

**A STUDY OF TEACHERS' PROFESSIONAL KNOWLEDGE
AND ITS PRACTICE AT SECONDARY LEVEL IN
KHYBER PAKHTUNKHWA**



By

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In

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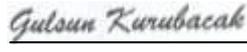
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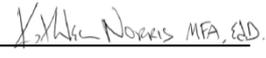
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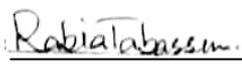
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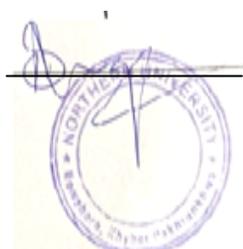
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Dedication

**I DEDICATE THIS WORK OF MINE TO My PARENTS, WIFE AND
CHILDREN WHO'S PRAYERS, LOVE AND SUPPORT HELPED
ME IN THE COMPLETION OF THIS ARDUOUS TASK.**

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Nawab Gul

List of Abbreviations

ATTC	Arabic Teacher Training Course
AIOU	Allama Iqbal Open University Islamabad
ADE	Associate's Degree in Education
A.V.aids	Audio-visual aids
B.A	Bachelor of Arts
B.Ed	Bachelor of Education
BISE	Board of Intermediate and Secondary Education
B.S.Ed	Bachelor of Science in Education
GCEE	Government Colleges of Elementary Education
CT	Certificate of Teaching
CPG	Continuous Professional Growth
EMIS	Education Management Information System
GCE	General Certificate of Education
GPK	General Pedagogical knowledge
HEC	Higher Education Commission
HSSC	Higher Secondary School certificate
KPK	Khyber Pakhtunkhwa
M.A	Master of Arts
M.Ed	Master of Education
NCATE	National Council for Accreditation of Teacher Education
NUN	Northern University Nowshera
Ph. D	Doctor of philosophy
PTC	Primary Teaching Certificate
SEP	Special Education Programme

SSC	Secondary School Certificate
UGC	University Grant Commission
UN	United Nation
UNESCO	United Nation Education Social Cultural Organization

ABSTRACT

The main purpose of the present study was to investigate the teachers' professional knowledge and its practice at secondary level in Khyber Pakhtunkhwa. In professional knowledge teachers' know their subject contents and how to teach those contents to their students. Teachers also focus on the action or process of teaching as well as the knowledge and skills gained through experience. Objectives of the study were: (i) To investigate the teachers' professional knowledge and its practice at secondary level; (ii) To examine the factors that affect the teachers' professional knowledge and its practice at secondary level; (iii) To find out what are the difficulties in the implementation of teachers' professional knowledge and its practice; and (iv) To compare the views of working teachers and prospective teachers regarding teachers' professional knowledge and its practice. For achieving the objectives of the study the following null hypotheses were tested; (i) There is no significant difference between teachers' professional knowledge and its practice; (ii) There is no significant effect of environmental factors on teachers' professional knowledge and its practice; (iii) There is no significant difference between difficulties and teachers' professional knowledge, its practices and implementation; and (iv) There is no significant difference between the views of working teachers and prospective teachers regarding teachers' professional knowledge and its practice. The population of the study was comprised of all the 210 prospective teachers who were enrolled as students of B.Ed (130) and M.Ed (80) in Northern University Nowshera (NUN) and all the 18683 (SST) male teachers at secondary level of Government Secondary Schools in the province of Khyber Pakhtunkhwa. A convenient sample of 105 prospective teachers from Northern University Nowshera (NUN) and 600 male working teachers from Khyber Pakhtunkhwa were selected through convenient sampling technique. The data were collected from

B.Ed and M.Ed classes of Northern University Nowshera (NUN) and from five Districts of Khyber Pakhtunkhwa: D.I.khan, Haripur, Mardan, Nowshera and Swabi. Three point questionnaires were used as research instrument for collection of data from the sample teachers. Chi-square technique was used to analyze the data statistically. The study was significant for all stakeholders in education including teachers, students, educational authorities and policy makers.

INTRODUCTION

The issue of teacher's professional knowledge and its practice at secondary level in Khyber Pakhtunkhwa has been discussed very rarely. It is an issue that needs suitable solutions with promising results. In order to probe into the issue, first of all we need to clearly define what a teacher is and what exactly professional knowledge and its practice is.

In general a teacher is a person irrespective of age, gender, cast and creed as well as religion who conveys or transfers knowledge to others. A teacher is a person who guides, counsels and leads learners in the process of learning. A teacher is like a candle who light ways for others. An efficient teacher is usually expected to be committed to his work. He must have the ability to take the initiative.

As a professional a teacher must know the art of communication which is a vital aspect of teaching. He must be a master of interpreting others and must possess the ability to learn from experiences. He must possess the ability to facilitate learning. Teachers insure qualitative change and raise the standards of education that guarantee the welfare, progress and prosperity of a nation, stated in a research study conducted by the Government of Punjab (1998). To ensure the achievement of the above stated objectives, teachers are trained professionally and are made competent in teachers training institutions. Specifically, professional knowledge makes a teacher aware of his subject contents and the ways through which he transfers the teaching contents to his pupils. A teacher always focuses on experiences and learns from it. The process of education can be fruitful if all teachers possess professional knowledge and effectively practice it and fulfill their respective responsibilities in this regard. For the development of education a teacher role is pivotal. By having professionally qualified teachers a school can ensure best academic achievements.

Farooq (2001) says, learning takes place in different social settings. It can be home, school, college, university, and academy. In these settings, interactions take place. They may be between teachers and learners, learners and learners or learners and learning material. These interactions voice a numbers of problems which need to be addressed through relevant research. More easily, discussions with learners or lecture in classroom solve many problems. Learners' likes, dislikes, skills, aptitude, and interests allow us to figure out the kind of personality he or she has. A teacher might follow a certain method of instruction derived from an empirical study. According to Nadkarni (2003) a properly planned and organized method of instruction should be in the hand of a teacher while he or she teaches. Similarly, the cognitive ability of students is further boosted if the method of instruction is well planned and balanced. Professional education includes any programs that improve the knowledge, skill, attitude or behaviour of teachers on the importance of professional education.

In general, knowledge gained means knowing about the surroundings with its realities, structures, requirements, usages and their relations to oneself. Once a person gains all these information, they become his knowledge. Professional knowledge emphasizes the knowing of basic ideas, principles and structures of the subject or discipline being taught by teachers. It also contains the in-depth knowledge of the characteristics of learners and their usefulness in teaching and learning. The basic qualification of a teacher is a set of information which helps in his performance and in practices, states Birman, et al (2000).

Generally, teachers training includes three fields, subject knowledge, pedagogical study and teaching practice. However, a question arises that what are taught and what are the objectives and goals of pedagogical studies. There are

questions needed to be answered in order to clearly define “professional knowledge” and its contents. They are:

What makes up the pedagogical work of a teacher?

What type of knowledge and qualification are needed for a teacher to receive?

Shulman (1986) says that the following steps and stages establish the parameter of pedagogical thinking and practical action.

- a) Comprehension and having full understanding.
- b) Moulding and re-bringing into another positive shape and form.
- c) Teaching / Instructing
- d) Appraisal/Evaluation/ to fix the value.
- e) Response/Rebound/ Feedback.
- f) Thinking capacity on the part of teachers to deal with the above mentioned points and areas.

Said by Shulman (1986) that pedagogical content knowledge and curriculum studies are the two basic components of professional studies. Basic factors of guaranteeing the mastery of a teacher are existing circumstances, context as well as beliefs, needs and experiences of a teachers. Defining knowledge that insures the mastery of teachers is almost impossible because of different needs and requirements that change with time and context as well as circumstances. According to Maijer, p.c. et al (1999) there are many parts of “professional knowledge”. Among the parts one is subject knowledge. The subject knowledge is key to effective teaching. According to Kennedy (1990) a teacher while teaching a subject must be able to question the subject, its connection with the social norms, its relations with social issues and its value in everyday life. A teacher should be equipped to know the art of transferring or conveying the knowledge he already possesses. Similarly he must know how to

highlight if there is any misinterpretation by learner of the content Shulman (1987). An additional requirement for a teacher other than the basic essential needs of a teacher is the knowledge of every subject in the curriculum of the grade he teaches. This would make him able to adopt a disciplinary approach to the material, i.e. using pictures, analogies and knowledge acquired by students through other subjects Ernest (1989). The effectiveness of a subject taught is immensely influenced by the teacher's opinion, his approach and conviction of the subject, Askew, et al (1997).

Secondly, knowledge of learners is the maximum information about learners that a teacher possesses while teaching. It helps him a lot in coping with different learners. This includes biological, social, psychological and physiological knowledge. This further assists a teacher in interaction with learners, in facing the student behavioural problem, motivating the learners, adjustment issues, learning difficulties and individual differences of the learners. The third most important principle of a teacher's professional knowledge is teaching methodology. It is an essential qualification for a teacher to devise a clear and detailed description of the teaching methodology. A systematic presentation of certain elements of instruction is as follows.

- i) Lesson planning i.e. teachers' pre-lessons activities and actions. Planning depends whether it is short – term (weekly lesson planning or unit planning) or long -term (for the entire semester or academic year).
- ii) Performance of teaching i.e. choices that are made during planning and their enforcement, teaching directs a teacher for using certain teaching methods, approaches, aids and take certain actions.
- iii) Evaluation of teaching i.e. evaluating and assessing students' performance.

Fourthly, the school curriculum is a tool that determines the choices of

teaching methods of a teacher. Shulman (1986) states that teachers must possess maximum knowledge about the curriculum, text-books, rules and law of education system and role of state in the education. Needs of today's society ask for a more critical approach to the designing of curriculum and its adaptation to the changing and emerging trends. Bayview (2013) says to provide the demands of learners, a program known as curriculum compacting is designed. It guarantees a proper training to those who are mastered in particular subjects. Their score or level of intelligence is measured through tests or assessments. The fifth effective factor for affective teaching is general pedagogical knowledge. It deals the organization of classrooms, motivation of students and relating learning (pedagogical theories). In another place Shulman (1986) states that "principles and strategic classroom management and organization that exceeds the knowledge of specific subjects". This sort of knowledge enables to devise a comprehensive framework of teachers' mental representations necessary for the understanding or describing of classrooms in a school. Ernest (1989) states that for the choices of teaching methods and approaches the pedagogical knowledge plays a central role and similarly this knowledge is also essential in lesson planning.

Next there is the knowledge of context. A teacher is expected to examine the surrounding circumstances in which he teaches, plans and takes actions or practices it. A teacher must not limit his methods and approaches as he might face situations where certain other approach or method would be suitably or appropriately applicable. Knowledge of the environment and the circumstances are the other names of the knowledge of the context. In this, a teacher is required to work for the school, region and the state. The contextual knowledge contains knowledge about students, their family background the whole indigenous community, system of education, organization and management of education, history and philosophy of education, in

every state the institutional frame work and administrative structure of education. A class consists of a number of students who belong to different social and economical backgrounds. Their upbringing is not same. Therefore, a teacher must know the attitude, behaviour, choices, ambitions, or shortly the character of his/her learners. It will not only help him in handling the class but it will be a lot better for learners as they are treated according to the traits they have in their personalities says, Brookfield (2006). Then we have knowledge of self which is also important. It is a fundamental and essential qualification of teachers related to their opinion on their role and duty, responsibilities, training qualification, rights and professional development, working conditions, values and philosophy. It is attached to the professional development of teachers by reflection of learning through experiences of teaching in relation to this working environment Kagan (1992).

Members of an organization are distinguished from each other mainly on the basis of professionalism. It includes professional knowledge and expertise in it. Furthermore, professional practice is also an important factor of performance. It is the practice of the professional knowledge for teaching purposes as well as knowledge and skills gained through experiences as a teacher is fostered and valued learning are the capabilities of every teacher. Teacher plans, reports or assesses for learning that is effective. By using the knowledge of classroom management a teacher creates a healthy, friendly and safe environment for learners with the development taking place in every walk of life so is the case with the profession of teaching which needs drastic changes and modifications in order to go along with the modern trends of education.

To sum up, in this study the review of related literature has established that teaching is a profession and teachers as professionals are required to be provided with enough professional knowledge in order to make them professionally well equipped.

Therefore, this suggestion has raised some very important question such as do the teachers agree with the statement that professional knowledge helps to improve their practice of teaching. If it is so, then what are the results? Do the forms and activities of professional knowledge experienced by the participants enable them to be more effective in their practice? This research attempts to answer the questions raised above.

1.1 STATEMENT OF THE PROBLEM

The study was designed to analyze the teachers' professional knowledge and its practice at secondary level in Khyber Pakhtunkhwa.

1.2 OBJECTIVES OF THE STUDY

The following were the major objectives of the study.

- 1 To investigate the teachers' professional knowledge and its practice at secondary level.
- 2 To examine the factors that affect teachers' professional knowledge and its Practice at secondary level.
- 3 To find out what are the difficulties in the implementation of teachers' Professional knowledge and its practice at secondary level.
- 4 To compare the views of working teachers and prospective teachers regarding teachers' professional knowledge and its practice.

1.3 HYPOTHESES

The study was based on the following null hypotheses.

- 1 There is no significant difference between teachers' professional knowledge and its practice at secondary level.
- 2 There is no significant effect of environmental factors on teachers' professional knowledge and its practice at secondary level

- 3 There is no significant difference between difficulties and teachers Professional knowledge, its practice and implementation.
- 4 There is no significant difference between the views of working teachers and prospective teachers regarding teachers' professional knowledge and its practice.

1.4 SIGNIFICANCE OF THE STUDY

The study is very significant for all stakeholders in education including learners, teachers, educational authorities and policy makers. The teachers would be able to know about the importance of professional knowledge and its practice. The outcomes of the study would provide guidelines for policy makers to consider the professional knowledge of teachers and its practice. It will indicate new issues for future researches.

1.5 DELIMITATION OF THE STUDY

This study was delimited only to Northern University Nowshera (NUN) and boys Secondary Schools in the public sector of Khyber Pakhtunkhwa.

