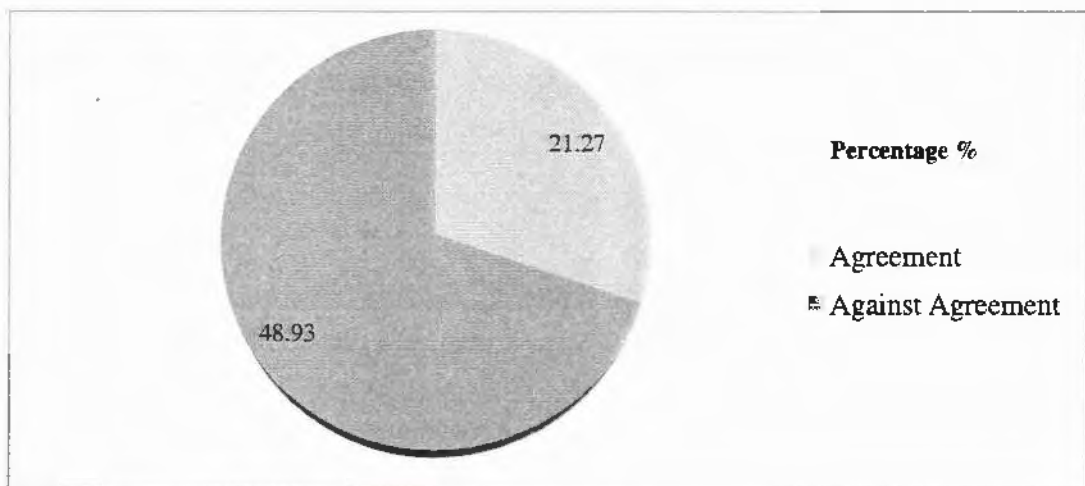


Fig.No.17 "Follow up of professional development"

**Q.NO.18: The professional practices in Associate Degree in Education (ADE) are fruitful than traditional methods in PTC&CT.**

Table 4.18 “New teaching methods are fruitful than traditional”

Scale	Frequency	Percentage	Mean
Strongly Agree	16	34.04	4.1
Agree	25	53.19	
Uncertain	2	4.25	
Disagree	3	6.38	
Strongly Disagree	1	2.12	
Total	47	100.00	

According to the Table No.4.18, majority (87.23%) of the respondent agreed that the professional practices in Associate Degree in Education (ADE) are fruitful than traditional methods in PTC&CT. The mean score about the statement (4.1) reflects that majority of the respondents were agreed and strongly agreed with the statement. The respondents (8.5%) disagreed and strongly disagreed with the statement.

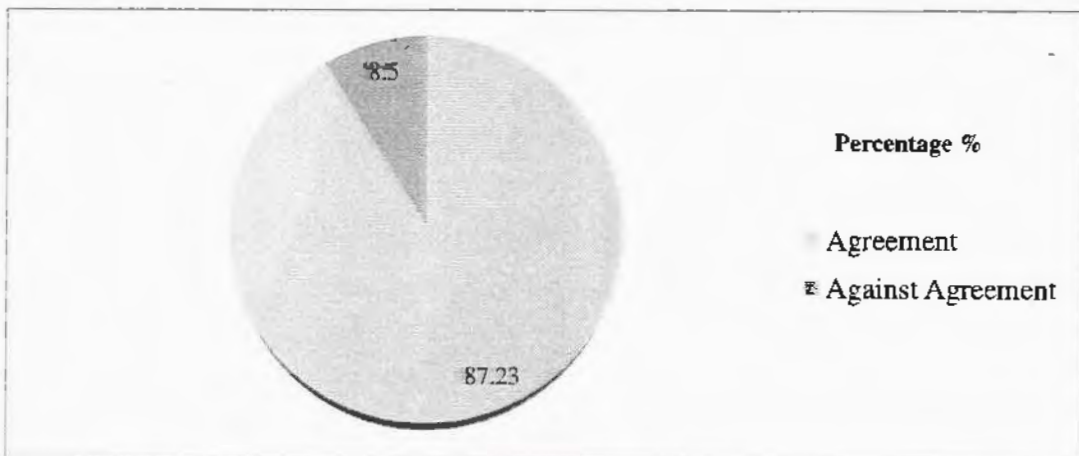


Fig.No.18 “New teaching methods are fruitful than traditional”

**Q.NO.19: Language (English) constraints were faced by the teacher educators in the professional development program.**

Table 4.19 “Language (English) constraints”

Scale	Frequency	Percentage	Mean
Strongly Agree	18	38.29	4.19
Agree	23	48.93	
Uncertain	3	6.38	
Disagree	3	6.38	
Strongly Disagree	0	0.00	
Total	47	100.00	

According to the Table No.4.19, majority (87.22%) of the respondent agreed that the Language (English) constraints were faced by the teacher educators in the professional development program. The mean score about the statement (4.19) reflects that majority of the respondents were agreed and strongly agreed with the statement. The respondents (6.38%) disagreed with the statement.

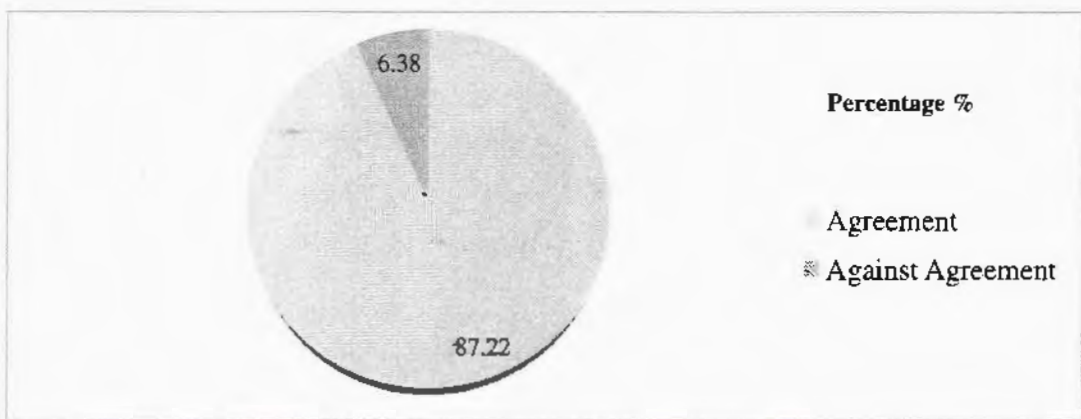


Fig.No.19 “Language (English) constraints”

**Q.NO.20: You need further professional development to enhance your professional practices.**

Table 4.20 "Need of further professional development"

Scale	Frequency	Percentage	Mean
Strongly Agree	24	51.06	4.36
Agree	18	38.29	
Uncertain	4	8.51	
Disagree	0	2.12	
Strongly Disagree	1	0.00	
Total	47	100.00	

According to the Table No.4.20, majority (89.35%) of the respondent agreed that they needed further professional development to enhance their professional practices. The mean score about the statement (4.19) describes that majority of the respondents were agreed and strongly agreed with the statement. The respondents (2.12%) disagreed with the statement.

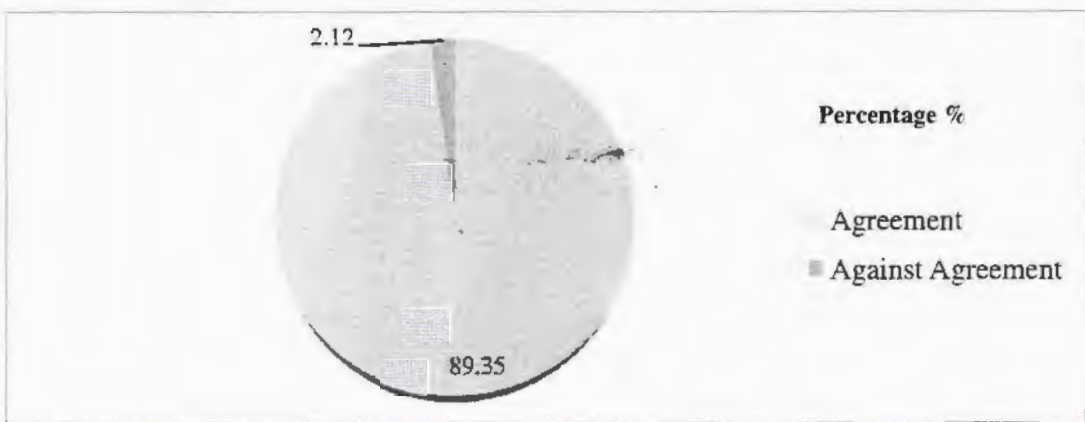


Fig.No.20 "Need of further professional development"



#### **4.1.2 Observation Check list**

The purposes of classroom observations were to discover the quantity and quality of strategies implemented by the teacher educators during practical class room setting. The researcher observed the classes to explore the effectiveness of professional practices of teacher educators. Specifically, I wanted to discover how often the teacher educators implemented instructional strategies and assessment techniques to teach ADE classes and how much these strategies aligned with the strategies presented and taught in depth in the professional development program.

Check list was used as a tool for class room observation. The class rooms of 12 teacher educators of elementary colleges were observed by the researcher with the permission of concerned principals. Two teacher educators were selected randomly from each college. Teaching practices were observed with the help of self made check list having three options: yes, No and Partially.

The data collected from class room observation was analyzed by quantitative method. Percentage was calculated and interpreted to measure the effectiveness of professional practices.

**Q.NO.1: Has the teacher educator have a lesson plan of concerned lesson with him /her in the class room?**

Table 4.21 "Having a lesson plan"

Scale	Frequency	Percentage
Yes	09	75
No	03	25
Partially	0	0
<b>Total</b>	<b>12</b>	<b>100.00</b>

According to the table 4.21, majority (75%) teacher educators had lesson plan of the concerned lesson in the class room during professional practices. On the bases of the above data regarding the effectiveness of professional practices, it can be interpreted that the teacher educators have learnt, how to develop lesson plan and teach according to the lesson plan.

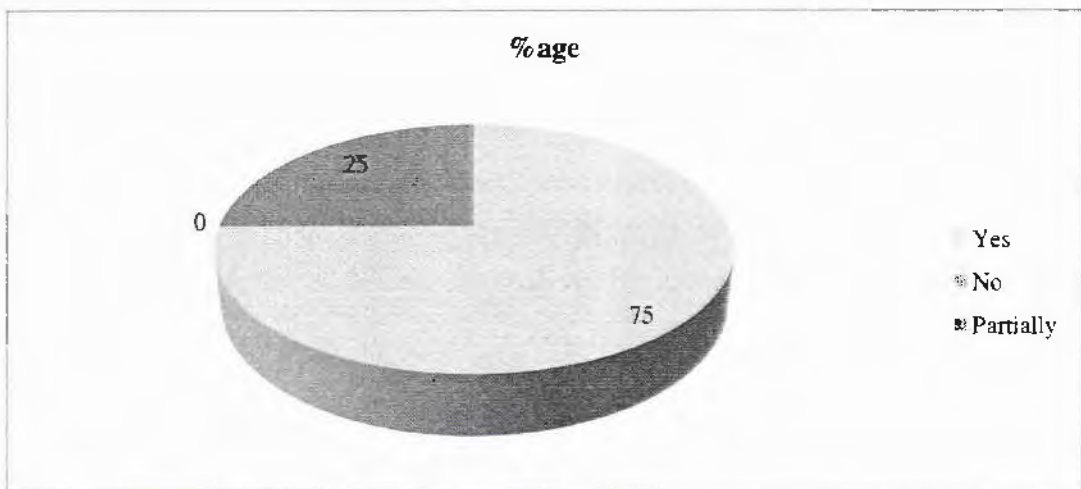


Fig.No.21 "Having a lesson plan"



**Q.NO.2: Does the teacher educator provide a sense of direction, aims and objectives, early in the lesson?**

Table 4.22 "Sense of direction"

Scale	Frequency	Percentage
Yes	06	50
No	0	0
Partially	06	50
<b>Total</b>	<b>12</b>	<b>100.00</b>

According to the table 4.22, majority (50%) of the teacher educators was providing a sense of direction to the students (prospective teachers) and 50% were partially providing the sense of direction of the lesson. On the bases of the above data regarding the effectiveness of professional practices, it can be interpreted that the professional practices remained interactive during motivation of the students.

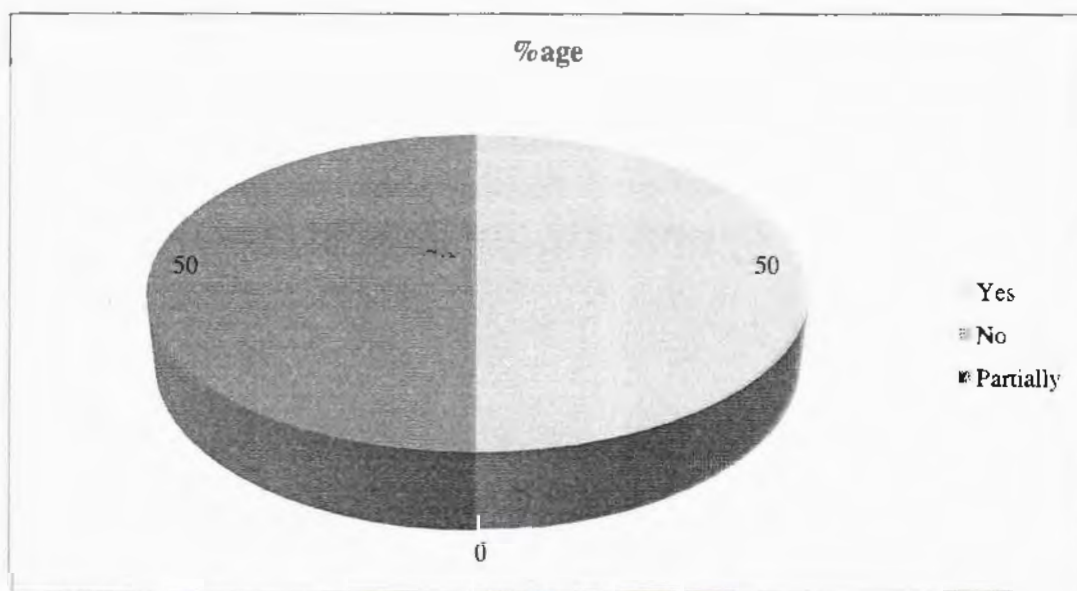


Fig.No.22 "Sense of direction"

**Q.NO.3: Is the teacher educator, the source of all information?**

Table 4.23 "The source of all information"

Scale	Frequency	Percentage
Yes	02	16.66
No	06	50.00
Partially	04	33.33
<b>Total</b>	<b>12</b>	<b>100.00</b>

According to the table 4.23, majority (50 %) of the teacher educators were not found as the source of all information. The Teacher educators (33.33%) were partially found as a source of all information. But 16.66% teacher educators delivered lecture method during their class room practices. On the bases of the above data regarding the effectiveness of professional practices, it can be interpreted that the teacher centered approach has been changed in to student centered.

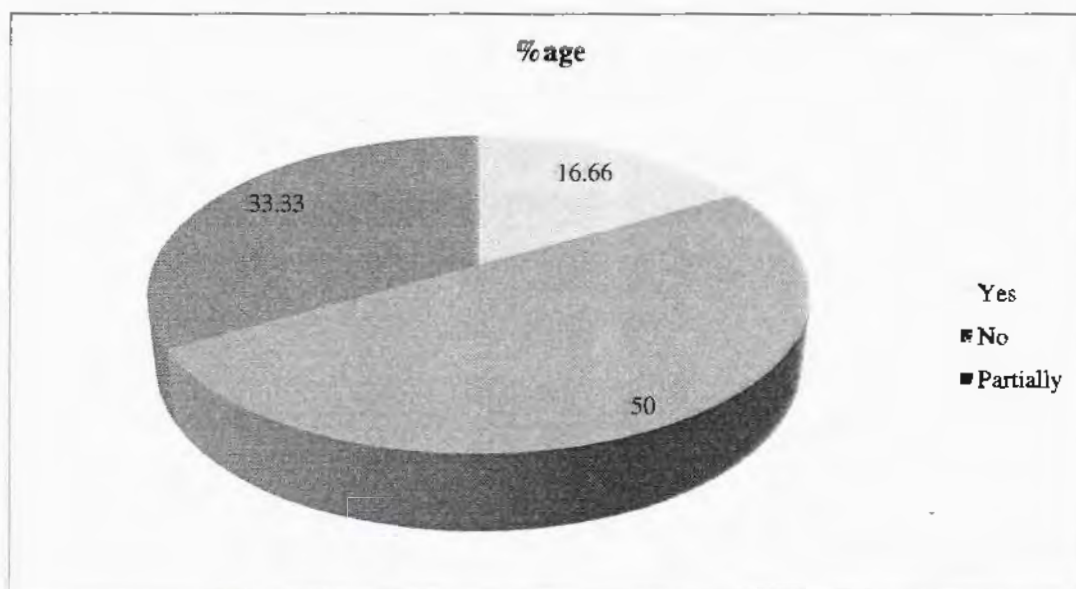


Fig.No.23 "The source of all information"

**Q.NO.4: Does the teacher educator use any technique of collaborative teaching method?**

Table 4.24 "Collaborative teaching method"

Scale	Frequency	Percentage
Yes	06	50
No	02	16.66
Partially	04	33.33
<b>Total</b>	<b>12</b>	<b>100.00</b>

According to the table 4.24, majority (50 %) teacher educators used different techniques of collaborative teaching methods. The Teacher educators (33.33%) were partially found using collaborative teaching methods. But 16.66% teacher educators delivered lecture method during professional practices. On the bases of the above data regarding the effectiveness of professional practices, it can be interpreted that the active learning and student centered approaches were applied in the class room.

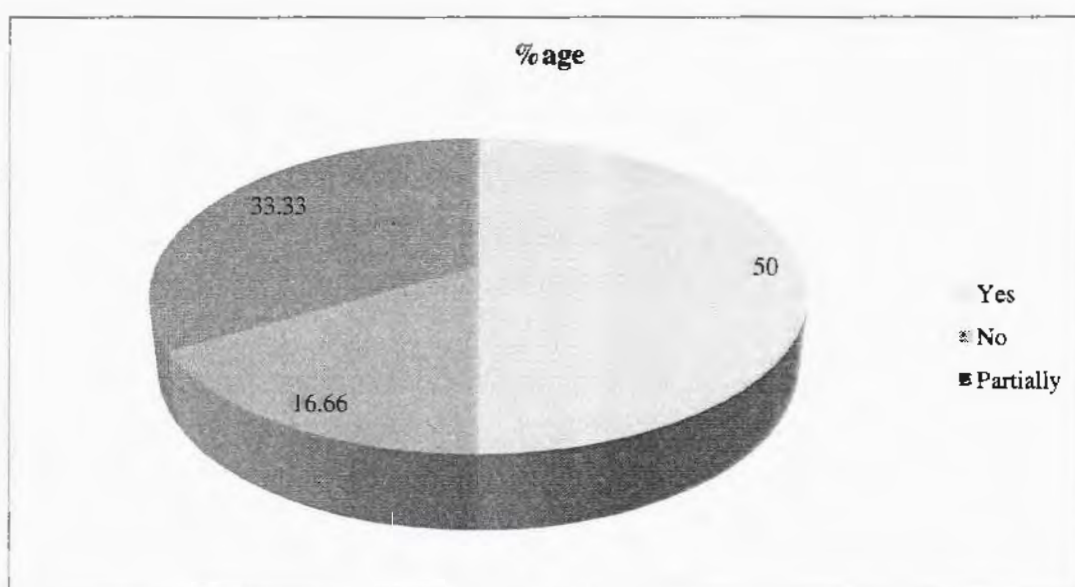


Fig.No.24 "Collaborative teaching method"

**Q.NO.5: Does the teacher educator give feedback during group work or activities?**

Table 4.25 “Feedback during group work”

Scale	Frequency	Percentage
Yes	1	8.33
No	09	75.0
Partially	02	16.66
<b>Total</b>	<b>12</b>	<b>100.00</b>

According to the table# 4.25, majority (75%) teacher educators did not provide the feedback to the students (teacher educators) during group work. The teacher educators (16.66%) were partially provided feedback. But the 8.33% teacher educators were found applying the newly learned skill of feedback. On the bases of the above data regarding the effectiveness of professional practices, it can be interpreted that most of the teacher educators were found passive. They did not involve deeply in professional interaction with the trainees during group work.