1.6 METHOD AND PROCEDURE

1.6.1 Population

All the 210 prospective teachers who were enrolled as students of B.Ed (130) and M.Ed (80) in Northern University Nowshera (NUN) and all the 18683 (SST) male working teachers at Secondary level of Government Schools in Khyber Pakhtunkhwa constituted the population of this study.

1.6.2 Sample

The samples of 105 prospective teachers from B.ED and M.ED classes of NUN and 600 working male secondary school teachers of Government schools from five Districts of Khyber Pakhtunkhwa were conveniently selected. The selected districts were, D.I.Khan, Hripur, Mardan Nowshera and

Swabi.

1.6.3 Research Instrument

As the study was descriptive in nature therefore three points questionnaires were used to collect data from the samples.

1.6.4 Data Collection

The researcher visited Northern University Nowshera (NUN) and most of the Government Secondary Schools in the selected districts. While in some districts data were collected with the co-operation of other teachers. The entire data were collected from the five districts.

1.6.5 Analysis of Data

The data were analyzed by using chi-square in the light of the objectives of the study. For statistical treatment chi-square was applied.

REVIEW OF RELATED LITERATURE

The aim of this chapter is to throw light and highlight works that are related to the topic of the study which is ‘A Teachers’ Professional Knowledge and its Practice at Secondary Level. This chapter further provides arguments and evidences to reveal the significance of the topic. Furthermore, it will review all that literature which is somehow related to the topic.

In professional knowledge teachers know the subject matter and the method i.e. the way how to import inner self to students. The main aim of teachers is not only to teach but also to know how to teach i.e. polish manner of conveying ideas to the learners. Like all other activities education will be fruitful if teachers’ concentrate on professional knowledge and its practice and the fulfillment of respective responsibilities in this regard. Teachers have central position in the development of education. Therefore, professionally equipped teachers ensure best academic achievements for students.

2.1 WHAT IS EDUCATION?

In education there is dual process of taking experience and giving knowledge i.e. either we take it or give it. This process is done for the sake of learning. Self-awareness is a process in which we discover about personal potentials, faculties, dreams and desires. Generally education is the name of process in which an individual or community learns some habits, attitudes, behaviour, knowledge, and skills through the medium of teaching, and training etc. The process of change through education usually occurs individually as well collectively. Education in Pakistan is managed by the provincial governments while the federal government supports in curriculum development, official sanction and in the financing of educational research and

training. The article (25-A) of the constitution of the Islamic Republic of Pakistan binds the state to provide free mandatory education to children of the age group from five to sixteen. “The State shall provide free and compulsory education to all children of the age of five to sixteen years in such a manner as may be determined by law”.

The education system in Pakistan has two sub groups or types,

- (1) General academic education
- (2) Professional and technical education. Furthermore, academic education starts from primary up to Ph.D. General academic education has the following stages.
 - (i) Primary 1-5
 - (ii) Elementary 6-8
 - (iii) Secondary and Higher Secondary Education 9-12

After Secondary and Higher Secondary level, school examinations are conducted by Boards of Intermediate & Secondary Education for intermediate, i.e. Class-9 to Class-12, and then college and university programmes leading to higher degree (Blood,1994).

2.1.1 Primary Education

In general the starting age limit for kids in Primary school is from three to five years. But in some countries these primary schools have been divided further into minor and higher primary schools. Primary education is easily done by parents but they prefer schools for their children. The basic goal of primary education is to enable the kids to learn how to read, write and count i.e. mathematics. Kids are also given basic foundation of social sciences at this stage. Primary education is a transitional stage for secondary education. At primary level students remain under the charge of a single teacher for a whole year. This primary teacher is being helped and equipped by many other senior teachers. One teacher at primary level is very important for the

overall growth and development of the children. At primary level different types of physical punishments are inflicted. According to (Wang, 2013) in the western countries the punishment at this stage are not liked and have come under hot debate.

2.1.2 Elementary Education

The students after passing the primary exams got admission in elementary grade. The duration of elementary education in Pakistan is three years and three grades (Class- 6 to Class -8) are included. But the number of elementary schools in Pakistan is very low. This grade is sometimes included in primary grades and in this case the elementary grade or school is started from (class-1 to class-to 8) and most of the times this grade is included in secondary stage named as secondary or higher secondary grade included five grades (class-6 to class-10). To introduce the three tires system in Pakistan the elementary grade has been removed. For the evaluation of elementary level internal exams are conducted by school management. At elementary optional subjects like Art, Pashto, Theology, History, General Science, Drawing, Arabic with compulsory subjects are taught. In Khyber Pakhtunkhwa Elementary and Secondary education department is the largest department of provincial government accommodated 187795 employees which are the 42.9% of the total education employees. The proposed budget for the financial year 2015 -16 for elementary and secondary education has been estimated at Rs 88,274,000 million which makes up about 29.6% of the total current revenue expenditure (EMIS, 2015-16).

2.1.3 Secondary and Higher Secondary Education

The duration of secondary and higher Secondary education in Pakistan is four years and four grades (Class-9 to Class-12) are included. For the evaluation of secondary level education, the students have to pass an examination after 1 or 2 years conducted by BISE. At secondary level two types of subjects are offered i.e. Science

and Arts. Physics, Chemistry and Biology are included in Science subjects along with a set of compulsory subjects. Arts offer a variety of optional subjects with the inclusion of compulsory subjects. These optional subjects are, Pashto, Theology, History, General Science and Education etc. After going through the exams successfully, the students are awarded secondary school certificate. It is also called metric or matriculation certificate but it is a complete stage in itself. A parallel system also works with SSC which is called GCE i.e. 'O' level and 'A' level (Wang, 2013).

2.1.4 Higher Education

Higher education is provided in the degree awarding institutes like colleges and universities and it starts after the completion of secondary education stage. Vocational institutes are also included in this category although these institutes issue certificates not degrees. Higher education is a recognized sight and fact for the students should be achieved. The UN has recognized that higher education must be in the access of students according to their abilities and it has been stated in the article No.13 of the UN international covenant on Economics, Social and cultural rights 1966. Wang (2013) state that in 1950, the UN had bound all the members countries to provide the guarantee of higher education is right for their citizens. Higher education is the third stage of the sequence of education and it is a transitional stage from secondary and post secondary education. It has the under graduate, post graduate and vocational training levels. Colleges and universities are responsible for the higher education. The degrees, certificates and diploma are awarded to students after the successful completion of higher education by concerned degree awarding institutes. In higher education teaching, research work and practical work along with medical and social subjects are included. Teaching consists of both the levels undergraduate and graduate in higher education. Graduate school's term is used for graduate level

especially in the areas of North America. In most of the developed countries, the highest number of students gets higher education. Higher education is the back bone of human development and growth. The college graduates are fruitful and useful not only for their own countries but also for the international community in the long run. In the United Kingdom, there are two main kinds of higher education one is academic and the other is vocational. While in America and Canada, the post secondary institutes award associate bachelors, masters and even Ph .D degrees in all the areas of excellence in education. Some institutes award particular certificates for particular study areas but this is not the basic role of these institutes. Tertiary education is considered the post-secondary education in America and Canada. In Pakistan, higher education starts after the completion of 12 years schooling i.e. H.S.S.C or intermediate stage. HEC (Higher Education Commission) looks after these awarding institutes in Pakistan. All the areas concerning higher education in Pakistan are looked after and monitored by HEC. In Pakistan degree awarding institutes have been recognized as public, military and private degree awarding institutes. The number of degree awarding institutes have been on the rise since the day of independence of Pakistan from the British Indian Empire till 2002, the higher education in Pakistan was looked after and monitored by UGC (University Grants Commission) now it is called HEC (Higher Education Commission).

2.2 TEACHING AND TEACHERS' PROFESSIONAL EDUCATION COURSES IN PAKISTAN

The sole purpose of professional education is to improve the overall performance and capacity of teachers. Variety in teaching degrees is there and this is up to the individual which degree he wants to avail. Degree/certificate regarding teaching is a kind of the permission for teaching. This license mainly covers the areas

of teaching methods etc. The further division of choice among these degrees/certificate also depends upon the individual teacher. Different institutes are in function for teacher's education and training.

Teaching is a holly profession. There are many designed courses for the teacher's training in Pakistan. This is the basic duty of the state to provide good training to teachers. For this purpose, different courses and workshops are being arranged regularly. This training is highly beneficial for both the teachers and students. These trainings are meant for the sharing of new and modern teaching methods. The importance of these trainings cannot be ignored and neglected. In Pakistan, the following degrees and certificates courses are offered;

2.2.1 PTC (Primary Teaching Certificate)

This is provided through the Government Colleges of Elementary Education (GCEE), and the distance education programmes of the Allama Iqbal Open University (AIOU) Islamabad. PTC course consists of two semesters of six months each having short term teaching practice in first semester while long term teaching practice in final semester. An internal system of evaluation of the theory papers undertaken during a semester. The final evaluation of practical teaching is made jointly by the head of the institution and two external examiners. The Primary Teaching Certificate (PTC) is awarded by the respective provincial educational department on the recommendation of the training institution at the end of a course that lasts one year. The same process is also adopted in AIOU Islamabad. This programme covers the students from first to fifth classes. It is included in primary and pre-primary education. It has the contents of professional skills and development of human beings. It focuses mainly on the teaching methods of a verity of subjects.

2.2.2 CT (Certificate in Teaching)

This is provided through the Government Colleges of Elementary Education (GCEE), and the distance education programmes of the Allama Iqbal Open University, (AIOU) Islamabad. For CT training the required qualification is BA/B.Sc degree. CT course also consists of two semesters of six months each having short term teaching practice in first semester while long term teaching practice in final semester. An internal system of evaluation of the theory papers undertaken during a semester. The final evaluation of practical teaching is made jointly by the head of the institution and two external examiners. The CT certificates are awarded by the respective provincial educational department on the recommendation of the training institution at the end of a course that lasts one year. The same process is also adopted in AIOU Islamabad.

This programme covers the teaching methods of class 6, 7 and 8. It also provides training of the teaching of various subjects like. Math, languages and science. In the Psychological areas, it covers the areas of child development, assessment of learning and curriculum development along with the technologies used in education.

2.2.3 B.Ed, M.Ed and Other Related Programs

These are degree level programmes and being offered by different universities of Pakistan. These degrees are also offered by different universities in their programmes of distance education. In spite of all these programmes there is a lot to be done for the improvement of these programmes. It means single-subject teaching degree. It trains the individuals to teach single subject to the students of Grade 9 to 10. One can choose a major subject of his/her choice which they intended to teach. This is called high school teacher education programme. Elementary Education certificate and Higher education degree have too many things common which are concerned

to the teaching methods. Both the degrees deal with multiple subjects and single subject.

2.2.4 Special Education Program

It focuses on a specific grade. In this programme teachers are trained to teach those students who have some impairment(s). As earlier mentioned, this special education certificate/degree covers the same areas as that of normal students. But this is obvious that teachers are trained for those students who have some physical/learning disability. In this programme all the things are specific and teachers are not only trained to teach the disable students but also to deal with their parents.

After these courses USAID recently started ADE (2 years) and B.Ed (Hons.) 4 year teachers training programs. In order to improve the teachers training level in Pakistan the new curriculum has been modified in these programs. These programs have been started initially in some colleges and it will be implemented in the whole country within short time. The Allama Iqbal Open University (AIOU) is also contributing in teachers training by means of distance education. It offers general teacher education programs like PTC, CT, B.Ed and M.Ed.

Generally the teachers training programs are of two types. It will be either pre-service or can be done during service. Looking to the present needs and demands of teacher's education, still there are inadequate teachers training programs in Pakistan. The curriculum of these programs is also not up to the mark and does not fulfill the present requirements of the day. Therefore, Government of Pakistan should give full attention to this area. Presently, the following general teachers training courses and programmes are offered in Pakistan.

- Primary Teaching Certificate (PTC) (1 year)
- Certificate of Teaching (CT Arts) (1 year)

- Associate's Degree in Education Program (ADE) {2 years}
- B.Ed (1 year)
- B.A B.Ed (2 years)
- B.Ed (Hons.) (4 years)
- B.S.Ed
- M.A M.Ed
- M.A Education
- M.Ed (Elementary/Secondary) (1 year)
- Arabic Teacher Training Course (ATTC)

2.3 TEACHER'S ROLE IN TEACHING

A teacher is a person who conveys or transfers knowledge to others. A teacher is a leader in the process of learning. A teacher uses time to convey knowledge that he already possess and is the one who makes the students achieve something. Now if effective teaching and learning is desired we need to have sound, peaceful competitive environment. It is helpful both for the teacher and learners. Therefore, a good classroom environment is only possible when a teacher possess the skill of classroom management. Classroom management involves effective planning. Skills that are requisite for a well manage classroom are group alerting and using the principle of least intervention and creating smooth shifts from one thing to another. An ideal teacher is supposed to be committed and dedicated to his work His personality and specifically his behaviour and attitude are significant in the achievements of students. According to Ellie, et al.(2012), teaching approach of a teacher that is friendly and just positively affects the behaviour and personality of learners. It boosts the confidence level of students to face any academic challenge.

Teacher is a professional who needs to know the art of communication.

Spiegel (2005), states that discussion in class has proved vital for learning. Everyone knows the significance of communication and due to this it is considered a substantial element of both teaching and learning. Discussion allows us to express ourselves and explore other. Through discussion we achieve certain pre-set targets or objectives. Similarly, the behaviour of learners is also shaped as desired through discussion. This can be practiced both in small and large groups. He must be sharp understanding others quickly. And he must learn from experiences. He should have the ability to facilitate learning. It is a well known fact that education plays a pivotal role in the moral, social, cultural, political and socio-economic development of a nation. The nations which have taken major initiatives have made revolutionary advances and have performed miracles in the last couple of decades. No doubt this great achievement is based on their effective education system (Ahmad, 2001). It is proved that education decides the prosperity of a country. If a country wants to survive, she needs to have standard education system (Saeed, 2001).

In a study conducted by the Government of Punjab in (1998), it says that education system particularly teachers bring qualitative change and raise the standard of education. It gives welfare, prosperity and opportunities to people. Therefore, good professionals of teaching are required. These teachers need training and guidance both academically and professionally. If we wish to have an ideal society, we have to make suitable changes in the current education system. Therefore, a teacher is more able to make it possible. If teachers or instructors are well equipped and well trained and have effective behaviour, the education institutions will achieve its objectives successfully. Anwar (1998) says that the patron or head of an educational institute improves the quality and standard of both teachers and students with his/her effective behaviour. Professional and interpersonal skill is keys for teachers to be effective in

their classrooms in term of student's behaviour, attitudes and achievements. A person possesses several attitudes changing according to the circumstances or situation she is going through. Luthans (1993) says that professional attitude serves in different valuable ways, and possessing the knowledge of these professional attitudes can serve a lot.

We all know that there is interaction between a teacher and student when a formal learning is taking place. Muntner (2008) stated that every day instructors made numbers of choices and initiated or assisted scores of interaction between learners and their teachers. For such interaction, a teacher needs to be skilled pedagogically which has four main steps. They are:

(a)Structure (b)Question (c)Respond (d)React

In a formal leaning situation all of these four steps should give a guideline to the learner what they are going to learn. As a researcher a teacher asks question as his tools to analyse the learning level of his\her pupils. Questions should be of such sort that they encourage or motivate learners. To get learners response, a teacher must wait for a couple of minutes. Then there is a question of teachers' way of reaction. How teachers are supposed to respond\react to the answer of the learners. It is that a teacher must respond by either praising, correcting or criticizing. Following are the four models that lead for high student's achievements are:

- (i) Direct teaching.
- (ii) Cooperative learning.
- (iii) Mastery learning.
- (iv) Project bases instruction.

There are some principles for direct teaching. One of them is the daily review of new lessons in a comprehensible manner. The second is guided practice, third is

teacher feedback, fourth is independent practice and fifth is weekly or monthly review. Moreover, cooperative learning which is that students should work in pairs and in small groups, and thus is rewarded on the performance of the group. Then we have mastery learning teaching method which includes certain objective and goal which are highlighted in the assessment. Usually students of different levels work in different ways and approaches with varying pace. They only move on to new or next things when they have completely learnt or picked the previous thing. Here the role of teachers is significant or key in the presentation of contents he possesses. Similarly the teachers play central role in project based instruction by stimulating students to explore serious issues. Student often cross the boundaries of traditional subjects limit by investigating real life issues and they express that they have learnt all these. In instruction, a teacher is required to have two basic skills which are; a) Speaking b) Interpersonal skill. These skills make the teachers able to develop the elements of confidence in students as well as motivate the learners to work on their own. If a teacher aspires to become an ideal teacher, he needs to be master of either or both the skills.

It is very essential to investigate and analyse the characteristics of a teacher conduct with learners, his skills, his knowledge and their impacts on the academic goals on the secondary school students in Pakistan. Iqbal (1996) states that teaching is the management and judgment of situations in which there are shortcomings on the part of the learner who tries to overcome the shortcomings which we call learning. Teaching is a procedure in which there is a friendly interaction between a teacher and the learner. In the process, the teacher is the learned person who conveys knowledge to a person who does not possess the knowledge furthermore; he has characterized teaching as an activity achieving intellect on basis of which we judge or assess the

learning. Similarly, he states that the effectiveness of instruction depends upon the behaviour and role of a teacher. Taking advantages from today's modern resources of educational devices and method, a teacher becomes fully involved in the implementation of new educational methods and procedures. In the instructional process the teachers should play role of an educator, researcher, developer, adopter, implementer, guide or counselor and mentor for the development of students' abilities, motivation, interest, confidence and achievements.

- In instruction, the teachers need to dedicate or allocate more time to involve learners in curricular and co-curricular activities.
- Teachers must know their role as citizens in society and as professionals in the institution he works. They should be given the opportunity of contribution to society as they are considered agents of change and development.
- The teacher's should be innovative, designer of curriculum and creator of learning background. He should take certain efforts helping to change the moods of students.

The role of teachers as supervisors was recommended by the UNESCO (1975). The recommendation states that teachers and administrators/management of all levels should be aware of the role they play in the educational context today. The recommendations suggest that the teachers should be aware that their roles and behaviour must not be fixed. They must be adapted according to the changes taking place both in society and in education system.

Mouly (1988) states that the role of teachers can be categorized in three parts, which are:

- (a) Academic functions
- (b) Professional functions

(c) Social functions

For effective learning, teachers improve the conditions says Ogwezi and Wolomsky (1985). They are:

- Guides learners to become aware of his or her problem areas in learning.
- Assists learners to develop self confidence necessary for learning.
- Enables learners to develop new interests and explore natural tendencies in them adds to the current understanding of learners.
- To help the learning become effective, he uses locally made A.V aids to support what he is trying to demonstrate.

The role of teacher's is central to education as described by Gupta, (1996).

Teachers must transfer cultural heritage of the learners' society which includes skills, knowledge, customs, social norms, attitudes which are acquired in many years. They must try to develop the element of adaptability in learners as world is rapidly changing. The effective teacher must possess the ability to motivate students for learning. He must be conscious about the student interests and ambitions or aspirations and their needs and make learning useful not only for the objective of course but clarify the students' concepts (Conant, 1993). Wright (1987) says the basic function of instructors is motivating the demotivated students, and to train those learners which are already motivated to acquire knowledge. To achieve this, there are numbers of approaches which a teacher can adopt.

- Showing positive behaviour towards the learners.
- Assigning learner useful, interesting and meaningful task to perform.
- Exhibiting self motivation and interest.
- Indulging learners playfully in classroom activities
- Highlighting success.

The way one teaches in class directly affects the quality of education. A teacher is an agent that is best to implement a new policy or methodology. Therefore, a teacher needs to be aware of the subject matter. He must have the competence and skills and exhibit enough commitment to perform the task of teaching effectively. All of these qualities are significant in effective teaching and learning process. Programmes of different levels and objectives should be arranged to face the downfall of the quality of education. Keeping in mind the policy of “education for all” we need to assure quality along quantity to face the growing numbers. However, it is very unfortunate that nothing has been done to assure the quality of education. Indeed a great number of teachers are hired every year judging them without teaching capabilities. Their knowledge about teaching contents and methodologies are never really given importance. Still teachers are an important element of the teaching learning mechanism. To bring improvements in education, the status of the teaching profession needs to be reformed. This should be done in order to attract respectable and highly qualified individuals. Moreover, advance level of professional trainings are highly inevitable if we are to think of bringing positive changes in education. The advancement of a country is only ensured if it has people who are highly qualified and wise. To have such citizens only efficient institutions run by efficient teachers and administration can guarantee this. Furthermore, this is only possible if proper libraries, laboratories and appropriate environment is provided. As everyone knows that scientific knowledge has embraced many advancements, research has also grown as an important element. And to conduct researches one must be a Ph.D scholar (Govt. of Pakistan., 1998).

2.4 PERSONALITY AND EFFECTIVENESS OF TEACHERS

The duty of a researchers’ especially in education is to highlight good

teachers' qualities and other characteristics that win them distinctive awards. There are qualities and characteristics that highlight the efficient teachers'.

- They usually mention their interest in children and consider the process of their development or cause for opting teaching profession.
- They show liking of qualities such as friendliness, permissiveness, simplicity and justice in teachers.
- They do not like in instructors qualities like pride, injustice and intolerance.
- They generally express their generosity in accepting other and giving appraisal similarity, they point out good traits rather than bad in others.
- They show that they are proud and satisfied with their profession and salaries and intend to continue teaching.
- They usually took on the role of a teacher when a teacher was absent.
- They would enjoy being in school when they were students.
- They demonstrated distinctive achievements in school.
- They remain in contact with most of the teachers and learners' parents.
- They take part in religious ceremonies and other activities.
- They enjoy activities with colleagues but prefer small groups.
- They indulge themselves in literacy programmes such as writing books and poetry.
- Generally they are emotionally stronger than usual adults.
- They are more generous in helping others.
- Being teachers, they try to give positive and compelling impression than other common adults.

A good teacher is usually a successful individual of society, a good parent and ultimately a good human being. He is a valuable asset both on the social and national

level. He is simple, truthful and honest. He is mild affable and never feels uncomfortable in the company of others. The element of flexibility is very important for good teacher. Therefore flexibility is the most used adjective to describe good teachers. If it is implicit or explicit flexibility, mostly the later one is a characteristic that we come across when good teaching is discussed. In research considering the multiple and different needs of different students, a teacher needs to approach accordingly. Good teachers are like a complete package that helps you or guide you whenever you need something. That is why they are more capable to be adoptable according to the needs, demand of the time and situation. They are more skilled to change themselves according to the changing world around them and fulfill the changing needs both of his students and as well as himself. A standard and universal table consisting qualities of a good teacher is not necessary. There are numbers of books, article and magazines that have extensively discussed this subject.

- 1 Mild expression of kindness, humor and inclined to maintain the class actively.
- 2 Interested in pupil's development, generous in helping others when need help, eager to motivate or encourage the current level of zeal or enthusiasm of students
- 3 A good teacher is one who simplifies the difficult parts of lesson which was not understood. He does not feel bothered by the faults of pupils and always welcome pupils who ask question or feel difficulties anywhere in his subject.
- 4 Cautious, conscious and express mildness towards students' questions and in their company.
- 5 One who does not express like or dislike for an individual.
- 6 Follow rules and principles but with flexibility.

2.5 MAJOR FEATURES/ CHARACTERISTICS OF AN EFFECTIVE TEACHER

Sybouts, (1994) says that effective teachers focus upon five key areas. These key areas are based on the criteria of teacher's effectiveness. They are

- 1 Clearly stating the mission of institution
- 2 Managing curriculum and instruction
- 3 Promoting the patronizing of instruction
- 4 Giving the supervision of instruction
- 5 Have the ability of the assessment of instructional programmes.

Sybouts (1994) suggested the following criteria for effective institutions based research.

- Well and orderly environment and suitable climate, pivotal role in teaching and learning and are symbol of effective institution.
- The environment is full of expectation of success. In such situations, all the staff believes in their abilities and possesses the conviction that all student can learn. The principal plays the role of an instructional leader in an effective institution. He or she further communicates that leadership role to his staff, student and their parents.
- A clear and focused mission is the real goal or objective of effective institution. The staff fully demonstrates that they are eagerly working to fulfill the responsibility and achieve the objectives of the institution. Making the students or gain the basic skills is the fundamental objective of an affective institution.
- Effective institution must know the importance of providing opportunities to students for learning and providing enough time to be instructed.

A regular measurement of learner's academic progress is a symbol of an effective institution. There are various methods to measure or assess the progress of

students. These assessments are carried out to improve students' individual progress. They are helpful in adding to the current instructional programmes. Reasonable communication and relation with learners' homes is a clear indication of an effective institution. Parents entertain the school initiatives about their children. They support, appreciate and give feedback to help the institution further improve. A teacher's behaviour which is not effective directly affects the desired progress of students. This very behaviour is just like laissez fair based supervision or administration. In such situation the patron or leader is adamant to achieve the objectives of an organization. They are not willing to take risks for the improvement of organization and are adamant to give or take some new idea for the variety of change in the organization. Students are not satisfied with teachers when the results of learner are not up to the expectation of the institution. Students are not satisfied with the performance of the institution and thus at this stage one can suspect that there is some ineffective behaviour. None of the principals, teachers and other staff members to achieve the desired goal of the organization. Personnel whose attitude is not responsible towards the organization. Their work is called ineffective behaviour. In such circumstances performance of the learners cannot be appreciated. Therefore, when an organization cannot make sure the achievement of objectives. It is worsly affected and is only due to ineffective behaviour. If such environment or situation continues to grow for long time, leader as well as the remaining staff members will become sluggish and will be adamant to shoulder responsibility. Such an attitude is not sincere or honest with institutional or organizational goals. Ineffective behaviour in the organization is the direct result of pessimism (Sadker, 1997).

There are scores of characteristics associated with efficient teaching and teachers. They are;

- 1 Have maximum command over the subject he is assigned to teach.
- 2 Give maximum consideration to students.
- 3 Reliable
- 4 Just
- 5 Disciplined
- 6 Active
- 7 Trustworthy
- 8 Counselor
- 9 Organized
- 10 Well wisher of students
- 11 Well orator
- 12 Enthusiastic
- 13 Master Presenter
- 14 Timely
- 15 Open and welcoming to guiding
- 16 Able to keep students focused on his presentation
- 17 Well coming of students questions
- 18 Sensible of classroom environment
- 19 A strong intellectual
- 20 Tidy and having likeable conduct
- 21 Giving equal attention to every student
- 22 Bold and confident
- 23 Devoted to his subject
- 24 Dedicated to his profession
- 25 Will be knowing about communication skills

- 26 Initiator
- 27 Unfazed by personal criticism
- 28 Having emotionally strong personality
- 29 Honest
- 30 Sincere
- 31 Spiritual
- 32 Gracious
- 33 The owner of aesthetic sense
- 34 The owner of a fascinating voice
- 35 Cordial
- 36 Courtesy
- 37 Skilled to spur both speedy and slow learners
- 38 Must exhibit more information than text books
- 39 Facilitator
- 40 Entrepreneur
- 41 Affable
- 42 Productive
- 43 Interactive

2.6 RESPONSIBILITIES OF TEACHERS

A teacher can efficiently mould or change the views or opinions of his pupils. The people give respect to teacher who performs their duty honestly and justly. People who look for opportunities that allow them grow personally consider career in the profession of teaching (Smith,1994). People those adopt the profession of teaching mould or adopt themselves according to the needs and demands of teaching. A teacher is constantly observed by learners and by community in which he teaches. Therefore,

a teacher should carefully consider the scrutiny of learners and observers. A nation's ideology which is generally pre-determined should be transferred somehow to learners by the teachers. The profession of teaching, further, demands that an ideal teacher should be active, calm, co-operative, initiator, creative, innovative and best commenter. Generally a teacher should

- A teacher must keep himself up to date both by study and research.
- A teacher must communicate his view confidently by participating in professional gathering towards the contribution of knowledge.
- Try to actively participate in professional organization for the improvement of education and development of profession. Perform their function dutifully devotedly and honestly.
- Actively take part in curricular and co- curricular activities and as well as in social work.
- Give freedom to learner to express their opinion and view and also give it respect.
- To cope with individual differences of learners a teacher should and must be able to identify them.
- Motivate learners to explore and develop their personalities that contribute to the development and welfare of their respective community.
- Be loving and not behaving irrationally towards any of the students.
- Should be available any time to help, guide or counsel learners if needed.
- Should respect decisions of other professionals and ask them for the assistance when needed.