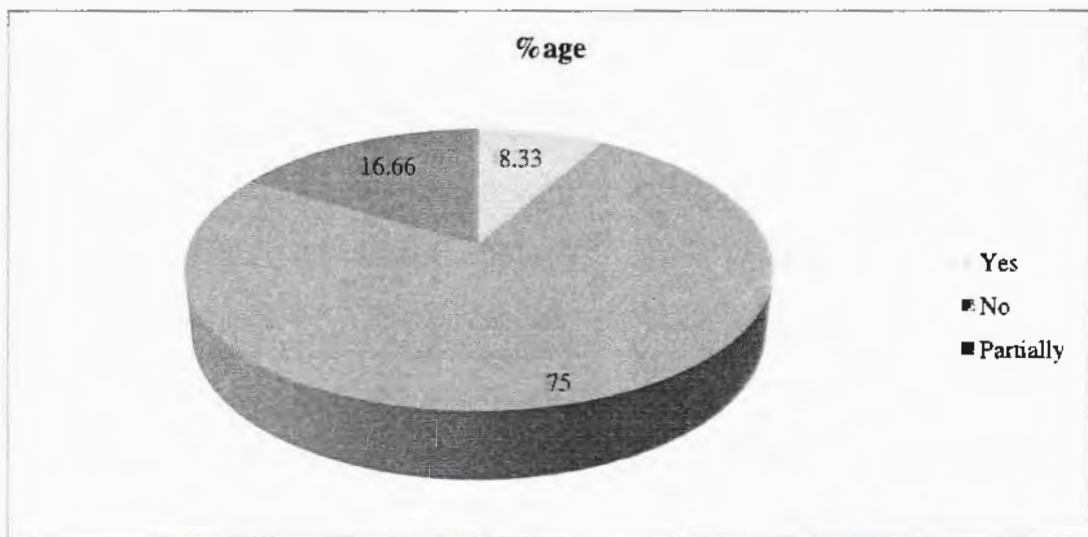


Fig.No.25 “Feedback during group work”

**Q.NO.6: Are most of the students participating in the learning activities?**

Table 4.26 "Participation of students"

Scale	Frequency	Percentage
Yes	06	50.00
No	1	8.33
Partially	05	41.66
<b>Total</b>	<b>12</b>	<b>100.00</b>

According to the table 4.26, In the majority (50%) of the class rooms, students (prospective teachers) were participating in the learning activities during the session. In the class rooms (41.66%) the students were partially participating in the learning activities. But the 8.33% classes students remained passive. On the bases of the above data regarding the effectiveness of professional practices, it can be interpreted that most of the students lying engaged during active learning strategies.

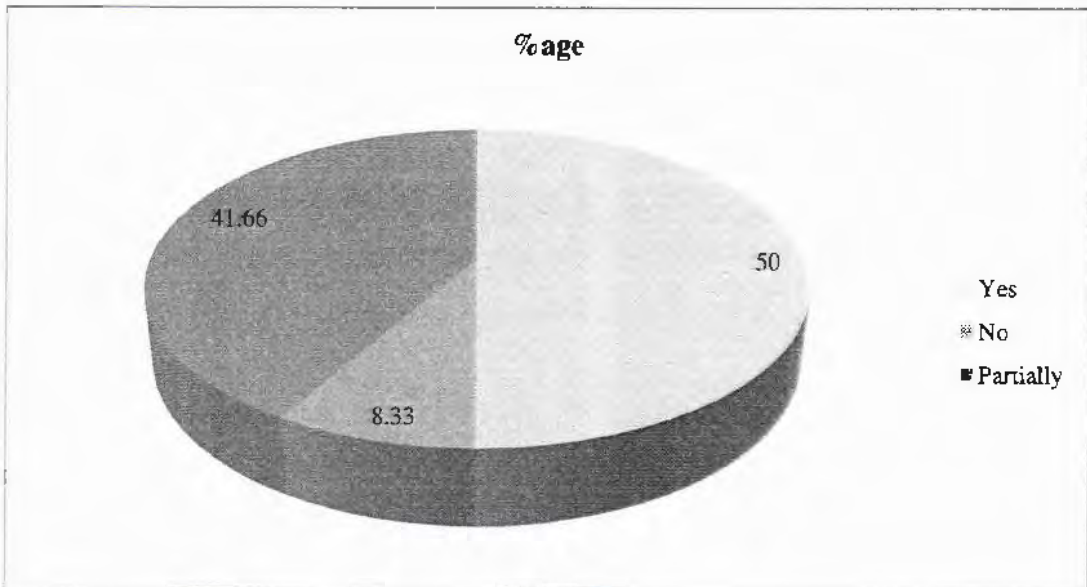


Fig.No.26 "Participation of students"

**Q.NO.7: Is there flow of communication from teacher educator to trainees?**

Table 4.27 "Communication from teacher educators to trainees"

Scale	Frequency	Percentage
Yes	02	16.66
No	06	50.00
Partially	04	33.33
<b>Total</b>	<b>12</b>	<b>100.00</b>

According to the table 4.27, majority (50.00%) teacher educators created class environment having no flow of communication from themselves to the trainees. The teacher educators (33.33%) were found to communicate the students partially. But the 16.66 % teacher educators were found applying the newly learned skill of communication. On the bases of the above data regarding the effectiveness of professional practices, it can be interpreted that most of the teacher educators did not ensure the communication with the students during class room.

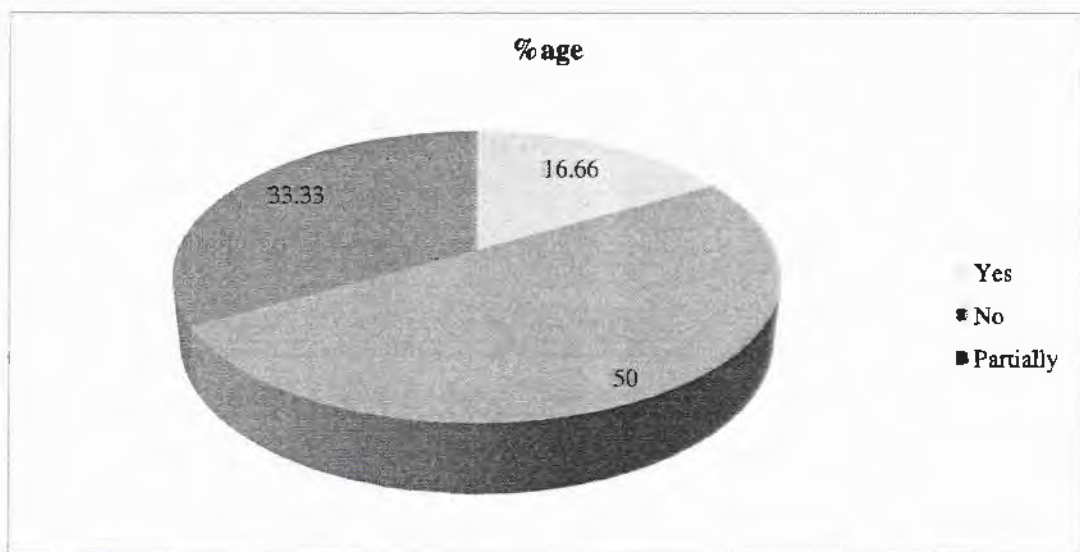


Fig.No.27 "Communication from teacher educators to trainees"



**Q.NO.8: Is there flow of communication from trainees to the teacher educator?**

Table 4.28 "Communication from trainees to teacher educators"

Scale	Frequency	Percentage
Yes	04	33.33
No	07	58.33
Partially	01	8.33
<b>Total</b>	<b>12</b>	<b>100.00</b>

According to the table 4.28, majority (58.33%) teacher educators created class environment having a no flow of communication from trainees to the teacher educator. The students (8.33%) were found to communicate the teacher educators partially. But the 33.33% students were found to communicate with their teachers. On the bases of the above data regarding the effectiveness of professional practices, it can be interpreted that most of the students (trainees) did not ensure the communication with their teachers during class room.

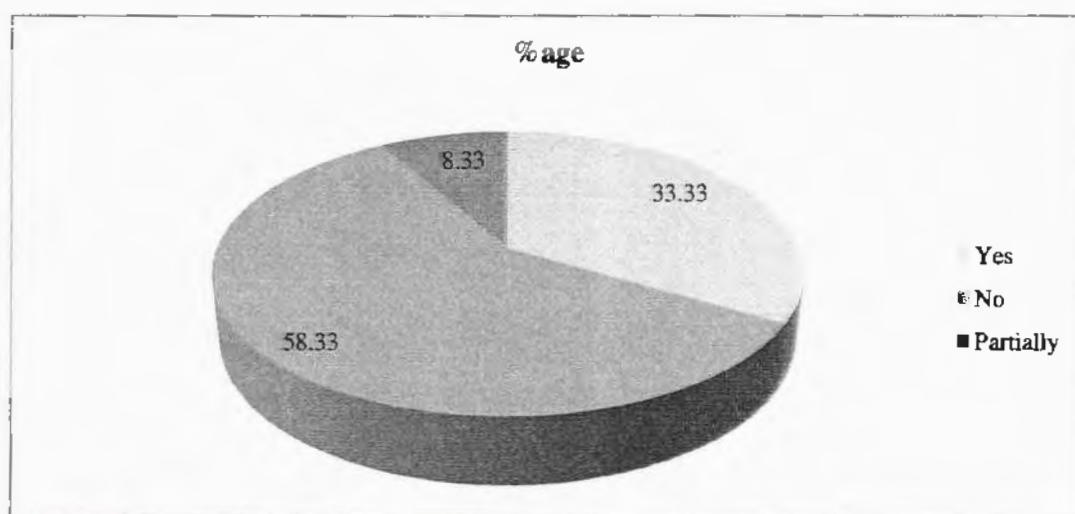


Fig.No.28 "Communication from trainees to teacher educators"

**Q.NO.9: Is there any learning interaction among the students?**

Table 4.29 “Learning interaction among the students”

Scale	Frequency	Percentage
Yes	04	33.33
No	01	8.33
Partially	07	58.33
<b>Total</b>	<b>12</b>	<b>100.00</b>

Regarding table 4.29, majority (58.33 %) of the teacher educators created learning environment having partial interaction among the students (prospective teacher), In 33.33% class rooms, students were found to communicate mutually. But in 8.33% class rooms, students did not have any learning interaction. On the bases of the above data regarding the effectiveness of professional practices, it can be interpreted that most of the students partially ensured the learning interaction among themselves.