Effective Teachers

- a) Must be able to clearly and variedly present
- b) Provide positive feedback

- c) Focuses on the instruction of academic contents
- d) Fully engage learners in academic activities for most of the class time
- e) Classroom should be organized in a way that helps in learning
- f) Follow or implement rules and regulations of class
- g) Following rationally and teaching principles in teaching contents

2.7 FEATURES/ CHARACTERISTICS OF GOOD TEACHING

A few important aspects of good teaching are as following:

- 1 Slow and steady presentation
- 2 Paying full-fledge/due attention to all the students individually.
- 3 The voice of the teacher should be audible enough for the whole class.
- 4 Proper use of A.V aids according to the context.
- 5 The teacher should effectively evaluate the progress of the students.
- 6 The teacher should be creative in teaching
- 7 Systematic presentation.
- 8 The teacher should motivate the students in such a way that he gets proper feedback from the students.
- 9 The teaching method should be effective
 - (a) in illustrating
 - (b) in using motivating techniques
 - (c) in encouraging the students for asking/posing questions
 - (d) in using chalkboard and other A.V aids
 - (e) in involving reinforcement which contribute to development of the students.
- 10 Teaching method should motivate the students for discussion and asking questions.

- 11 The teacher should teach with great fervor and enthusiasm.
- 12 The teacher should be innovative
- 13 Lecture should be based on solid arguments
- 14 Teaching should be properly planned
- 15 Teaching should be cooperative
- 16 Relevant explanation
- 17 Sense based teaching
- 18 Teaching method should lay great stress on learning process
- 19 The students should be treated affectionately
- 20 Effective teaching should use:
 - (a) suitable examples for illustration
 - (b) teaching methodology should be contextual
 - (c) teaching methodology should include proper use of A.V aids
 - (e) teaching methodology should involve real situation
- 21 Teacher should use multiple styles of presentation to evaluate the works of students

2.8 NEED OF CLASSROOM MANAGEMENT FOR EFFECTIVE TEACHING

Classroom management involves teacher and student. The teacher's behaviour and different activities create the sense of co-operation and participation among the students. Emmer (1987) says that actual teacher not only knows his subject but also knows about the actual classroom situation. He knows how to deal with the classroom situation and creates a positive environment for learning. An influential teacher is very dexterous and skilled. He knows each and every thing about his students. The different understandings essential for teachers are,

- Proof for getting enlisted
- Willingness to work
- Academic excellence
- Reaction to the traits of teachers
- Sense of facing the challenges and decisions making power
- Sound in healthy look and condition

There are two groups of students who are in need of the attention of their teachers

- i. Learners showing low level of desires
- ii. Learners showing high level of desires

The first groups of learners show such features of their personality i.e. they do not show full attention to their work, they show carelessness and they are not fully independent but all the time they are in search of support. The second group of learners is aggressive, strolling in the class room; makers of noise and rubbing all the time. This behaviour of the students may also be due to domestic way of life, social, political factors and fast experience of schooling. These are the factors which are directly connected with the behaviours of students.

2.8.1 Result Oriented Strategies for Classroom Management

There are different techniques of classroom management. These techniques are needed to be carefully dealt by the teachers. These techniques may have opposite effects in different set ups. According to Bridgett (2008), a teacher must know different strategies to handle different situations in class. He must be equipped with tricks to handle minor issues. A teacher if master of classroom handling techniques can even handle major problems such as physical fights or other disciplinary major issues.

2.8.1.1 Knowledge of students and their family back ground

Effective teachers own their students and they know each and every thing about their students. They know not only about their curricular but also about their co-curricular excellence and attachment. Knowing the names of students is very much important for teachers as it helps a lot in controlling the classroom situation because when a student is called by name, he feels honored and does not annoy his teacher. The teachers, who have contacts with the family members of the students, can control the students very easily and effectively.

2.8.1.2 Knowing subject content

The effective teachers have full control on their subjects and they know their subjects very well. The students also show full respect to the knowledge of their teachers. In the classroom of such teachers, students do not mar the peaceful atmosphere of learning. So, all the teachers must add a lot to their treasure of knowledge.

2.8.1.3 Appropriate teaching methods

The proper teaching method keeps the environment and atmosphere of the classroom peaceful. If a proper method of teaching is used then naturally students show their full interest. Students create problems and troubles inside the classroom due to improper method of teaching. The teachers must use A.V aids in their teaching so that their teaching may be effective and life like. In the best method of teaching, the students are fully involved and the teachers are just like the managers who manage the situation. According to Dawes (2012) discussion in classroom is one of the best tricks to handle trouble creating learners. It does not just do this. The main aim of classroom discussion in class is to increase the confidence level of learners to interact or express. It is also used to entertain learner when they are bored with routine lessons or lectures.

2.8.1.4 Teachers' observation

A teacher should be capable enough to observe his or her students rigorously. A teacher does not express or let student know that they are observed. He does it in a casual way. He is skillful to detect what is happening and what is going to happen. This is an essential quality for all teachers and this quality must be possessed by all the teachers as it is a key to control the class i.e. students. But some of the teachers do not feel the intensity of this technique. Mohanty (1989) reported about the observation of an English language class. The teacher took the class for 40 minutes but what did was only reading. What he did not do? He did not look at the students. He did not even talk with the students. This was a lifeless class and such a class students never take interest.

2.8.1.5 Focusing attention

This is up to the teacher whether he focuses his attention on students or not. Attention focusing and keen observation are synonymous words. The students who behave in such away which does not become danger or threat to someone else may be ignored. Too much focusing on such issues will mar the very teaching purpose. If there is murmuring among the students or chance of talking, these may be ignored. This is up to the teacher whether to interfere in such situation or not. Both the behaviours i.e. negative and positive must be taken and dealt. When the majority of the students are disturbed by negative behaviour then that should be halted. The teachers must be tactful in re-bringing the students back to the learning environment after the pause when he was controlling the situation created by the negative behaviour of some students. According to Melissa (2013) a teacher comes across different problems created by learners in class. He must be aware of all as soon as

possible. Problems should be solved at the very early stage in order to avoid major unrest. This can also be aided by the views and opinions of the learners.

2.8.1.6 Proper use of punishment and reward.

Desirable behaviours are applauded by giving proper rewards while the undesired behaviours are controlled with the help of punishment. So punishment may create resistance and uneasiness among the students and may lead towards negative reaction against them. Therefore, praise and scold both go side by side for the good and bad behaviours of the mischief-makers. Rewards may motivate the students and lead them towards the exhibition of better behaviours. Some times in this connection, the teacher may have a guidance and counseling session with the students or may contact their parents. This is done for the sole purpose of guiding the students towards positive behaviours. Reward and punishment are the tools which are to be used by the teachers intelligently. The punishment must be inflicted only for the realization of mistake otherwise no need for punishment.

2.8.1.7 Proper Use of humour

Use of appropriate humour is also very much helpful in controlling the inside situation of classrooms. It develops the relationship between teacher and students. It also increases the motivational level of students and brings an end to tension. The students are relaxed with the help of humour in class. It also decreases the gaps between learners and teachers. They confidently explore the personality of their teachers.

2.8.1.8 Questions i.e. use of questions

Questions make the students attentive. The students are also engaged in asking questions. The skilled teachers ask different questions in various manners and by doing this, he makes his lesson interesting and the students start taking interest in

the lesson. Some-times the questions is asked from the whole class and then a student is selected to answer the questions. This is also a common practice that a student is selected first and then the question is put. The teacher has to decide about the questioning process inside the class. These questions are normally asked only for feedback and feedback is always there for the improvement

2.8.1.9 Touchy to students' response

The actual teacher is all the time careful about the answers of his questions by students. Correct responses are applauded and exalted by the teachers not only through words but also by his facial expressions in gestures. If the students are not interested in the setting of the teaching method for the time being, the teacher must modify that teaching method right at that time but students must not be bored or depressed.

2.8.1.10 Honest in dealing

Fairness is a very important trait of teachers' personality. Such teachers are not biased. Such teachers do not believe in making the students their pets. By doing so they create the atmosphere of uneasiness among the rest of the students and the inside situation of the class is no more pleasant and friendly.

2.8.1.11 Democratic approach

This approach brings harmony among the students and they are controlled very easily. Good teachers always take their students into confidence regarding the study scheme and other activities inside the class. Teaching strategies are also discussed with the students. Different students are also involved in teaching according to their levels of ability. They also take their advices for the maintenance of proper class room environment. Efficient teacher are the ones who are consistent and firm in taking actions or decisions. They calmly handle situation.

2.9 THE FUNCTION OF TEACHERS AND TEACHING

There are certain pre-requisite requirements which have great impact on the development and professional growth of teachers. They are requirements, practice standards and methods of assessment. According to Brown, et al (1993) teaching is basically a human effort that involves interaction between teacher and student. Generally every human is a teacher in one way or the other. In our usual lives we communicate with people and every time we communicate, we try to transfer a particular message or messages. At times we also find ourselves in positions in which we try to transfer some skills or compel people to do things that we want them to do in particular. In informal situations the term “teacher” is the name of a person who personally has a set of information or knowledge, skills, or beliefs which he wishes to share with other after making the judgment that sharing the knowledge with others would be beneficial and appropriate for others. To perform such a role, it always depends upon the place, time or circumstances. No teacher or person can claim himself or herself as a complete teacher. This is because numerous changes are taking place both in teaching and learning that it is almost impossible to keep one fully perfect and updated with the current trends and needs. Goble and James (1997) state that to transfer knowledge or skills to learners, teacher always organize knowledge or skills that he already possess in a fashion that it becomes easy for the learners to pick or understand it. Effective teaching can ensure numbers of new opportunities in life especially for young people. However, effective teaching can never guarantee the remedies for problems related to drug addictions, injustice, poverty, economic recession and other social conditions. A teacher is always a responsible professional who is held accountable by different judgments of public, parents, local government, state government and business community. Teaching is not an ordinary and simple

profession rather it is very significant, worthy, respected and valuable. Teaching enables an individual to explore the hidden potential in young learner and makes it valuable. Teaching is considered a distinct profession these day like any other profession. Teachers are privileged to have professional knowledge, independence to do their works and follow code of ethics. Like any other professional, a teacher performs a social function which is to teach that is entirely dependent on intellect. A teacher is given respect because of his profession and the values attached to it. An individual is not considered a teacher unless he is trained to teach or is taught the skills required for teaching.

2.10 KNOWLEDGE AND PROFESSIONAL KNOWLEDGE

Professional knowledge helps in the improvement of the teaching methodologies of all those subjects which are thought by teachers. This also helps in the understanding of students' psychology. The teachers get knowledge about the contents they teach to students. According to Birman, et al (2000) the basic knowledge and qualification at least increases the treasure of teachers' knowledge regarding their field of interest and excellence. The teachers training programmes normally covers the contents, teaching methods and teaching practices. But in the area of pedagogy a lot is to be done yet. The answers of the following questions establish the contents of professional knowledge. These questions are:

- (i) What is meant by pedagogical and instructional role of a teacher?
- (ii) What is the basic and required qualification for a teacher?

Shulman, (1986) says that the following steps and stages establish the parameter of pedagogical thinking and practical action.

- a) Comprehension and having full understanding.
- b) Moulding and re-bringing into another positive shape and form.

- c) Teaching / instructing
- d) Appraisal/Evaluation/ to fix the value.
- e) Response/Rebound/ feedback.
- f) Thinking capacity on the part of teachers to deal with the above mentioned points and areas.

Shulman (1986) further clarifies that professional knowledge is in need of the refined contents and curriculum background studies. The personal field of interest of teachers and the prevailing conditions directly or indirectly affect the teachers. But there are too many other fields of expertise which are to be explored and learnt as a prerequisite by the teachers.

According to Maijer, et al (1999) the professional Knowledge covers the following areas:

2.10.1 Knowledge of Subject

For the knowledge of subject the teachers must be aware of the social conditions and principles which are related to the subject being taught. Its value should also be checked and tested in the light of every day situation, Kennedy (1990). According to Shulman (1987) the teachers must also go in depth to find out the misconception of the students regarding the subject being taught. Furthermore, the teachers must devise ways and means for the teaching/ learning of such skills which are related to the subject being taught. Ernest (1989) says that teachers must have the knowledge of all subjects of the grade, they teach. Due to this added knowledge of the subjects' refreshes their teaching methods and then they are in better position to use different teaching aids and tools in their teaching. Furthermore, teachers must have a developed liking for the subjects they teach. This belief on the part of teachers really pushes the teaching process of the subject towards excellence Askew,et al (1997).

According to Turner-Bisset (2001) that holistic approach in teaching makes the teaching vary effective.

2.10.2 Knowledge of Students (Learners)

This is basically related to the psychology of students the teachers must know about the different needs and demands of their students. These needs and demands cater all those areas which are related to the student's biological, psychological, cognitive and societal needs. Furthermore, all those issues which are brought under the umbrella of behaviour, motivation, adjustment etc are the basic components of the students knowledge and the teachers must look into them. A class consists of a number of students who belong to different social and economical backgrounds. Their upbringing is not same. Therefore, a teacher must know the attitude, behaviour, choices, ambitions, or shortly the character of his/her learners. It will not only help him in handling the class but will be a lot better for learners as they are treated according to the traits they have in their personalities says, Brookfield (2006).