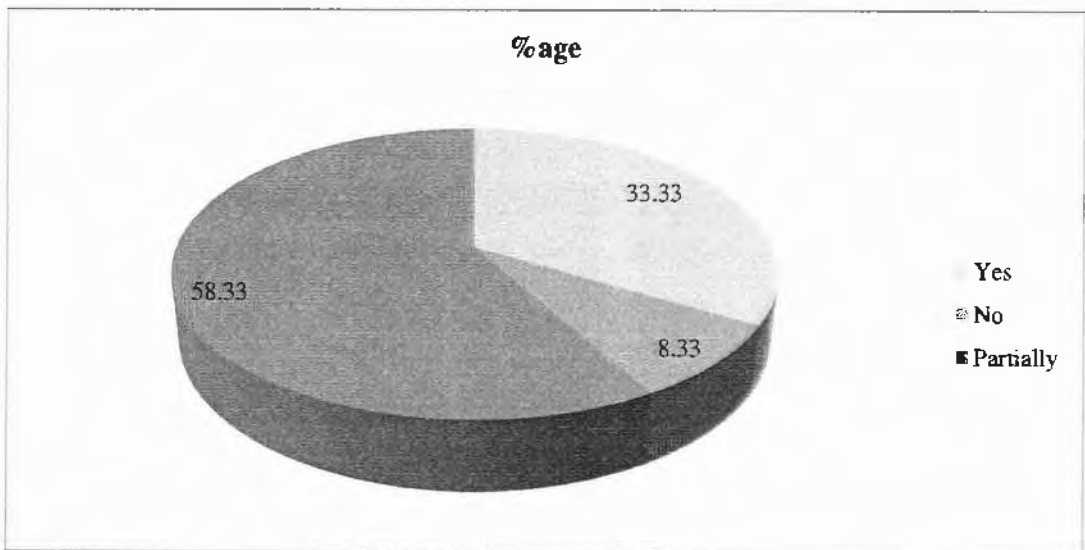


Fig.No.49 “Learning interaction among the students”



**Q.NO.10: Are audio-visual, demonstration material, model, chart, map or hand outs being used in the class room?**

Table 4.30 "Use of A.V. Aids"

Scale	Frequency	Percentage
Yes	08	66.66
No	04	33.33
Partially	0	0.00
<b>Total</b>	<b>12</b>	<b>100.00</b>

According to the table 4.30, majority (66.66 %) teacher educators were using learning material in the class room. The teacher educators (33.33%) were not found to use the A.V.Aids in the practical class room setting. On the bases of the above data regarding the effectiveness of professional practices, it can be interpreted that most of the teacher educators used hand outs, models and multimedia for the collaborative teaching method.

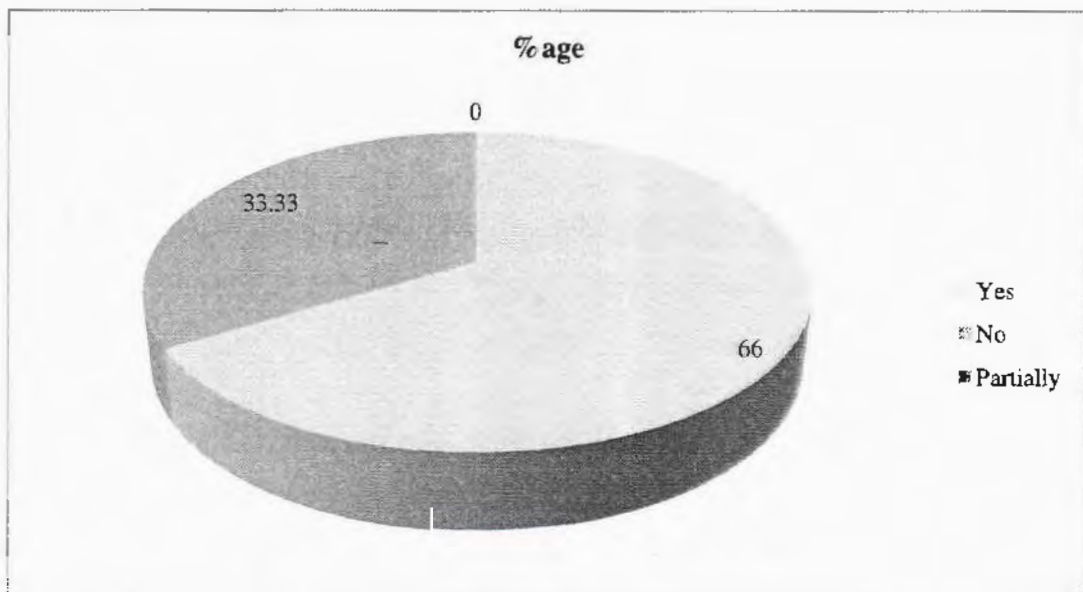


Fig.No.30 "Use of A.V. Aids"

**Q.NO.11: Is the teacher educator using any tool to assess the learning of the trainees during the session?**

Table 4.31 "Assessment"

Scale	Frequency	Percentage
Yes	03	25.0
No	0	0.00
Partially	09	75.0
<b>Total</b>	<b>12</b>	<b>100.00</b>

According to the table 4.31, majority (75%) of teacher educators partially used the assessment tools. But the 25 % teacher educators were found to use the assessment tools properly. On the bases of the above data regarding the effectiveness of professional practices, it can be interpreted that most of the teacher educators used assessment tools partially and did not used proper assessment tools in written form during formative assessment. They observed the students and asked lower order questions verbally.

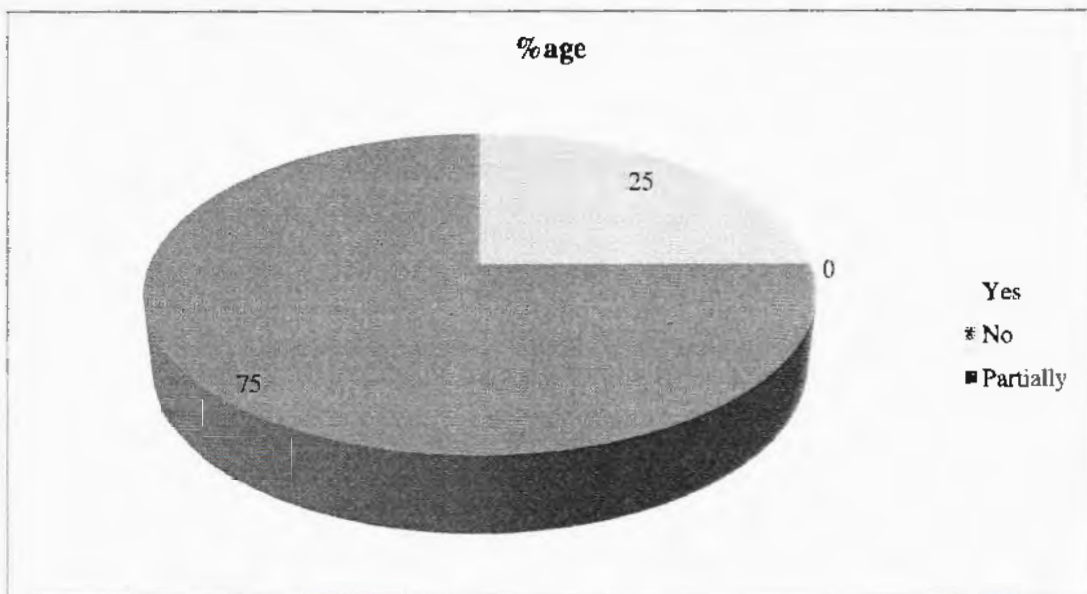


Fig.No.31 "Assessment"

**Q.NO.12: During the session, does the teacher educator ask the higher order questions started with the words 'how' and 'why' to enhance their thinking ability?**

Table 4.32 "Higher order questioning"

Scale	Frequency	Percentage
Yes	01	8.33
No	07	58.33
Partially	04	33.33
<b>Total</b>	<b>12</b>	<b>100.00</b>

Regarding table 4.32, majority (58.33%) of the teacher educators did not use higher order questions in the class. The teacher educators (33.33%) were asking the higher order questions partially. But the 8.33 % teacher educators were found applying the newly learned skill of higher order questioning. On the bases of the above data regarding the effectiveness of professional practices, it can be interpreted that the prospective teachers were not assessed on the logical level. Critical thinking approach was not used.

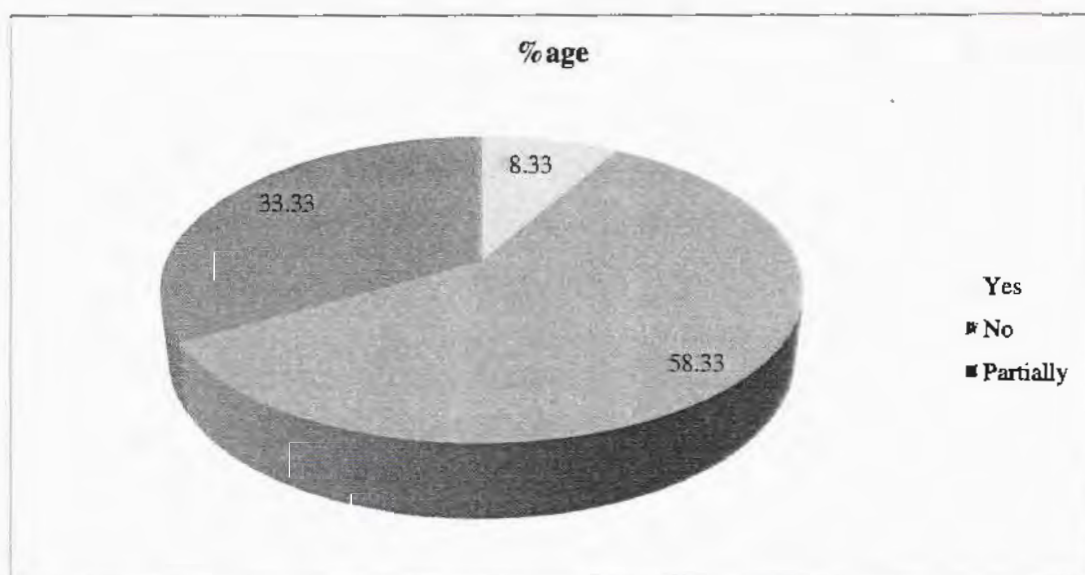


Fig.No.32 "Higher order questioning"

**Q.NO.13: At the end of the session, does the teacher educator summarize the lesson?**

Table 4.33 "Summarize the lesson"

Scale	Frequency	Percentage
Yes	02	16.66
No	07	58.33
Partially	03	25.0
<b>Total</b>	<b>12</b>	<b>100.00</b>

According to the table 4.33, majority (58.33%) of the teacher educators did not summarize the lesson at the end. The teacher educators (25%) were found to summarize the lesson partially. But the 16.66 % teacher educators were found to summarize the lesson properly. On the bases of the above data regarding the effectiveness of professional practices, it can be interpreted that summarizing the lesson is necessary to check either the objectives of the lesson have been achieved or not. It showed the short falls of the practices.