2.10.3 Methods of Teaching

Knowledge of teaching method is a pre-requisite qualification for a teacher. Teaching methods help in the proper presentation of the teaching / learning process. Teaching method includes the following

a) Lesson-planning i.e. this is a teachers' pre-teaching activities, these activities are:

- organization of the contents being taught
- moulding of contents into the teachable materials
- working for the achievement of teaching goals
- The selection of the evaluation process for the contents to be taught .

Lesson planning may be weekly and unit based. Weekly and unit based lesson

planning is for the short term while lesson planning for long terms teaching performance.

- b) It embodies in it all those steps and aids which are necessary for effective teaching. It involves too many things regarding teaching.
- c) The evaluation of teaching methods.

After the completion of the lesson the students' assessment tells about the evaluation. The evaluation not only tells about the achievement of learning objectives but also the teaching achievements.

2.10.4 Curriculum Knowledge

Curriculum is a tool which helps the teacher in their teaching. Therefore, it is very important for the teachers to have knowledge about the curriculum contents and system of education and its roles Shulman (1986). However, in this regard, the teachers must also cater for the needs and demands of society while teaching. Bayview (2013) says to provide the demands of learners a program known as curriculum compacting is designed. It guarantees a proper training to those who are mastered in particular subjects. Their score or level of intelligence is measured through tests or assessments.

2.10.5 G.P.K (General Pedagogical Knowledge)

It deals with the organization of all those learning and teaching theories which directly or indirectly affects the students' motivational level and interest for learning more and more. This also refers to the knowledge of some particular subjects, Shulman (1986). This knowledge on the part of teachers makes their job very easy and they easily conduct all those activities which are helpful for the students in the class room environment. According to Ernest (1989) this knowledge is very much necessary for the teachers and their orientation of the lesson and other classroom

activities.

2.10.6 Knowledge of Contexts

The teachers are required to go for the appraisal of the contexts in which they teach and act according to the demands and needs of their surroundings and affecting conditions. It is allowed by the researchers and other experts in the field that the teachers should go for some modification and refinements in the contents keeping in view the different context of their surroundings. Knowledge of contexts in the real words is the knowledge of those conditions and surroundings in which the teachers work. It also embodies in itself the whole demographic background and knowledge of the country, state and even locality. It also touches the very history and philosophy of the prevailing situation.

2.10.7 Knowledge of “Self”

According to kagan (1992) the knowledge of “self” determines the very way of teachers’ role in the imparting of education. The knowledge of self covers all the areas of teachers’ professional practices and actions i.e. responsibilities, training and other related and necessary qualifications and skills.

2.11 TEACHERS’ PROFESSIONALISM AND PRACTICE

Professionalism is a distinguishing feature of an individual in an occupation. It also means some special skills in a field of knowledge and specialization. This is the application of knowledge of an individual. On the part of a teacher this is very much necessary as it sets a climate for proper teaching and learning. It helps the teacher in the evaluation of proper teaching. The teacher becomes more communicative and he/she is able to create a proper environment for learning. Professional knowledge polishes and refines the teachers’ proficiency and efficiency. The background study of the professional knowledge makes it clear that it is a main agent in bringing the

positive reforms in education. Teacher is a highly honored personality in society and his profession is considered the holy one and the sacred one. Now a day the teachers' profession needs a lot of care due to various conditions. The role of teachers has also been recognized globally. According to Bredeson, (2002) that the proper definition of the teacher professional knowledge is yet to be finalized. As there is a flux of definition of teachers' professional Knowledge, Bredeson (2002) says that there are too many terms and areas of the professional knowledge of teachers' i.e.in service developments of staff, regular growth in education, training and the improvement of teachers.

According to the Guskey and Huberman (1995) the professional knowledge can be overviewed and perceived with different perspectives and angles as these have their own separate and distinct features. This professional knowledge is like CPG i.e. (Continuous Professional Growth) Bolam (2002). Gabriel, Day, and Allington (2011) are of the view that professional knowledge covers both the areas of education i.e. formal and informal. Hawley and Villie (1999) say that for the increase and improvement of the teachers' professional knowledge, the highly qualified and sober teachers must be engaged and hired only then the professional knowledge will be helpful. Researchers say that professional knowledge is a catalyst for bringing any education reforms on long term base, Desimone (2009). The same view has been supported and applauded by Fullan and Mascal (2002) they are on the view that this professional knowledge keeps up all those who are held responsible the overall function of teaching and learning. In the perspective of American education, according to Birman, Desimone, and Garret (2000) professional knowledge helps in the consolidation of education and changes take place in it. Not only teachers gain a lot from the training in professional knowledge but also the programmes of education

gets benefits from it. Guskey (2002) says that some of the teachers are of the view that it is a burden on them and it should not be there. This is a common belief throughout the world that teachers resist change and they remain like static water. But when the teachers attend such a programme regarding their development, their outlook is completely changed. As many teachers are also of the view that these programmes are not related to their job description and premises Guskey (2000). These programmes and training sessions are normally conducted by those professional and consultants who are hired and main purpose behind this is the professional development of the teachers. This is also recommended that such programmes must be evaluated regularly and researches must be conducted regularly in this regard. It is hoped that the money spent on such programmes will bear fruits in the shape of quality education for the citizens. However, the present research does not concern with the expenses and their justification or with the benefits the teachers may get from it. But the main pushing agent behind all this is to see those basic reasons which lead the authorities towards the conduction of such developmental programmes. But this research study has been designed to see all those everlasting changes and benefits teachers gain from these programmes.

According to Fishman et al (2003) professional developmental programmes will bring a positive change in the extrinsic behaviour of the teachers and they will move towards a better and effective teaching model and practice. According to Buczynski and Hansen (2010) that successful teachers must bring into practice their professional experiences and knowledge. The present research study will also see to those elements which arouse or suppress their level of commitment/devotion and willingness to work for bringing positive change in their procedure of teaching. Furthermore, the consistency in these changes will also be evaluated.

2.12 TEACHER AS PROFESSIONAL AND TEACHING AS PROFESSIONALISM

Cardno (2005) stresses on the professional development of teachers as it is very much important for the consistency in the performance. Boyle and while (2004) reinforce this point further and say that continuous professional growth of teachers enhance their level of professionalism and teaching skills. Professional development of teachers must be based on ground realities and practices. Goodson (1997) say that the basic function of such development is the improvement. He further states that such programmes must be research and practice based. This study of professionalism has improved the teaching practices. According to Dean (1991) "Profession" means an enterprise which needs long training based upon the ground theory and reality and it has its own codification. It further elaborates that it is only to improve the teaching practice of the teacher. So opportunities of training for the continues professional growth to the teachers must be provided on regular basis so that they may be familiar with the new and modern trends in the field. According to Dean (1991) this is essential for the teachers to avail the opportunities of training on regular basis throughout their careers as this is their all time enterprise and exercise so it is essential for them to get benefits from such programmes. Kwakman (2003) further explains that such programmes directly or indirectly affect the very performance and functions of teachers as it is a part of their continuous professional growth. Such programmes keep the teachers aware of subject matter, teaching methodologies, instructional strategies, societal changes and above all the teaching practice and education.

Bredeson (2002) says that learning opportunities for teachers on regular basis increase their knowledge and efficiency but the problem are of the lack of funds and other basic facilities. But many research studies and scholars are of the view that

before joining the field of teaching one must know about the in-depth meaning of the word “Professionalism”. Hargreaves (2000) defines the word “Professionalism” in these words that this is a kind of the power of self development and growth. The teachers remain very active during academic time in their classes and have very low interaction with other teachers in the institute. Thus teachers increase their professional knowledge by attending workshops, by contacting the skilled persons in the field or having close contacts with expert teachers in the field.

According to Little (1993) as cited in Hargreaves (2000) these teachers do not understand and comprehend their review knowledge in their respective training because they do not have the time and opportunity to bring that in to practice. Those people who were interested in the economic growth of the country come with a basic concept to improve the quality of education of the students and prepare them appropriately not only for local but also for international markets. So the teachers started teaching their students in an innovative way while the teachers themselves got education from their teachers in the traditional way Mc Laughlin (1997). Hargreaves (2000) says that in this regard teachers seek mutual support from one another and thus try to solve the matter at hand. This practice changed the whole scenario and none of the teachers’ prefer team work. This has also affected that teachers’ notion regarding professionalism. So now the authorities design those workshops for training the teachers which are collaborative in nature. To conclude it is said that teaching is an active profession and it needs those persons who are by nature teachers and have the sense and understanding of professionalism. But the question is this, if teachers are agreed with this professional development or not. Are they aware of the effects of such workshops? Are these training programs make their teaching more result oriented and effective? This present study deal with the following areas;

2.12.1 Development of Professionalism in Teachers

For the improvement of quality education it is essential that teachers must be professionally developed. Professional development means improvement in the skills and knowledge of teachers. The teachers are the main agents of professional development. The teachers are all the time in the pursuit to develop their professional knowledge if they have sincerity with their profession. Due to the increase in the price of books, the teachers are now unable to buy books even on monthly basis. So the concerned institutions must come forward and help the teachers in the provision of books. All the developed educational institutes have well equipped libraries. From time to time these institutions arrange workshops for the development of their teachers. Due to the following reasons, these institutes arrange programmes for the professional development of their teachers, or the improvement of quality education and pedagogy.

(a) For the motivation of teachers to go for research regarding teaching and consequently learning.

(b) For the development of the sense of competition in the concerned field among different institutions.

(c) For bringing variety in teaching practice as all students do not come from the same background and they are not satisfied with the same teaching method.

Only those teachers can inspire and affect their students who have the high level of professional knowledge as well as the high level of knowledge regarding their subject matter. But the thirst for gaining more and more knowledge has no end. Those teachers who believe in the continuous professional growth are the actual achievers and they do justice with their profession and those who are only silent spectators miss the thrill and satisfaction of knowledge.

2.12.2 Teachers' Academic Achievement and Excellence

Academic achievements is the level of excellence. It is the result of the students, it does not only mean that they are promoted to high classes, but their future endeavors are also dependent upon this academic achievement. Those who are excellent in their academic achievement, show the same excellence in their field of work and profession. To ensure any excellence in education it is high time for the establishment to reconsider current policies and devise some new that would target excellence in academic achievements. Learners academic achievements are clearly reflected in their scores in intelligences test. These tests could be considered best and reliable predictors that show the near academic future of candidates. The level of interest of the students also affects the level of achievement and their belief in themselves plays the basic role in this regard. Teachers' traits of personality and behaviours also affect the achievement level of the students. Teachers who are dictators are not liked and adored by their students and they cannot have free commuting with their teachers and consequently fail in their excellence of achievement. Moreover, teachers who are lenient and friendly encourage learners achieving high grades. Similarly the learning of students is greatly influenced by the character and personality of a teacher. A teacher personality should be ideal so that learners copy and follow best etiquettes that usually an ideal teacher practices. Friendly teachers motivate their students for higher grade. The environment of the learners also affects the achievement level of the learners. Teachers' personalities have great impacts on the performance of learners. It is because they are model for learners who usually try to copy them. If their personalities are flawless they attract learners. But this was also depending upon the gender of teachers. However, with opposite gender it was not the case. Marshall and Weinstein (1986) state that teachers'

way of delivery and communication also increase or decrease the students' level of achievement. Personality of teachers or their different traits of personalities are not the only set of factors which are responsible for the excellence in achievements but there are too many other factors which are responsible in this regard. These other factors are result oriented strategies of teaching, age of the learners, gender of the learners and motivational level of the learners. Teachers in such situation will display the best of their knowledge, so that excellent achievements may be possible. However, there are other three pillars that play considerable roles in ensuring academic excellence of learners. They are teachers, colleagues and parents of learners. If all the three are efficient in their capacities, learners' excellence in education is guaranteed.

2.12.3 Techniques in Secondary Education

Teaching is the basic part of education. Teaching has too many methods and approaches. Different educationists have different views regarding teaching methods. There are many definitions of teaching in the eyes of great scholars from antiquity.

In modern teaching, the student is of the central importance. In this modern teaching, students are connected with their peer groups, parents and teachers. The academic achievement is also addressed to this modern approach of teaching. In modern way of teaching the knowledge and understanding of the subject is given the top priority. For better and result oriented teaching, some basic strategies have been devised by Radhakrishnan commission in 1949. These strategies are, students' response, teachers' questions, and writing of significant points on the chalk board and using easy and comprehensive language as medium of instruction. The commission presented some points to eradicate poor teaching process and these points are, lifeless presentation on the part of teachers, weak and low level of knowledge about the

learning process, know appraisal of students' level etc. Generally there are numbers of environmental factors that also affect learning and teaching.

2.12.4 The Effect of Teaching Practice

In such developmental programmes teachers develop their professional knowledge, attitude and dexterity i.e. skill. Dean (1991) and Guskey (2000) Powell, Terrel, Furey and Scat Evens (2003) states that teachers will very soon feel the long and short term effects of these developmental programmes. According to these scholars some of the teachers have recognized this fact that after such developmental programmes, they have started using their own insights too in teaching practices. Now the teachers are in the position to evaluate their own learning methods in the light of experience they have gained from these developmental programmes. The same findings have been supported by Harris, Cale and Musson (2010). They conducted research on the primary teachers who were engaged in such developmental programmes of physical education. According to them, all the primary teachers of physical education felt a better change after the attending of these developmental programmes.

In long-term results the teachers have recognized that these developmental programmes have increased their level of confidence in their teaching practice, Buczynski and Hansen (2010). Similarly Harris, et al (2010) support that those teachers who participated in their research study regarding these developmental programmes, have identified that there is reasonable impact of confidence on their teaching practice after participating in these professional developmental programmes. The same view has also been supported by Hustler, et al (2003). The findings of Powell, et al (2003) confirm that the growing level of teacher's confidence is because of these professional developmental programmes and in these professional

developmental programmes the subject area of teachers is also improved and enhanced on a great scale. These programmes increase the teachers' level of knowledge. It also increases their teaching practices such as making and preparing of lesson plan are also improved and made better

2.12.5 Active Learning

In order to achieve good performance of teachers we need to assure the arrangement of programmes that professionally develop teachers. These programmes need not to be totally new and experimental. We must try to reform already existing similar programmes which have up to some extent proved successful. The traditional teaching and its developmental programmes have failed in bringing the positive change in the teaching practices of the teachers, Birman, et al (2000). Fullan and Mascal (2000) are of the view that these professional developmental programmes must be more practical in form and the teachers must be practically involved in the process. On the contrary of this, positive change cannot be expected Harris, et al (2011) and Briman, et al (2000). These programmes are helpful for teachers in the designing of their lesson plans and also for the evaluation of not only the achievements of their students but also for the evaluation of their own teaching methods and approaches. The proper demonstration of a lesson leads to the writing of a report which is a form of active learning. These different types of new approaches affect the prevailing teaching practices positively. According to South Worth (2004) that such professional developmental programmes not only bring change in the teaching practices of those schools which are small in size but also in those schools which are big in size. Guskey (2000) refers to this reality that such programmes will be effective only then when the teachers are provided opportunities of feedback constantly regard the change supposed to be brought in their teaching practices. This

approach of feedback will entirely change the form and results of such professional developmental programmes.

2.12.6 The Process of Change in Teacher

According to Clark and Hollings Worth (2002), that the process of change in a teacher takes place in many different forms. The authors are of the view that only training sessions cannot bring change in teachers and in their teaching practices. According to these scholars all those professional developmental programmes which have been arranged in the shape of training sessions have failed in bringing any change in the practice of teachers. The duration of such programmes must be increased as in a day the objectives cannot be achieved, Timperley, et al (2007). The same view has been supported by Helmer Bartlett, Wolgemuth and Lea (2011). Clarke and Hollings Worth (2002) are of the view that all these professional developmental programmes have failed because these programmes were arranged to bring change in the teachers' overall traits of personality like perceptions, attitudes and beliefs. These changes were considered helpful in bringing change in the classroom environment i.e. in the teaching practice of the teachers. Guskey (2002) is of the view that teachers' attitudes and beliefs can be changed only when the achievement level of their students is on the rise in the light of these changes which were thought to them during these professional developmental programmes. Desimone (2009) is of the view that changes in the attitudes and beliefs of teachers must take place first and then these developmental programmes may be arranged and these programmes will be fruit full only in this way. Hargresaves (1994) states that deep change in the attitudes of teachers' remains permanent when the first step for change is taken positively otherwise not. The linear change in the attitude of teachers proposed by Guskey (2002) and Desimone (2009) has been opposed by many authors

and scholars. According to Huberman (1995) that change in teachers are not linear but cyclical. This notion of Huberman has been supported by Clark and Hollings Worth (2002) and Oper, Pedderb and Lavicza, (2010). They are on the view that there is a link between the change in teachers, attitude and changes in the teaching practices of these teachers. Opfer, et al (2010) is of the view that change is only created and pushed by personal interest, motives and motivational level rather than by rational and logical grounds. These researchers are of the view that change in teachers is not the result of these developmental programmes. Teachers are not for immediate change in their attitudes after attending these developmental programmes. Hawley and Valli (1999) believe that teachers are not ready for immediate change but they take time in adopting the change when they see and feel the betterment of it. Poskitt (2005) also supports this view and says that it (change) is a time consuming process. She says that teachers do take time in adopting the change as this change affects their very beliefs. It means that teachers will utterly change themselves for acquiring new knowledge, skills and practices. The author says that this is not a minor change but it is a basic change not only in beliefs of the teachers but also in the very practice of their profession. Kwakman (2003) recommends that these developmental programmes must be made conducive for learning and the teachers must be fully involved in training sessions and be made responsible for the 'change' these programmes seek to see in them. If the new information provided in these developmental programmes convinces the teachers only then the positive change can be occurred and brought into practice, Timperley, et al (2007). Timperley (2008) says that ample time must be given to teachers to comprehend these changes/this change for the implementation in their respective classrooms. Timperley and Alton-lee (2008), state that adopting or change is a very complicated process and it takes time to be adopting. Poskitt (2005)

supports the view by saying that teachers take time to integrate and coordinate the newly acquired knowledge and skill with their already existing knowledge and the implementation of change in classroom environment and practice is to be adopted with the passage of time. Timperley, et al (2007) presents the arguments in this regard by asserting that researches do not support a particular activity to be more effective than the rest of the activities but this difference of gradation of the activities is a time consuming process. Garret, et al (2001) and Sparks and Hirsh (1997) advocate that a better activity is to be adopted ultimately by teachers as this makes their job easy for them. Poskitt (2005) believes in the continuous professional growth of the teachers and she says that these professional developmental programmes must be based on activity so that their utility must be comprehended and experienced. These programmes must be practice based so that teachers must feel the usefulness of these training and developmental programmes. These programmes must also improve the instructional quality of teachers. Teachers, in these developmental programmes must be provided the environment where they can freely express their views with their colleagues in a substantive way, only then they can understand the utility of change. Desimon, et al (2003) and Garet, et al (2001). Hawley and Valli (1999) stress on the need of collegian interaction and discussion of teachers and through this collegian discussion and dialogue, they can reach to the solution of existing problems. Then they can be led and pushed towards positive change in their teaching practice. According to Fullan and Mascal (2000), these developmental programmes must be given a shape of a collaborative community where these teachers must open their heart and discuss their problems and issues and they will ultimately reach to the proper solutions of their problems and issues. This view point affirms the view of Guskey (1995) advocates feedback on the efforts made by teachers for the

improvement of their teaching skills, methods and practices. Timperley (2000) also review this point that there should be a constant commuting among the teachers in these training sessions. Hawley and Valli (1999) say that for the sustaining of a change to be permanent. It is necessary that the development of teachers' professionalism must be a continuous process with the follow-up of feedback only for the sole purpose of improvement and positive change in the teaching practices of the teachers. Helmer, et al (2011) concludes the utility and importance of these professional developmental programmes in the following lines. He says that such programmes must be organized;

- There should be collaboration among the teachers.
- Follow-up and feedback must be the essential part of these programmes.
- Experts must be utilized in the follow-up of such programmes.

The utility of these programmes can be seen as positive change in the teaching practice of the teachers. Is there is an innovative change in the teaching practice of the teachers? How can this change be sustained? But all these changes are in need of teachers' reflections and practices for the improvement of teaching practice. But the fact remains that teachers always resist change and this change will take time to be the permanent feature of teaching practice.

2.13 PROSPECTIVE TEACHERS' VIEW ABOUT PROFESSIONAL KNOWLEDGE

The training period of teachers or their professional education make them able to teach effectively and this is how they become an asset for the society. During this period they equip themselves with methods and techniques that help them in their teaching profession. Training programmes should be model to guide them through different phases some of which might be difficult. This will also develop in them the

professional knowledge which is very basic for a teacher just like any other professional. Even through these training give a detail theoretic insight into teaching and learning method and issue but it never fully equip teacher professionally to handle real issue in their place of work (Greene & Campbell, 1993; Veenman, 1984).The knowledge that is acquired in these training needs to be implemented and furthermore they use appropriate skill and attitude. Teachers who are new to the profession usually face problem when they practically face educational problems (Flores, 2006; Hebert & Worthy, 2001). Similarly the load of responsibilities may also limit the opportunities of learning (Huling-Austin, 1992). Therefore a prospective teacher needs to polish himself to stop problems approaching him and give opportunities a chance to come in his way.

Van Es and Sherin (2008) states that if future teachers get sufficient knowledge of classroom issues they will surely be good at analyzing it. Thus it is highly requisite to structure such an environment which is helpful and supportive for a teacher training. In such an environment they will be able to gain the skill of 'noticing'. In easy language the skill of noticing or keen observation is a key part of teaching at any level and it must be instilled in teachers.(Van Es & Sherin 2008). In order to think about teaching and learning in a more deep and considerate way we need to prioritize the addition of this skill in the courses of teachers' candidates. If we want to bring effectiveness to field observation we have to develop the element of 'noticing'. Noticing can be categorized into three aspects. First is the identification of the importance of classroom situation. Secondly connecting classroom interaction with the overall rules of teaching and learning which they represent. Thirdly judging the basics of classroom interaction and implementing them (Van Es, 2002). This investigation formed an atmosphere, which will help prospective teachers to develop

the skill of 'noticing'. Through reflective conversations on situations it is thought that the transition from a learner to become a teacher might be easy. Similarly they will feel like a teacher does feel. If we talk about the reform based visions of teachers learning, it is very much important that the future teacher should be provided with such opportunities' to become acquainted with duties that might be asked from them.

Teachers' quality is directly proportional to quality education. To bring in quality to education it is always highly recommended to employ energetic, focus, visionary and the highly qualified teachers. The teachers' training therefore, should be carried out in such an environment which is supportive for academic and as well as research development. The professional knowledge of teachers is defined in many different ways by different educationists. On the other hand (Maijer, et. al., 1999) says that those teachers which are well qualified are always good at handling different situation. They are good just because they implement their knowledge or what they have in their minds. Similarly what teachers do is a representation of the knowledge that they have gained are learnt in their respective professional trainings. Teachers attitude and actions are reflections of their professional knowledge. According to the National Council For Accreditation of Teacher Education (NCATE, 2001) says that disposition are the dedication, values and professional ethics that may have impacts on the behaviours towards learners, their relatives, friends and surrounding that affect learners learning, their motivation and grooming as well as their personal virtues which student have including belief, likes and dislikes appreciation values and modes of allocation. The characteristic of a teacher as a whole are the disposition of him and they are a reflection of the professional knowledge, they have. Therefore these qualities must be highlighted in order to make them part of the courses for prospective teachers. In today's modern world of science and technology the profession of

teaching has also become more systematic logical and objective oriented. Today's teachers must possess subject or content knowledge and teaching expertise if they really want to be effective. Their professional knowledge and particular their application is given very importance in the field of education and along with this some other distinctive aspects of teaching is given priority in the training of teachers in Pakistan. These standards strictly considered the knowledge of subject they teach and the standard of teaching. These standards also encompasses the development of human growth their concept and knowledge of Islamic values and ethics. Traditional standards for teachers training including the teaching planning and respective strategies, learners assessments, environment of classroom learning, effectiveness of teacher student communication and the use of skillful information technologies, mutual understanding among instructors, their institution and continuous professional development of teaching (Govt. of Pakistan, 2009). These standards look for instructors effectiveness in knowledge and understanding, their behaviour, attitude and performances. For instance skills and what a teacher can do is key to learning of students (Govt. of Pakistan, 2009). To make a teacher best or efficient it is very important that all the existing professional courses for teachers must be re-considered in order to change the current status of a teacher for better. Properly and sufficiently trained teacher will be sure to provide quality and standard teaching or education which will be seen in the quality of education of the coming generation.

METHOD AND PROCEDURE

This chapter addresses the research methodology and procedure used in this study to investigate the research problem. The main purpose of the study was to examine “teachers’ professional knowledge and its practice at secondary level in Khyber Pakhtunkhwa”. The following procedure was adopted for this study.

3.1 POPULATION

The population of the study was comprised of all the 210 prospective teachers who were enrolled as students of B.Ed (130) and M.Ed (80) in Northern University Nowshera (NUN) and all the 18,683 (SST) male working teachers at Secondary level of Government Schools in Khyber Pakhtunkhwa.

3.2 SAMPLE

A convenient sample of 105 prospective teachers from B.ED and M.ED classes of NUN and, 600 secondary school male working teachers from five districts of Khyber Pakhtunkhwa (KPK) was selected. The districts included were D.I. Khan, Haripur, Mardan, Nowshera, and Swabi. The sampling procedure used was as following:

Five districts out of 25 districts were selected through convenient sampling technique. From each district 12 Government Secondary Schools for boys were conveniently selected. A sample of 120 working teachers was drawn in such a way that ten teachers from every school of sampled district were selected for collection of data.

List of Sample Districts:

S. No	Name of District	Teachers
1	D.I Khan	120
2	Haripur	120
3	Mardan	120
4	Nowshera	120
5	Swabi	120
Total	5	600

3.3 RESEARCH INSTRUMENT

As the study was descriptive in nature therefore the researcher used a questionnaire of three points; 'Mostly', 'To Some Extent' and 'Not at All'. Questionnaires were developed after having gone through the related literature, with the co-operation of respectable supervisor and the members of supervisory board. There were thirty eight items in every questionnaire of NUN, and fifty four items in each and every questionnaire of KPK. It was used to collect data from B.ED and M.ED prospective teachers of NUN and male working teachers at Secondary level of Government Schools in Khyber Pakhtunkhwa.

3.3.1 Pilot Testing

For pilot testing ten Government Secondary Schools (boys) from district Mardan were selected. The researcher personally visited schools. He administered the questionnaires himself distributed them among the Secondary School teachers (Science and General). The researcher requested participants to fill questionnaires liberally and honestly. They were also allowed to make modification in questions if needed. On the basis of pilot testing teachers' questionnaire containing 54 items was

finalized for KPK and teachers' questionnaire containing thirty eight items for NUN. After discussion with the supervisory committee and supervisor the final versions of the questionnaires were developed.

3.4 DATA COLLECTION

Data collected through the above mentioned research instruments were tabulated, analyze and interpreted in the light of the objectives of the study.

3.5 ANALYSIS OF DATA

The data were analyzed by using chi- square test

fo = Frequency Observed

fe = Frequency Expected

df = Degree of Freedom

p = Probability of Exceeding the tabulated value of χ^2

$$= (fo - fe)$$

$$= (fo - fe)^2$$

$$= \frac{(fo - fe)^2}{fe}$$

$$\chi^2 = \frac{\sum (fo - fe)^2}{fe}$$

ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with the analysis of the collected data. and were analyzed through Chi-square test and results were interpreted.

Table 1: Teachers’ pedagogical knowledge helps in teaching.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Working Teachers	472	116	12	600	2	581.92

Table value at 0.05 level = 5.99

Table 1 expresses that the calculated χ^2 value was found to be 581.92 which is greater than the table value at 0.05 level and significance goes in favour of positive response. Hence, the statement “Teachers’ pedagogical knowledge helps in teaching” was accepted.