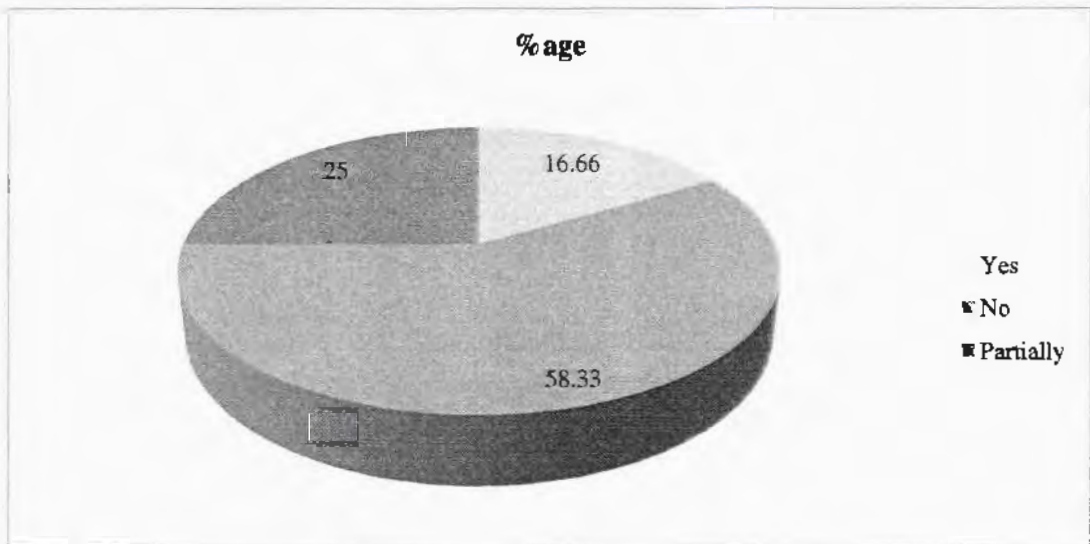


Fig.No.33 "Summarize the lesson"

**Q.NO.14: Has the teacher educator assigned the work for next session?**

Table 4.34 “Assigned the work for next session”

Scale	Frequency	Percentage
Yes	04	33.33
No	08	66.66
Partially	0	0.00
<b>Total</b>	<b>12</b>	<b>100.00</b>

According to the table 4.34, majority (66.66 %) of the teacher educators did not assign and the work for the next session. The teacher educators (33.33%) were found to assign the work for next session. On the bases of the above data regarding the effectiveness of professional practices, it can be interpreted that the teacher educators did not share the next session with the students.

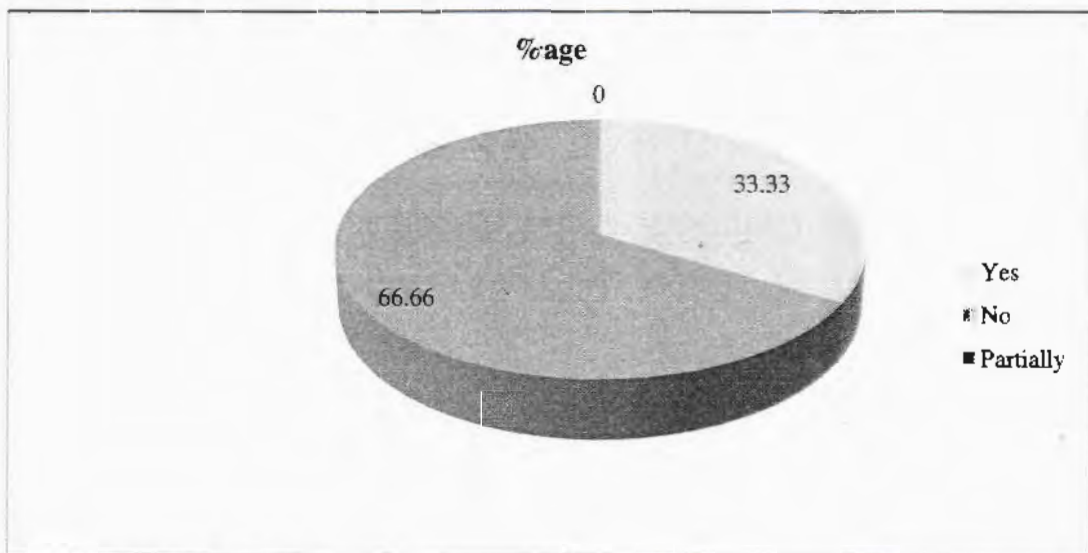


Fig.No.34 “Assigned the work for next session”

## 4.2 Qualitative Data Analysis

There are three key stages to analyze qualitative data; 1) familiarization and organization, 2) coding and recoding, and 3) summarizing and interpreting. Lofland et al. (2006) emphasized that “researchers are the central agents in the analysis process. (Lofland, 2006)

Qualitative data analysis is a process that requires that the researcher be comfortable with developing categories and making comparisons and contrast (Creswell, 1997), which is the first stage of data analysis. Creswell (1997) suggests several points to guide qualitative data analysis (p. 153). He quotes Marshall and Rossman(1989, as cited in Creswell, 1997) who explain that qualitative data is analyzed using ‘reduction’ and ‘interpretation’ where the enormous amount of information collected is reduced into certain patterns, categories and themes to generate meaning.

The data, collected by the researcher through semi structured interview was analyzed qualitatively by Visual Model of Coding (Creswell 2009, pp244) as follow:

### 4.2.1 Semi structured interview

There were 12 participants in this group who were teaching different subjects to the prospective teachers of class Associate Degree in Education (ADE) in Government Colleges of Elementary Education, Balochistan. Two teacher educators were selected randomly for interview from each college with the permission of concerned principals, 13 semi structured questions were asked from each teacher educator and recorded by audio recorder. First of all the audio tapes were transcribed in to 12 pages transcript, then all the 12 answers of the same question were combined. I read the transcript several time and



divided the text into segments of information. The segments were labeled with codes or ideas. The similar ideas were merged to make a theme.

All the themes of the interview are given below to explore the effectiveness of professional Development on the professional practices.

#### **4.2.2 Themes of Interviews**

The following are the major themes that emerged from the interview sessions conducted with 12 participants in the elementary colleges, Balochistan.

a) **Conduction of Needs Assessment:** Most of the participants provided mixed responses when asked about analysis of their professional needs. According to them some senior teacher educators of elementary colleges were invited in a seminar and asked about their professional needs. The program coordinator did not conducted survey to identify the needs of all the teacher educators. Most of the teacher educators were unaware about the conduction of needs assessment. One of them said that the teacher educators who were near to retirement were also allowed for the professional development, and they directly went to their homes after getting the training.

b) **Addressing participants needs:** All the participants reported that they perceived a successful professional development experience as one that addressed their specific needs. They repeated that for a professional development program to have a positive impact on their teaching practice. The professional development program was according to the professional needs of the teacher educators. Most of them commented that they were lacking the new teaching techniques and pedagogical skills before the professional development experience. They learned and improved the new professional skills. The colla-

borative activities were applied during the professional development program to fulfill the professional needs of teacher educators. But according to some teacher educators the activities which were applied in the professional development are not applicable in their class rooms due to the low learning level of the prospective teachers in the elementary colleges.

c) **Teaching skills improvements:** All the participants agreed that their professional development experiences had a positive impact on their teaching practice. According to them, they were unknown about the new teaching techniques. They improved professional skills after attending professional development.

d) **Introduction of student centered approaches:** The factors identified to have influenced the teachers' perceptions of the effectiveness of their professional development experiences were active learning and student centered strategies applied by the Master trainers in the professional development. Learning by doing method and A.V.Aids were employed during the performance of the activities in professional development. According to them different techniques like think pair share, Jigsaw, group work, group discussion, demonstration and gallery walk were used under the umbrella of collaborative teaching method.

e) **Application of student centered approach:** Most of the teacher educators reported that they applied active learning and collaborative method in their class rooms and used different teaching techniques at different time according to their lesson plan. Some of them identified the use of lecture method to teach the basic knowledge of contents of different subjects by using multimedia. According to them, they assign group work and give feedback to the prospective teachers during class room practice. Such methods im-



prove the confidence of students and also finish their boredom. The main benefit is that the students learn from each other and do not totally depend upon the teachers.

**f) Asking higher order questions:** Most of the participants expressed their intention to apply the higher order questioning technique to promote the hidden and thinking abilities of the students. According to them it compels the students to think critically, deeply and give their reasons. This technique leads the sense of innovation and creation in the student. Teacher educators ask the higher order questions from the prospective teachers in the class room. They agreed that some of them start with a simple and lower order question then ask higher order questions to identify the levels of the student. Some of the teacher educators do not use higher order questions in their class rooms.

**g) Tools used for formative and summative assessment:** All the teacher educators agreed that the formative and summative assessment techniques were used to assess the learning of prospective teachers in the class room. Most of them agreed to use the observation, quizzes and check lists to assess the learning of the students. Some of them agreed that they asked verbal questions to check the behavior and knowledge of the prospective teachers.

**h) Learning of new knowledge.** Most of the participants said that the Prospective teachers come from Urdu medium but the content knowledge of all the subjects of ADE is in English, therefore in the start the prospective teachers feel difficulty in learning but gradually feel comfort to understand English and take interest and are happy to learn English. Not only prospective teachers feel difficulty but also some teacher educators feel difficulty to teach ADE classes.

i) **Mechanism and schedule of follow up:** All the participants agreed that the Pre-STEP coordinators conducted follow up seminars and workshops to ensure the application of newly learned skills in practical class room setting to support the trained teacher educators (TEs). They visited the colleges 2-3 times for the professional support. They focused to support on the lesson planning and application of new teaching techniques. Some respondents expressed that the mechanism and schedule of the follow up did not exist in the colleges. With the closing of the Pre-STEP the follow up program has been ended.

j) **Unrealistic time frame:** Another factor identified by the respondents about their professional development experiences is the amount of time given to assimilate the new knowledge in this program. Most of the teacher educators were not satisfied with the duration of the professional development. They wanted to learn more about content knowledge and pedagogical skills to teach ADE classes. According to them there were four modules for the specific areas and four days were scheduled for each module, so these four days were not enough to understand the new techniques completely. Some of them were partially satisfied because they were agreed with the duration of professional development.

k) **Need to improve ICT and English.** All the interviewed participants highlighted some of the challenges or difficulties faced in relation to their professional development experiences. English as the medium of instruction and content knowledge remained the constraint in the learning of modern strategies during professional development. Most of them suggested the conduction of workshops to enhance capability of English language.

Moreover, the participants expressed their frustration in the use of information communication technology (ICT) in the class room.