Table 2: Teachers’ pedagogical knowledge helps the learners.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Working Teachers	394	191	15	600	2	359.68

Table value at 0.05 level = 5.99

Table 2 reflects that the calculated χ^2 value was found to be 359.68 which is greater than the table value at 0.05 level and significance goes in favour of positive response. Hence, the statement “Teachers’ Pedagogical knowledge helps the learners” was accepted.

Table 3: Teachers' knowledge of curriculum is necessary for effective teaching.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Working Teachers	493	99	8	600	2	664.56

Table value at 0.05 level = 5.99

Table 3 depicts that the calculated χ^2 value was found to be 664.56 which is greater than the table value at 0.05 level and significance goes in favour of positive response. Hence, the statement "Teachers' knowledge of curriculum is necessary for effective teaching" was accepted.

Table 4: Teachers' pedagogical knowledge helps in student's motivation.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Working Teachers	431	157	12	600	2	452.76

Table value at 0.05 level = 5.99

Table 4 indicates that the calculated χ^2 value was found to be 452.76 which is greater than the table value at 0.05 level and significance goes in favour of positive response. Hence, the statement "Teachers' pedagogical knowledge helps in student's motivation" was accepted.

Table 5: Teachers' Pedagogical skills and knowledge is necessary for solving students' problems.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Working Teachers	418	167	15	600	2	414.18

Table value at 0.05 level = 5.99

Table 5 shows that the calculated χ^2 value was found to be 414.18 which is greater than the table value at 0.05 level and significance goes in favour of positive response. Hence, the statement “Teachers’ Pedagogical skills and knowledge is necessary for solving students’ problem” was accepted.

Table 6: For achieving teaching goals pedagogical skills and knowledge is helpful

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Working Teachers	392	192	16	600	2	353.92

Table value at 0.05 level = 5.99

Table 6 shows that the calculated χ^2 value was found to be 353.92 which is greater than the table value at 0.05 level and significance goes in favour of positive response. Hence, the statement “For achieving teaching goals pedagogical skills and knowledge is helpful” was accepted.

Table 7: For achieving teaching aims pedagogical skills and knowledge is helpful.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Working Teachers	414	170	16	600	2	403.4

Table value at 0.05 level = 5.99

Table 7 reflects that the calculated χ^2 value was found to be 403.4 which is greater than the table value at 0.05 level and significance goes in favour of positive response. Hence, the statement “For achieving teaching aims pedagogical skills and knowledge is helpful” was accepted.

Table 8: Teachers' general Pedagogical knowledge affects the process of learning.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Working Teachers	382	196	22	600	2	324.12

Table value at 0.05 level = 5.99

Table 8 expresses that the calculated χ^2 value was found to be 324.12 which is greater than the table value at 0.05 level and significance goes in favour of positive response. Hence, the statement "Teachers' general pedagogical knowledge affects the process of learning" was accepted.

Table 9: Teachers' play best role due to pedagogical skills.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Working Teachers	383	202	15	600	2	338.58

Table value at 0.05 level = 5.99

Table 9 shows that the calculated χ^2 value was found to be 338.58 which is greater than the table value at 0.05 level and significance goes in favour of positive response. Hence, the statement "Teachers' play best role due to pedagogical skills" was accepted.

Table 10: Teachers' play best role due to pedagogical knowledge.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Working Teachers	350	231	19	600	2	281.10

Table value at 0.05 level = 5.99

Table 10 indicates that the calculated χ^2 value was found to be 281.10 which is greater than the table value at 0.05 level and significance goes in favour of positive response. Hence, the statement “Teachers’ play best role due to pedagogical knowledge” was accepted.

Table 11: Teachers’ know different types of teaching methods due to pedagogical knowledge.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Working Teachers	321	266	13	600	2	269.82

Table value at 0.05 level = 5.99

Table 11 depicts that the calculated χ^2 value was found to be 269.82, which is greater than the table value at 0.05 level and significance goes in favour of positive response. Hence, the statement “Teachers’ know different types of teaching methods due to pedagogical knowledge” was accepted.

Table 12: Teachers’ Pedagogical knowledge helps in knowing the curriculum.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Working Teachers	305	247	48	600	2	181.68

Table value at 0.05 level = 5.99

Table 12 shows that the calculated χ^2 value was found to be 181.68 which is greater than the table value at 0.05 level and significance goes in favour of positive response. Hence, the statement “Teachers’ Pedagogical knowledge helps in knowing the curriculum” was accepted.

Table 13: Teachers' Pedagogical knowledge helps in the use of reward.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Working Teachers	253	303	44	600	2	188.76

Table value at 0.05 level = 5.99

Table 13 depicts that the calculated χ^2 value was found to be 188.76 which is greater than the table value at 0.05. level and significance goes in favour of positive response. Hence, the statement "Teachers' Pedagogical knowledge helps in the use of reward" was accepted.

Table 14: Teachers' Pedagogical knowledge helps in the use of reinforcement.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Working Teachers	307	214	79	600	2	131.42

Table value at 0.05 level = 5.99

Table 14 expresses that the calculated χ^2 value was found to be 131.42 which is greater than the table value at 0.05 level and significance goes in favour of positive response. Hence, the statement "Teachers' Pedagogical knowledge helps in the use of reinforcement" was accepted.

Table 15: Teachers' Pedagogical skills and knowledge help in knowing special and basic needs of learners.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Working Teachers	392	184	24	600	2	340.48

Table value at 0.05 level = 5.99

Table 15 expresses that the calculated χ^2 value was found to be 340.48 which is greater than the table value at 0.05 level and significance goes in favour of positive response. Hence, the statement “Teachers’ Pedagogical skills and knowledge help in knowing special and basic needs of learners” was accepted.

Table 16: Teachers’ Pedagogical knowledge helps in knowing learning theories.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Working Teachers	335	225	40	600	2	222.24

Table value at 0.05 level = 5.99

Table 16 indicates that the calculated χ^2 value was found to be 222.24 which is greater than the table value at 0.05 level and significance goes in favour of positive response. Hence, the statement “Teachers’ Pedagogical knowledge helps in knowing learning theories” was accepted.

Table 17: Teachers apply their professional knowledge in teaching.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	52	51	2	105	2	46.67
Working Teachers	320	269	11	600	2	274

Table value at 0.05 level = 5.99

Table 17 indicates that the calculated χ^2 value of the prospective teachers was found to be 46.67 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (274). In both cases significance goes in favour of positive response. Since both are in favour

of the statement “Teachers apply their professional knowledge in teaching” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 18: Teachers use their abilities appropriately.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	48	43	14	105	2	19.24
Working Teachers	275	311	14	600	2	262.7

Table value at 0.05 level = 5.99

Table 18 indicates that the calculated χ^2 value of the prospective teachers was found to be 19.24 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (262.7). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers use their abilities appropriately” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 19: Professional education is the source of change in behaviour.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	86	18	1	105	2	115.58
Working Teachers	322	261	17	600	2	260.46

Table value at 0.05 level = 5.99

Table 19 indicates that the calculated χ^2 value of the prospective teachers was found to be 115.58 which is greater than the table value at 0.05 level, and the calculated χ^2 value of working teachers was also found to be significant (260.46). In both cases significance goes in favour of positive response. Since both are in favour of the statement “professional education is the source of change in behaviour” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 20: Teachers know the psychology of students.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	38	55	12	105	2	26.78
Working Teachers	296	290	14	600	2	259.56

Table value at 0.05 level = 5.99

Table 20 indicates that the calculated χ^2 value of the prospective teachers was found to be 26.78 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (259.56). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers know the psychology of students” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 21: Teachers are aware of the changes taking place in learning environment.

Respondents	Mostly	To some Extent	Not at all	Total	df	χ^2
Prospective Teachers	40	57	8	105	2	35.35
Working Teachers	341	238	21	600	2	266

Table value at 0.05 level = 5.99

Table 21 indicates that the calculated χ^2 value of the prospective teachers was found to be 35.35 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (266). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers are aware of the changes taking place in learning environment” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 22: knowledge means the process in which practical engagement of the learners is ensured.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	60	41	4	105	2	46.32
Working Teachers	345	244	11	600	2	293.40

Table value at 0.05 level = 5.99

Table 22 indicates that the calculated χ^2 value of the prospective teachers was found to be 46.32 which is greater than the table value at 0.05 level, and

calculated χ^2 value of working teachers was also found to be significant (293.40). In both cases significance goes in favour of positive response. Since both are in favour of the statement “knowledge means the process in which practical engagement of the learners is ensured” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 23: Teachers involve their students in learning process.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	57	39	9	105	2	33.58
Working Teachers	353	236	11	600	2	302.12

Table value at 0.05 level = 5.99

Table 23 indicates that the calculated χ^2 value of the prospective teachers was found to be 33.58 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (302.12). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers involve their students in learning process” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 24: Those teachers who have command on their subjects teach well.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	81	14	10	105	2	90.90
Working Teachers	462	122	16	600	2	442.92

Table value at 0.05 level = 5.99

Table 24 indicates that the calculated χ^2 value of the prospective teachers was found to be 90.90 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (442.92). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Those teachers who have command on their subjects teach well” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 25: The main purpose of training is to enhance the teaching process.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	60	37	8	105	2	38.78
Working Teachers	376	203	21	600	2	315.13

Table value at 0.05 level = 5.99

Table 25 indicates that the calculated χ^2 value of the prospective teachers was found to be 38.78 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (315.13). In both cases significance goes in favour of positive response. Since both are in favour

of the statement “The main purpose of training is to enhance the teaching process” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 26: Teaching process is improved due to pedagogical training.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	39	58	8	105	2	36.38
Working Teachers	426	167	7	600	2	447.06

Table value at 0.05 level = 5.99

Table 26 indicates that the calculated χ^2 value of the prospective teachers was found to be 36.38 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (447.06). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teaching process is improved due to pedagogical training” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 27: Teachers’ teach according to new trends and methods.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	25	63	17	105	2	34.50
Working Teachers	469	104	27	600	2	557.52

Table value at 0.05 level = 5.99

Table 27 indicates that the calculated χ^2 value of the prospective teachers was found to be 34.50 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (557.52). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers’ teach according to new trends and methods” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 28: Teachers’ Pedagogical skills and knowledge enhance teaching method.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	76	27	2	105	2	80.95
Working Teachers	413	167	20	600	2	394.28

Table value at 0.05 level = 5.99

Table 28 indicates that the calculated χ^2 value of the prospective teachers was found to be 80.95 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (394.28). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers’ Pedagogical skills and knowledge enhance teaching method” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 29: Teachers' Pedagogical skills and knowledge helps in lesson planning.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	79	22	4	105	2	87.59
Working Teachers	431	157	12	600	2	452.76

Table value at 0.05 level = 5.99

Table 29 indicates that the calculated χ^2 value of the prospective teachers was found to be 87.59 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (452.76). In both cases significance goes in favour of positive response. Since both are in favour of the statement "Teachers' Pedagogical skills and knowledge help in lesson planning" hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working Teachers were found strongly in favour of statement as compared to prospective Teachers

Table 30: Teachers' evaluate the students' performance on the bases of their professional knowledge

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	49	48	8	105	2	31.24
Working Teachers	331	243	26	600	2	122.42

Table value at 0.05 level = 5.99

Table 30 indicates that the calculated χ^2 value of the prospective teachers was found to be 31.24 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (122.42). In

both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers’ evaluate the student’s performance on the bases of their professional knowledge” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 31: Teachers’ use A.V aids due to pedagogical skills and knowledge.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	52	35	18	105	2	16.51
Working Teachers	262	291	47	600	2	177.66

Table value at 0.05 level = 5.99

Table 31 indicates that the calculated χ^2 value of the prospective teachers was found to be 16.51 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (177.66). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers’ use A.V aids due pedagogical skills and knowledge” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 32: Teachers’ self knowledge is helpful in teaching.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	80	9	16	105	2	87.47
Working Teachers	374	209	17	600	2	319.22

Table value at 0.05 level = 5.99

Table 32 indicates that the calculated χ^2 value of the prospective teachers was found to be 87.47 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (319.22). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers’ self knowledge is helpful in teaching” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 33: Teachers’ encourage the students’ for discussion.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	37	56	12	105	2	27.82
Working Teachers	289	281	30	600	2	216.9

Table value at 0.05 level = 5.99

Table 33 indicates that the calculated χ^2 value of the prospective teachers was found to be 27.82 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (216.9). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers’ encourage the students for discussion” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 34: Teachers adopt new and innovative teaching methods

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	34	51	20	105	2	13.75
Working Teachers	239	309	52	600	2	176.52

Table value at 0.05 level = 5.99

Table 34 indicates that the calculated χ^2 value of the prospective teachers was found to be 13.75 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (176.52). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers’ adopt new and innovative teaching methods” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 35: Teachers make groups for discussion during teaching.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	55	29	21	105	2	18.04
Working Teachers	195	275	130	600	2	52.74

Table value at 0.05 level = 5.99

Table 35 indicates that the calculated χ^2 value of the prospective teachers was found to be 18.04 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (52.74). In both cases significance goes in favour of positive response. Since both are in favour

of the statement “Teachers make groups for discussion during teaching” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 36: Teachers’ go for descriptive assessment of students.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	59	27	19	105	2	25.58
Working Teachers	209	338	53	600	2	203.66

Table value at 0.05 level = 5.99

Table 36 indicates that the calculated χ^2 value of the prospective teachers was found to be 25.58 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (203.66). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers’ go for descriptive assessment of students” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table37: Teachers use new technology i.e. internet, etc.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	25	48	32	105	2	7.92
Working Teachers	100	378	122	600	2	230.84

Table value at 0.05 level = 5.99

Table 37 indicates that the calculated χ^2 value of the prospective teachers was found to be 7.92 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (230.84). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers use new technologies. Internet, etc” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 38: Teachers give and examine home assignment.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	45	54	6	105	2	37.18
Working Teachers	179	377	44	600	2	280.52

Table value at 0.05 level = 5.99

Table 38 indicates that the calculated χ^2 value of the prospective teachers was found to be 37.18 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (280.52). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers give and examine home assignment” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 39: Teachers arrange co- curricular activities

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	36	50	19	105	2	13.75
Working Teachers	147	385	68	600	2	272.28

Table value at 0.05 level = 5.99

Table 39 indicates that the calculated χ^2 value of the prospective teachers was found to be 13.75 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (272.28). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers arrange co curricular activities hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 40: Teachers add new information to basic contents.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	42	51	12	105	2	23.82
Working Teachers	242	311	47	600	2	117.04

Table value at 0.05 level = 5.99

Table 40 indicates that the calculated χ^2 value of the prospective teachers was found to be 23.82 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (117.04). In both cases significance goes in favour of positive response. Since both are in favour of the

statement “Teachers add new information to basic contents” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 41: Teachers use additional material during teaching.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teacher	31	52	22	105	2	13.52
Working Teachers	186	347	67	600	2	197.46

Table value at 0.05 level = 5.99

Table 41 indicates that the calculated χ^2 value of the prospective teachers was found to be 13.52 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (197.46). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers use additional material during teaching” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 42: Teachers suggest additional study to students.