### 4.2.3 Theme Analysis of Interview

Table 4.35 Theme analysis of interview

S. No	Themes	Majority Accepted	Majority Rejected
a)	Conduction of needs assessment.		Rejected (66.66%)
b)	Addressing participants needs	Accepted (100%)	
c)	Teaching skills improvements.	Accepted (100%)	
d)	Introduction of Student centered approaches.	Accepted (100%)	
e)	Application of student centered approach.	Accepted (83.33%)	
f)	Asking higher order questions	Accepted (75%)	
g)	Tools used for formative and summative assessment	Accepted (100%)	
h)	Learning of new knowledge		Rejected (83.33%)
i)	Mechanism and schedule of follow up		Rejected (100%)
j)	Unrealistic time frame		Rejected (58.33%)
k)	Need to improve ICT and English	Accepted (100%)	

### 4.3 Mixing Quantitative and qualitative Data

The mixing is consisted of integrating the two data bases by merging the quantitative data with qualitative data. The data results were compared by mixing the quantitative and qualitative data interpretations. The results of questionnaire check list and semi structured interview were mixed and compared to show the similarities and differences for

achieving the objectives of the study. Quantitative and qualitative results were mixed to derive the similarities and differences with respect to the objectives of the study from the analysis of the collected data.

**4.3.1 Objective# 1: To investigate the nature of professional development for teacher educators of elementary colleges in Balochistan.**

**A) Similarities**

Table No.4.36 Similarities of quantitative and qualitative results for objective#1.

S#	Quantitative Results	Qualitative Results
1	Table.No.4.1 showed that majority(51.06%) of the participants were not agreed with the conduction of needs assessment before starting the professional development	Table No.4.35, Most (66.66%) of the teacher educators were unaware about the conduction of needs assessment.
2	Table No.4.2, showed that majority (93.6%) participants were agreed with the relevancy of professional development with the professional needs.	Table No.4.35, all (100%) of the participants accepted the program was according to the professional needs of the teacher educators.
3	According to table No.4.3 and 4.4, majority (95.73%) agreed with the improvement of pedagogical skills	Table No.4.35, all (100%) accepted about improving the pedagogical skills, innovative teaching methods.

	and content knowledge.	
4	TableNo.4.5, majority (92.18%) agreed with the application of A.V. Aids in professional development.	Table No.4.35, all (100%) accepted the use of A.V. Aids was introduced.
5	Table No.4.6, majority (92.18%) agreed that collaborative learning process has been introduced in the professional development.	Table No.4.35, all (100%) accepted the use of active learning and student centered approach in professional development.
6	Table No.4.7, majority (89.35%) agreed that higher order questioning techniques were used in professional development.	Table No.4.35, majority (75%) accepted the Introduction of higher order questions to identify the level of students.
7	Table No.4.8, majority (89.35%) agreed about the improvement of formative assessment skills.	Table No.4.35, majority (100%) accepted about the asking questions, Observation, quizzes and check lists were used for formative and summative assessment.
8	Table No.4.17, majority (48.93%) were against the statement that follow up program exist.	Table No.4.35, all (100%) rejected the mechanism and schedule of visit for the follow up.

**B) Differences:**

Table.No.4.37 Differences of quantitative and qualitative results for objective#1.

S#	Quantitative	Qualitative
1	Table No.4.16, majority (61.69%) of the respondent agreed that the duration of the professional development program was sufficient to strengthen their professional practices.	Table No.4.35, majority (58.33%) respondents rejected the Four days workshop scheduled for one module of professional development. According to respondents, 16 days workshop to learn about four modules of professional development was not sufficient.

**4.3.2 Objective #2&3: To explore the effectiveness of professional practices of teacher educators of the elementary colleges and To find out the impact of professional development on teacher educators of elementary colleges in Balochistan.**

**A) Similarities**

TableNo.4.38 Similarities of quantitative and qualitative results for objective# 2 and 3

S#	Quantitative(questionnaire )	Qualitative
1	Table No.4.9, majority (93.61%) of the respondent agreed that with the developing of lesson plans.	Table No.4.35, majority (83.33%)of the participants accepted the teaching according to the lesson plan.
2	Table No.4.10, majority (95.73%) of the respondent agreed that they give feedback to the prospective teachers.	Table No.4.35, majority (83.33%)of the participants accepted, they give feed back during active learning.

3	Table No.4.11, majority (95.73%) of the respondent agreed about asking higher order questions.	Table No.4.35, majority (75%)of the participants accepted the use of higher order questions and its purpose .
4	Table No.4.13, majority (93.6%) of the respondent agreed that they apply formative assessment to assess learning of prospective teachers.	Table No.4.35, all (100%)of the participants accepted, they use formative and summative assessment techniques in the class room.
5	Table No.4.14, majority (91.41%) of the respondent agreed that they use of A.V. Aids in class rooms .	Table No.4.35, majority (83.33%) of the participants accepted the use of multimedia in the class room.

## B) Differences

TableNo.4.39 Differences of quantitative and qualitative results for objective# 2 and 3

S#	Quantitative(check list)	Qualitative
1	According to the table No. 4.25, majority (75%) teacher educators did not provide the feedback to the students (teacher educators) during group work. The teacher educators were found passive.	Table No.4.35, majority (83.33%) of the participants accepted to give feed back to the prospective teachers.

2	According to the table No. 4.31, majority (75%) teacher educators were not used proper assessment tools for assessment. Observation and simple questioning were used without any written document.	Table No.4.35, all(100%)of the participants accepted, they use formative and summative assessment techniques in the class room by using check list and quizzes.
3	Regarding table No.4.32, majority (58.33%) of the teacher educators did not use higher order questions in the class.	Table No.4.35, majority (75%)of the participants accepted the use of higher order questions and its purpose.

**4.3.3 Objective#4: To identify the shortfalls in professional development for teacher educators of elementary colleges in Balochistan.**

**A) Similarities**

Table.No.4.40. Similarities of quantitative and qualitative results for objective# 4.

S#	Quantitative	Qualitative
1	According to table No. 4.1, majority (51.06%) respondents were against the statement that Pre-STEP conducted needs assessment of the teacher educators before starting the professional develop-	Table No.4.35, majority (66.66%) of the participants rejected the Conduction of needs assessment.



	ment program	
2	According to the Table No.4.17, majority (48.93%) of the respondent were against the statement that the follow up mechanism of the professional development program exist.	Table No.4.35, all (100%) of the participants rejected the existence of mechanism and schedule of follow up of professional development.
3	According to the Table No.4.19, majority (87.22%) of the respondent agreed that the Language (English) constraints were faced by the teacher educators in the professional development program.	Table No.4.35, all (100%) of the participants accepted that teacher educators need to improve ICT and English.

## CHAPTER NO 5

### Summary, Findings, Discussion, Conclusions and Recommendations

#### 5.1 Summary

Teacher professional development programs are conducted for the enhancement of knowledge, skills and attitude of teachers. The purpose of professional development is to develop teaching learning process and ultimately to improve the learning of the students. This descriptive and exploratory study has attempted to analyze and explore the professional development of teacher educators working in Government colleges of elementary educations, Balochistan, Pakistan. In the 1st Chapter, the title of the study, its importance, significance of teacher education and the role of teacher educators was highlighted from different perspectives. Keeping in view the use of modern strategies of teaching in the class rooms, feedback and new assessment techniques, the contribution of professional development programs in the promotion of good standards of teacher educators was established. The nature of professional development, professional practices of teacher educators and the gaps in the program were discussed. The following objectives for the study were formulated:

1. To investigate the nature of professional development for teacher educators of elementary colleges in Balochistan.
2. To explore the effectiveness of professional practices of teacher educators according to the nature of professional development in elementary colleges, Balochistan.

3. To find out the impact of professional development on teacher educators of elementary colleges in Balochistan.
4. To identify the shortfalls in professional development of teacher educators of elementary colleges in Balochistan.

In the 2nd Chapter, the review of relevant literature provided a clear insight about the focus of the study, and broadened the outlook about the essential pre requisites of good professional development. Literature review revealed that teacher education is the tentacle of education system to provide the training to the prospective teachers having knowledge, attitude and skills. The enhancement of teacher quality and professionalism of teachers is in the hands of the teacher educators. Teacher educator is the person who educates the teachers. High quality professional development is a paradigm shift of professional development from attentive listener to active learner. Traditional classroom teaching methods have been changed to innovative methods by using the audio-visual Aids to encourage the interactive form of learning in students through active participation. Shields and certificates are provided as incentives to motivate the teachers for professional practices but these are not enough to motivate them. These incentives could be effective only one or two time but not every time. The incentives could be given in the form of financial benefit to motivate teachers toward their trainings for the improvement in quality and performance of teaching.

In the 3rd Chapter, I used the mixed method approach to determine the nature of professional development and the professional practices of teacher educators. This study was a descriptive, analytical and exploratory that focused upon the professional practices of

teacher educators after attending the professional development program conducted in Balochistan. I collected data through questionnaire, interviews, and class room observation from the sampled population. The sample consisted of Seventy one (71) teacher educators of six Elementary Education colleges in Balochistan.

In the part of 4th chapter, the collected data was graphically and statistically analyzed. The responses about the nature of professional Development, professional practices of teacher educators and short falls were reflected upon for the parameters of effectiveness. Each component of the inquiry was analyzed and recorded separately and then combined through triangulation. Quantitative Data was analyzed by percentage and mean score using SPSS software to show the effectiveness of the professional development. The Data collected through the Interview (qualitative) was analyzed by making themes and theme analysis. Technique of triangulation was adopted to mix the analyzed data through comparing the quantitative and qualitative results.

Findings were taken from the analysis, interpretations and comparison of data. Conclusions were derived from the findings and recommendations were given by the researcher to improve the professional development and professional practices.

## **5.2 Findings**

Findings were derived with respect to the objectives of the study from the analysis of the collected data.

**5.2.1 Objective#1: To investigate the nature of professional development for teacher educators of elementary colleges in Balochistan.**

### **1. Quantitative Data**

According to the quantitative data, majority (Strongly Agree and Agree) of the participants were agreed with the relevancy of professional development with the professional needs(93.6%), pedagogical skills(95.73%), content knowledge(78.71), usage of Audiovisual Aids in professional development(92.18%), collaborative learning(95.73%), higher order questioning(89.35%), formative assessment skills(89.35%), learning activities(82.97%) and duration of the professional development(61.69%) respectively. Table No. 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.15, and 4.16, investigates the nature of the professional Development. But according to Table No.4.1, majority (51.06%) of the participants was not agreed with the conduction of needs assessment before starting the professional development.

### **2. Qualitative Data**

According to the qualitative data, majority of the participants accepted that the program was according to the professional needs (100%), improving the pedagogical skills (100%), innovative teaching methods (83.33%) and higher order questioning techniques (75%). But inajority of the participants rejected the nature of professional development in terms of follow up (100%) and duration (58.33%). Table No.4.35, investigates the nature of the professional Development.

**5.2.2 Objective # 2 and 3: To explore the effectiveness of professional practices of teacher educators of elementary colleges & To find out the impact of professional development on teacher educators of elementary colleges in Balochistan.**

## 1. Quantitative Data

According to the quantitative data, majority of the participants were agreed (Agree and strongly agree) with the developing of lesson plans (93.6%), giving feedback to the prospective teachers (95.73%), asking higher order questions (80.84%), improving problem solving abilities (80.84%), applying formative assessment (93.6%), use of A.V. Aids in class rooms (91.48%) and ADE as an innovative pre service program (87.23%). Table No.4.9, 4.10, 4.11, 4.12, 4.13, 4.14 and 4.18 explored the professional practices of the teacher educators.

Table No.4.21, 4.22, 4.23, 4.24, 4.26 favored: the new techniques of professional practices of the teacher educators to show the impact of the professional development. Majority of the teacher educators were involved by applying the lesson plan (75%), to give the sense of direction by sharing the objectives of the lesson (50%), teacher observed as not a source of all information (50%), collaborative teaching method (50%).

Table No. 4.25, 4.29, 4.30 partially favored: participating of prospective teacher in learning activities (50%), use of A.V.Aids like maps, charts and handouts in the class room (66%) and using different tools to assess the trainees (75%).

Table No.4.27, 4.28, 4.31, 4.32, 4.33, 4.34 did not favor the new techniques of professional practices. Majority of the teacher educators had no communication from teacher educators to trainees (50%) nor trainees to the teacher educators (58.33%), providing no feedback to the students during group work (75%), teacher educators just assigned the group work and allowed the students to study and discuss, no proper tools were used to assess the students except observation and asking lower order questions. Higher order

questioning were not asked(58.33%) and at the end of the session there was no summarizing of lesson (58.33%)nor assigned any work for the next session(66.66%)..

## **2. Qualitative Data**

According to qualitative data, majority of the participants accepted the effectiveness of the use and benefits of new teaching methods (83.33%), higher order questions and its purpose (75%), assessment techniques used in the class room(100%) and give feed back to the prospective teachers(83.33%). Table No.4.35 also explores the professional practices of the teacher educators.

### **5.2.3 Objective#4: To identify the shortfalls in professional development for teacher educators of elementary colleges in Balochistan.**

#### **1. Quantitative Data**

According to the quantitative data, Majority of the participants were agreed with the weaknesses of professional development: the program coordinator did not conduct any sort of needs assessment(51.06%) before starting the program , no follow up mechanism exist(48.93%) and English language as medium of instruction was a constraint for learning (87.22%) with respect to Table No.4.1, 4.17, 4.19.

#### **2. Qualitative Data**

According to qualitative data, majority of the respondents rejected the duration of the professional development because four days for one foundation module were not feasible for teacher educators to understand completely (58.33%). English language as medium of instruction and content knowledge remained hurdle for learning (100%) and follow up

mechanism did not exist (100%). Table No.4.35 verified the weaknesses of professional development that there was a lack of conduction of needs assessment before starting the program (66.66%).

### **5.3 Discussion**

The significant findings of the research study were discussed and integrated with the literature from chapter two as follow:

1. The results of the findings about the nature of professional development of teacher educators were discussed that it was relevant to the professional needs of the teacher educators because professional needs of teacher educators were assessed through the senior members of teacher educators. The participants were learned about pedagogical skills, content knowledge, use of A.V Aids, collaborative learning, higher order questioning and assessment. But the duration was less for learning, and follow up program did not exist.

Mane 2014 supports the results of the nature of professional development that conventional or traditional classroom teaching methods have been changed to non conventional or innovative method by using the audio-visual Aids to encourage the interactive form of learning in students through active participation. According to new model, with the passage of time learning takes place and there was a connection between prior and modern knowledge.(Smith,2007). According to ( Kareem 2013, Malik 2012)Teacher education is main part of the education system which has strategies and guidelines to prepare the future teachers with the knowledge, approaches, behaviors and abilities. There is a need to enhance their abilities to perform efficiently in the classroom, school and among the



people. Hargreaves and Fullan (1996) have explained three approaches: Teacher development as information and ability growth, teacher development as self assessment, teacher development as environmental adjustment.

2. The effectiveness of professional practices according to the nature of professional development was explored by observing the classes of teacher educators that they had lesson plans with them during taking classes and having a sense of direction by sharing the objectives of the lesson. They partially used the A.V. Aids and Assessment. New techniques were not implemented according to the nature of professional development: No communication of teacher educators to trainees nor trainees to teacher educator during group work, provided no feedback to the students during group work, they just assigned the task and allowed the students to study and discuss, No proper tool were used for assessment and did not asked higher order questions. They did not summarize the lesson nor assigned work for next session.

According to Faleye 2012, the learning and performance of the students depend upon the effectiveness of a teacher, the teacher who is not aware about new teaching techniques and is inefficient, the learning of the students will be low than the students who learn from the effective teachers. Thus the impact of effective teaching is the change in learning and increase the knowledge.

According to the implementation standards the successful implementation begins with adult learning providing ongoing support for individuals, teams and schools in different ways. More over change occurs due to constructive feedback and reflection to support continuous improvement in practice. (Brown, 2013). According to Slavin 1983, the mu-

tual educational struggle among the students or teacher-students is the Cooperative Learning. It is necessary for the students to share, discuss and encourage completing the mutual assignment.

3. The shortfalls of professional development were identified that proper needs assessment was not conducted, English as a medium of instruction was constraint for learning activities, duration of professional development was not feasible for the learning and no mechanism of follow up program for professional development exists.

The sustainability of the professional development is compulsory. It is the responsibility of the coordinator of a program to sustain. Less duration and having no continuity are ineffective for developing the professional practices. Collaboration, shared inquiry and learning from each other are the backbone of the professional development. (Kathryn-Broad, 2006)

Aslam2013 suggests that the follow up and evaluation process does not exist to know about the change and effectiveness. After getting training the teachers face problems to implement these changes in the class room, the teacher need guidance. In the absence of follow up and guidance teacher lose motivation to teach the class with modern techniques and after some time continues traditional method.

#### **5.4 Conclusions**

On the basis of analyses of collected data gathered through questionnaires, interviews, and class room observation, different conclusions were drawn to find out the impact of professional development on the teacher educators of elementary colleges in Balochistan.

1. Professional development was conducted according to the professional needs of the teacher educators. All the activities in professional development were student centered having new teaching techniques. Higher order questioning and assessment techniques were new for the teacher educators.
2. All the sessions in professional development were conducted according to the lesson plan. Teacher educators learnt to develop lesson plan during professional development. It was observed through class room observation that most of the teacher educators use lesson plan during teaching practice.
3. New teaching methods like collaborative learning techniques were applied in the professional development. Jigsaw method and group discussion were applied. It was concluded from the findings that group work technique was used by teacher educators to teach the prospective teachers.
4. It was concluded from the findings that A.V.Aids like multimedia, charts, maps and models were used in the professional development. Teacher educators also used the A.V.Aids such as maps and models during their professional practice.
5. Ongoing assessment techniques by using rubrics and checklists were used in the professional development. Teacher educators assessed their students by asking questions and observation.
6. Higher order questions were asked from the teacher educators in the professional development to enhance their thinking capabilities. The logical questions were posed using the words “why” and “how”. Whereas the teacher educators used lower order memorize type questions from the prospective teachers. They did not use higher order questions during their class room.

7. The assessment techniques like check list and rubrics were applied in the professional development. But the teacher educators did not use proper tools to assess the student learning. They only observed and asked lower order questions during the professional practices.
8. It was concluded that the feedback mechanism was introduced during group work in the professional development. The teacher educators in the class just assigned the group work and allowed the students to study and discuss about the topic without giving feedback.
9. Researcher concluded that majority of the teacher educators had no communication from teacher educators to trainees nor trainees to the teacher educators which did not support the theme of collaborative learning applied in professional development.
10. It was concluded through class room observation that most of the teacher educators did not summarize the lesson at the end of the session which deviates the nature of the professional development.
11. Most of the teacher educators were not agree with the duration of the program because there were four foundation modules: FM1, FM2, FM3 and FM4 to conduct the professional development. Four days were scheduled for each module which was less time for the learning of new themes of education.
12. English as medium of instruction and content knowledge of Associate Degree in Education in professional development was the constraint for most of the teacher educators. Some teacher educators after professional development applied for transfer from elementary colleges to the schools avoiding to teach the Associate Degree in Education (ADE) classes because of English content knowledge.

13. In the start of the ADE program, the coordinators of the professional development visited the colleges for follow up but could not continue it. Thus, there was no mechanism and schedule exists for follow up and professional support.

### **5.5 Recommendations**

Keeping in view the findings and conclusions of the study, professional development programs of teacher educators enhance the professional capability of the teacher educators, Need assessment and follow up programs play a key role for bringing about the desire change and its consistency.

1. The coordinators of professional development may conduct a proper survey for the needs assessment before to start the professional development of the teacher educators.
2. Follow up may continue for the support of the teacher educators after professional development. The administration of Bureau of curriculum and extension center Quetta, Balochistan, would make a proper schedule for the follow up and professional support of the teacher educators.
3. Collaborative teaching method is used to enhance the learning of the students. It is useless without giving feedback during group work of the students. Teacher educators would provide feedback to the trainees during group work.
4. Teacher educators may use proper assessment tools for the formative assessment of the trainees.
5. Teacher educators of Elementary colleges would take responsibility to sustain the change after professional development.

6. Most of the teacher educators are weak in English, so that there is need of professional development to enhance capability of English language. Bureau of curriculum may conduct short trainings to enhance English capabilities of teacher educators.
7. Duration of the professional development may schedule according to the content level and learning level of the participants.
8. Collaborative learning techniques require the usage of internet, so that information and communication technology (ICT) Training might be conducted for the teacher educators to fulfill the requirements of teaching practices.
9. Education Department, Government of Balochistan should establish separate teacher educator cadre to strengthen the teacher education.

#### **5.6 Recommendation for future researchers**

This research is the first study on the impact of professional development on the teacher educators of elementary colleges in Balochistan. From this research, there are numerous key areas that need to be developed for further studies.

1. Impact of professional development on the teacher educators of elementary colleges may be studied in Punjab, Khyber Pakhtun khwa(KP) and Sind.
2. Effectiveness of professional practices of teacher educators of elementary colleges Balochistan might be compared with the professional practices of teacher educators working in other provinces of Pakistan.

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## Appendix 1

### QUESTIONNAIRE FOR THE TEACHER EDUCATORS

Government College of Elementary Education \_\_\_\_\_

Date \_\_\_\_\_

Researcher: Abdul Majeed (MS-Education, IIU Islamabad)

Note: Please read the following statements carefully and give your opinion

SCALES: Strongly Disagree=1, Disagree=2, Undecided=3, Agree=4, Strongly Agree=5

Serial #	Questions	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1-	Pre-STEP conducted needs assessment of the teacher Educators before starting the professional development program.					
2-	Professional development program was in accordance with your professional needs.					
3-	Professional development program has improved your pedagogical skills.					
4-	Professional development program has improved your content knowledge.					
5-	Professional development program included the usage of Audio-Visual Aids.					
6-	Collaborative learning process has been introduced in professional development program.					
7-	Higher order questioning techniques have been incorporated in the professional development program.					
8-	Professional development program has improved your formative assessment techniques.					

9-	You develop the lesson plan to teach a particular lesson.					
10-	You give the feedback to the prospective teachers during the group work activities.					
11-	Higher order questioning techniques are being used by you in the class room.					
12-	You are focused to improve problem solving abilities of the prospective teachers.					
13-	You utilize the formative assessment techniques to assess the learning of the prospective teachers.					
14	you use the Audio-Visual Aids in the class room to improve the learning of the prospective teachers.					
15-	The learning activities in Professional development program are applicable in your class room.					
16-	The duration of the professional development program is sufficient to strengthen your professional practices.					
17-	There is existence of follow up mechanism of the professional development program.					
18-	Introduction of Associate Degree in Education(ADE) is fruitful than PTC&CT.					
19-	Language (English) constraints were faced by the teacher educators in the professional development program.					
20-	You need further professional development for the effective professional practices.					

**SEMI STRUCTURED INTERVIEW  
FOR  
THE TEACHER EDUCATORS**

**Government Colleges of Elementary Education, Balochistan**

*Name of Researcher: Abdul Majeed*

*Name of Course: MS (Education).*

*Name of University: International Islamic University Islamabad.*

- 1- Pre-STEP has trained you through professional development program to teach ADE Classes. Have they conducted any needs assessment to identify your needs?
- 2- What do you think this program was according to your professional needs?
- 3- How do you feel the improvement of pedagogical skills after the workshop?
- 4- What teaching methods were applied in the professional development program?
- 5- What teaching method you apply during professional practices in the class room?
- 6- (if yes )then what are the benefits and effectiveness of this new teaching method in the learning of the prospective teachers?
- 7- During teaching do you ask higher order questions to the prospective teachers?
- 8- What is the purpose to ask higher order questions during professional practices?
- 9- What assessment techniques do you use to check the knowledge and behavior of the prospective teachers?
- 10-First time English is the medium of instruction in ADE, so do you think, the prospective teachers feel any difficulty in learning?
- 11-Do the professional development coordinators visit the college for the follow up or to support the professional practices?
- 12-Are you satisfied about the duration of workshop to enhance the professional practices?
- 13-Do you feel the need of further professional development to enhance your professional practices.

## Appendix 3

### CHECK LIST FOR CLASS ROOM OBSERVATION

Based on  
(To explore the teaching practices of the teacher educators)

Name of class-----Name of teacher-----  
Name of college -----Date-----

S.No	QUESTIONS	YES	NO	SOME WHAT
1.	Has the teacher educator have a lesson plan with him/her in the class room?			
2.	Does the teacher educator provide a sense of direction, aims and objectives, early in the lesson?			
3.	Is the teacher educator the source of all information?			
4.	Does the teacher educator use any technique of collaborative teaching method?			
5.	Does the teacher educator give feedback during group work or activities?			
6.	Are most of the prospective teachers participating in the learning activities?			
7.	Is there flow of communication from teacher educator to trainees?			
8.	Is there flow of communication from trainees to the teacher educator?			
9.	Is there any learning interaction among the students?			
10.	Are audio-visual material, demonstration material, model, chart, map or hand outs, being used in the class room?			
11.	Is the teacher educator using any tool to assess the learning of the trainees during the session?			
12.	During the session, does the teacher educator ask the higher order questions started with the words 'how' and 'why' to enhance their thinking ability?			
13.	At the end of the session, does the teacher educator summarize the lesson?			
14.	Has the teacher educator assigned the work for next session?			



**Appendix 4****LIST OF EXPERTS FOR CVR**

Researcher: Abdul Majeed (MS. Education, IJU Islamabad)

**Impact of Professional Development on the Teacher Educators of Elementary Colleges in Balochistan.**

S#	Name/Designation	Institution
1.	Rubina Masood Associate Professor	Government college of Education, Quetta.
2.	Ishfaq Hussain Senior research officer	Bureau of curriculum and Extension center, Quetta, Balochistan
3.	Amir Bano. Assistant Professor	IER, University of Balochistan, Quetta.
4.	Syed Abdul Majeed shah	PPTU (Policy planning & implementation unit), Quetta, Balochistan.
5.	Abdul Malik Taj Assistant Professor	Government college of Education, Quetta.
6.	Zaheer-ul-Hassan Senior research officer	Bureau of curriculum and Extension center, Quetta, Balochistan
7.	Abdul Khaliq Assistant Director	Bureau of curriculum and Extension center, Quetta, Balochistan
8.	Dr. Muhammad Nasir Education Department	International Islamic University, Islamabad.
9.	Dr. Muhammad Munir Kayani Assistant Professor	International Islamic University, Islamabad.

## Appendix 5

### Content Validity Ratio (CVR) of Questionnaire

Impact of professional Development on the teacher educators of Elementary colleges in Balochistan		$CVR = (ne - N/2)/(N/2)$
1.	Pre-STEP conducted needs assessment of the teacher Educators before starting the professional development program.	0.9
2.	Professional development program was in accordance with your professional needs.	0.8
3.	Professional development program has improved your pedagogical skills.	0.8
4.	Professional development program has improved your content knowledge.	0.5
5.	Professional development program included the usage of Audio-Visual Aids.	0.9
6.	Collaborative learning process has been introduced in professional development program.	0.9
7.	Higher order questioning techniques have been incorporated in the professional development program.	0.8
8.	Professional development program has improved your formative assessment techniques.	0.8
9.	You develop the lesson plan to teach a particular lesson.	0.9
10.	You give the feedback to the prospective teachers during the group work activities.	0.8
11.	Higher order questioning techniques are being used by you in the class room.	0.8
12.	You are focused to improve problem solving abilities of the prospective teachers.	0.5
13.	you utilize the formative assessment techniques to assess the learning of the prospective teachers.	0.5
14.	you use the Audio-Visual Aids in the class room to improve the learning of the prospective teachers.	0.8



15. The learning activities in Professional development program are applicable in your class room.	0.9
16. The duration of the professional development program is sufficient to strengthen your professional practices.	0.9
17. There is existence of follow up mechanism of the professional development program.	0.9
18. Introduction of Associate Degree in Education(ADE) is fruitful than PTC&CT.	0.5
19. Language (English) constraints were faced by the teacher educators in the professional development program.	0.9
20. You need further professional development for the effective professional practices.	0.8

#### **Content Validity Ratio (CVR) of Interview**

Impact of professional Development on the teacher educators of Elementary colleges in Balochistan

$$CVR = (ne - N/2)/(N/2)$$

1. Pre-STEP has trained you through professional development program to teach ADE Classes. Have they conducted any needs assessment to identify your needs?	0.9
2. What do you think this program was according to your professional needs?	0.8
3. How do you feel the improvement of pedagogical skills after the workshop?	0.8
4. What teaching methods were applied in the professional development program?	0.8
5. What teaching method you apply during professional practices in the class room?	0.9
6. ( if yes )then what are the benefits and effectiveness	0.8

	of this new teaching method in the learning of the prospective teachers?	
7.	During teaching do you ask higher order questions to the prospective teachers?	0.5
8.	What is the purpose to ask higher order questions during professional practices?	0.5
9.	What assessment techniques do you use to check the knowledge and behavior of the prospective teachers?	0.9
10.	First time English is the medium of instruction in ADE, so do you think, the prospective teachers feel any difficulty in learning?	0.9
11.	Do the professional development coordinators visit the college for the follow up or to support the professional practices?	0.8
12.	Are you satisfied about the duration of workshop to enhance the professional practices?	0.8
13.	Do you feel the need of further professional development to enhance your professional practices?	0.5

### Content Validity Ratio (CVR) of Check list

Impact of professional Development on the teacher educators of Elementary colleges in Balochistan

$$CVR = (ne - N/2)/(N/2)$$

1.	Has the teacher educator have a lesson plan with him/her in the class room?	0.9
2.	Does the teacher educator provide a sense of direction, aims and objectives, early in the lesson?	0.8
3.	Is the teacher educator the source of all informa-	0.5

	tion?	
4.	Does the teacher educator use any technique of collaborative teaching method?	0.8
5.	Does the teacher educator give feedback during group work or activities?	0.8
6.	Are most of the prospective teachers participating in the learning activities?	0.5
7.	Is there flow of communication from teacher educator to trainees?	0.8
8.	Is there flow of communication from trainees to the teacher educator?	0.8
9.	Is there any learning interaction among the students?	0.5
10.	Are audio-visual material, demonstration material, model, chart, map or hand outs, being used in the class room?	0.8
11.	Is the teacher educator using any tool to assess the learning of the trainees during the session?	0.8
12.	During the session, does the teacher educator ask the higher order questions started with the words 'how' and 'why' to enhance their thinking ability?	0.8
13.	At the end of the session, does the teacher educator summarize the lesson?	0.5
14.	Has the teacher educator assigned the work for next session?	0.5

## Appendix 6



**DIRECTORATE OF BUREAU OF CURRICULUM &  
EXTENSION CENTER BALOCHISTAN, QUETTA**

Address: Directorate of Education Shawaksha Rd Quetta

Ph: (081) 9202612  
Fax: (081) 9202682  
Email: proabdulhalim@yahoo.com

2648-54-  
No. \_\_\_\_\_ / C. B

Date: 20/6/2015


To,

The Principals,

- 1- Government college of Elementary Education (boys) Quetta
- 2- Government college of Elementary Education (girls) Quetta
- 3- Government college of Elementary Education (boys) umerabad Pishin
- 4- Government college of Elementary Education (girls) Pishin
- 5- Government college of Elementary Education (boys) Loralai
- 6- Government college of Elementary Education (boys) Kalat

Subject: PERMISSION FOR THE DATA COLLECTION FOR MS /M.Phil THESIS

Refer to the application submitted by Mr. Abdul Majeed Assistant Professor/Senior Subject Specialist Government college of Education Quetta, regarding subject captioned above. It is stated that he has completed the course work of MS/M.Phil (Education) from International Islamic University Islamabad. Therefore it is directed you to allow and cooperate with him for the collection of DATA for thesis. More over this DATA will be confidential and just used for research.

  
ASSISTANT DIRECTOR  
Bureau of Curriculum & Extension Center  
Quetta Balochistan.

20/6/15