Respondents	Mostly	To some extent	Not at all	Total	Df	χ^2
Prospective Teachers	41	48	16	105	2	16.15
Working Teachers	159	299	142	600	2	74.22

Table value at 0.05 level = 5.99

Table 42 indicates that the calculated χ^2 value of the prospective teachers was found to be 16.15 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (74.22). In both cases significance goes in favour of positive response. Since both are in favour of the statement "Teachers suggest additional study to the students" hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 43: Teachers discuss contemporary issues with learners in class.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	32	48	25	105	2	7.92
Working Teachers	180	313	107	600	2	109.08

Table value at 0.05 level = 5.99

Table 43 indicates that the calculated χ^2 value of the prospective teachers was found to be 7.92 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (109.08). In both cases significance goes in favour of positive response. Since both are in favour of the statement "Teacher discusses contemporary issues with learners in class" hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 44: Teachers involve their students in discussion.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	48	49	8	105	2	31.24
Working Teachers	192	348	60	600	2	207.84

Table value at 0.05 level = 5.99

Table 44 indicates that the calculated χ^2 value of the prospective teachers was found to be 31.24 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (207.84). In both cases significance goes in favour of positive response. Since both are in favour of the statement "Teachers involve their students in discussion" hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 45: Teachers know individual differences of students.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	34	52	19	105	2	15.58
Working Teachers	238	324	38	600	2	215.32

Table value at 0.05 level = 5.99

Table 45 indicates that the calculated χ^2 value of the prospective teachers was found to be 15.58 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (215.32). In both cases significance goes in favour of positive response. Since both are in favour

of the statement “Teachers know individual differences of students” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 46: Teachers discuss class room problems with students.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	42	53	10	105	2	28.50
Working Teachers	183	350	67	600	2	202.38

Table value at 0.05 level = 5.99

Table 46 indicates that the calculated χ^2 value of the prospective teachers was found to be 28.50 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (202.38). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers discuss class room problems with students” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers..

Table 47: Teachers share students’ problems with them.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	36	49	20	105	2	12.04
Working Teachers	192	283	125	600	2	62.68

Table value at 0.05 level = 5.99

Table 47 indicates that the calculated χ^2 value of the prospective teachers was found to be 12.04 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (62.68). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers share students’ problems with them” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 48: Teachers cooperate with their colleagues.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	55	43	7	105	2	35.64
Working Teachers	314	263	23	600	2	241.46

Table value at 0.05 level = 5.99

Table 48 indicates that the calculated χ^2 value of the prospective teachers was found to be 35.64 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (241.46). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers cooperate with their colleagues hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 49: Teachers' contact parents regarding the progress of students.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	45	44	16	105	2	15.47
Working Teachers	231	232	137	600	2	29.76

Table value at 0.05 level = 5.99

Table 49 indicates that the calculated χ^2 value of the prospective teachers was found to be 15.47 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (29.76). In both cases significance goes in favour of positive response. Since both are in favour of the statement "Teachers' contact parents regarding the progress of students" hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 50: Teachers organize outside classroom activities.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teacher	32	53	20	105	2	15.92
Working Teachers	92	338	170	600	2	158.04

Table value at 0.05 level = 5.99

Table 50 indicates that the calculated χ^2 value of the prospective teachers was found to be 15.92 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (158.04). In both cases significance goes in favour of positive response. Since both are in favour

of the statement “Teachers organize outside classroom activities” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 51: Teachers assign and assess homework.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	39	53	13	105	2	23.52
Working Teachers	198	329	73	600	2	168.84

Table value at 0.05 level = 5.99

Table 51 indicates that the calculated χ^2 value of the prospective teachers was found to be 23.52 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (168.84). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers assign and assess home work” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 52: Teachers use different teaching methods.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	60	37	8	105	2	38.78
Working Teachers	243	277	80	600	2	110.88

Table value at 0.05 level = 5.99

Table 52 indicates that the calculated χ^2 value of the prospective teachers was found to be 38.78 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (110.88). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers use different teaching methods” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 53: Teachers prepare lesson plans.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	52	41	12	105	2	24.38
Working Teachers	202	262	136	600	2	39.72

Table value at 0.05 level = 5.99

Table 53 indicates that the calculated χ^2 value of the prospective teachers was found to be 24.38 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (39.72). In both cases significance goes in favour of positive response. Since both are in favour of the statement “Teachers prepare lesson plans” hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

Table 54: Teachers keep in mind students' educational needs during teaching.

Respondents	Mostly	To some extent	Not at all	Total	df	χ^2
Prospective Teachers	39	56	10	105	2	30.90
Working Teachers	242	303	55	600	2	166.98

Table value at 0.05 level = 5.99

Table 54 indicates that the calculated χ^2 value of the prospective teachers was found to be 30.90 which is greater than the table value at 0.05 level, and calculated χ^2 value of working teachers was also found to be significant (166.98). In both cases significance goes in favour of positive response. Since both are in favour of the statement "Teachers keep in mind students' educational needs during teaching" hence it is accepted. Keeping in view the apparent difference in calculated χ^2 value in both cases the working teachers were found strongly in favour of statement as compared to prospective teachers.

DISCUSSION

The results of the study revealed that pedagogical knowledge helps in teaching

According to Sadkar (1997) pedagogical knowledge always helps in teaching.

The result of the researcher is significant according to the views of the Shulman (1986).

The results indicated that pedagogical knowledge helps the learners. The view point

of Conant (1993) is also supported by the results of the researcher.

The results showed that the knowledge of curriculum is necessary for effective

teaching. The results of the collected data are supporting the views of Shulman (1986).

The results showed that pedagogical knowledge helps in motivating students. Due to

pedagogical knowledge teachers know learning theories, teaching laws, and students' individual differences which help in students' motivation. The results are significant and supporting the views of Wright (1987).

The study revealed that for solving student's problems pedagogical skills and

knowledge is necessary. According to Shulman (1986) pedagogical skills and knowledge helps in solving student's problem.

The results of the study indicated that for achieving teaching goals pedagogical skills

and knowledge is helpful. The researcher's views are supported by Shulman (1986).

The study indicated that for achieving aims pedagogical skills and knowledge are

helpful. The results are showing support to the views of Shulman (1986).

The study indicated that general pedagogical knowledge helps in the process of

learning. The results are showing support to the views of Shulman (1986).

The study revealed that a teacher plays his role well due to pedagogical skills. The results are also supporting the views of Mouly (1988) and Shulman (1986).

The study revealed that a teacher plays his role well due to pedagogical knowledge. The results are showing support to the views of Shulman (1986).

The results indicated that a teacher knows different teaching methods due to pedagogical knowledge. According to Meijer, et al., (1999) pedagogical knowledge enables the teacher to learn and use different teaching methods.

The results indicated that pedagogy helps in knowing the curriculum. The same idea is supported by Shulman (1986).

The results indicated that pedagogical knowledge helps the teachers in the use of reward and reinforcement. According to Emmer (1987) pedagogical knowledge helps the teacher in the proper use of rewards and reinforcement. The results from the data are in support of the views of Cardno (2005).

The results indicated that pedagogical skills and knowledge help in knowing special and basic needs of learners. The results from the data are in support of the views of Maijer,et al.,(1999).

The results indicated that pedagogical knowledge helps in knowing learning theories. The results from the data are in support of the views of Shulman (1986).

The study identified the application of teachers' professional knowledge in teaching. The same idea is supported by Bridgett (2008) "the teachers apply their professional knowledge in classroom while teaching to students".

The results of the study revealed that teacher use their abilities appropriately. The study identified the application of teachers abilities appropriately Melissa (2013)has also agreed to the same idea about the use of teacher's abilities appropriately.

The results of the study revealed that professional education is the source of change in behavior. Anwar (1998) has also suggested the idea of behavioural change due to professional education.

The results indicated that teacher knows the students psychology. The result of the study is in consistency with the Brookfield (2006) views.

The results indicated that the teachers are aware of the changes taking place in learning environment. According to UNESCO report (1975) teacher is aware of changes taking place in the learning environment.

The results of the study revealed that knowledge means the process in which practical engagement of the learners is ensured. According to Emmer (1987) the process of the practical engagement of the learner is ensured due to knowledge. The result obtained from the data was also supporting the views of the author.

The study identified that teachers involve their students in learning process. The results agreed to the views of Maijer et al., (1999).

The study identified that those teachers who have command on their subjects teach well and affects the learning process. Subject command is the factor contributing to the effectiveness of teachers. The results are supported by Kennedy (1990).

The study identified that rational of training was to enhance the teaching process.

Breadson (2002) and Buskey (2008) supported the results of the researcher.

The results of the study revealed that teaching process was improved due to pedagogical training. According to Birman et al., (2000) pedagogical training improves the teaching process.

The results of the study revealed that the teachers' teaching according to new trends

and methods affects the teaching process. According to Bredeson (2002) teaching process was positively affected by adopting new trends and methods of teaching.

The results showed that pedagogical skills and knowledge enhance teaching methodology of a teacher. According to Sadkar (1997) pedagogical skills and knowledge is necessary for improvement of teaching methodology of a teacher. The result of the researcher is significant as the views of the Shulman (1986) are in harmony.

The results indicated that pedagogical skills and knowledge help in lesson planning . The views of Shulman (1986) are accepted by the results of the data.

The results showed that teachers' evaluate the students' performance on the bases of their professional knowledge. The result of the researcher is significant as the views of the Shulman (1986) are in harmony.

The results of the study revealed that teachers use A.V.aids due to pedagogical skills and knowledge. According to Ernest (1989) pedagogical skills and knowledge enable teachers to use A.V.aids, for making their lessons easy to the students in classroom. The views of Shulman (1987) are supporting the results of the researcher.

The results of the study raveled that teachers self knowledge is helpful in teaching. According to Kagan (1992) for the teachers self knowledge is necessary to teach the students effectively in class room.

The results of the study showed that teachers encourage the students for discussion during teaching in the class. All this is possible due to pedagogical training of the teacher. The results support the views of the Dawes (2012).

The study revealed that teachers adopt new and innovative teaching methods. The

results support the views of the Bredeson (2002) and Clandinin and Connelly (1987).

The study revealed that teachers make groups for discussion during teaching and divide the students in different groups for performing different activities. The results support the views of the Dawes (2012).

The results indicated that teacher's assess the students work descriptively. The results are significant and supporting the views of wright (1987).

The results of the study showed that teachers use new technology. The results from the data are in support of the views of Kagan (1992).

The study revealed that teachers give and examine home assignment. The results from the data are in support of the views of Kagan (1992).

The study identified that teachers arranges co-curricular activities for the students in the school. According to Gupta (1996) teacher arranges co- curricular activities for their students in order to motivate them for learning.

The results of the study showed that teachers add new information to the basic contents of the lesson. The results from the data are in support of the views of Sybouts (1994).

The study identified that teachers use additional material during teaching and suggest additional study to the students in class room. The results of the researchers are also supporting Shulman (1987).

The study revealed that teachers discuss contemporary issues in class, and involve their students in discussion to know about them. The views of Maijer et al, (1999) are supporting the results of the researcher.

The study revealed that teachers know about students individual differences. The results are showing support to the views of Brookfield (2006).

The study identified that teachers discuss classroom problems in class with their students to help and assesses them. The results of the study showed that the teachers share students' problems with them to know and help them in their problem solving. The results are showing support to the views of Melissa (2013).

The results of the study showed that the teachers cooperate with their colleagues about the current situation and problems of the students. The results are showing support to the views of Emmer (1987) and Hargreaves (2000).

The study also identified that teachers contact parents regarding progress of the students. The views of Sybouts (1994) are supporting the results of the researcher.

The results of the study showed that the teachers organize outside classroom activities. The results are showing support to the views of Gupta (1996).

The study revealed that teachers assign and assess homework of the students. The results from the data are in support of the views of Kagan (1992).

The results of the study showed that the teachers use different teaching methods in class during teaching learning process. The results from the data are in support of the views of Shulman (1986).

The study identified that teachers prepare the lesson plan for making the teaching process effective and easy for the students. The results are showing support to the views of Ernest (1989).

The study revealed that teachers keep in mind students' educational needs during teaching. The teacher looks at the students needs in classroom contexts and adopts relevant teaching method. The results are showing support to the views of Emmer (1987) and Maijer et al, (1999).

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY

“A study of Teachers’ Professional Knowledge and its Practice at Secondary level in Khyber Pakhtunkhwa” was quite a new study in this region. It is very appealing as teachers’ professional knowledge and its practice in education are two important factors. This study encapsulate two major inquires. Objectives of the study were; (i) To investigate the teachers’ professional knowledge and its practice at Secondary level; (ii) To examine the factors that affect the teachers’ professional knowledge and its practice at secondary level; (iii) To find out what are the difficulties in the implementation of teachers’ Professional knowledge and its practice at secondary level; (iv) To compare the views of working teachers and prospective teachers regarding teachers’ professional knowledge and its practice. The population of the study consisted all the 210 prospective teachers who were enrolled as students of B.Ed (130) and M.Ed (80) in Northern University Nowshera (NUN) and all the 18683 (SST) male working teachers at Secondary level of Government Schools in Khyber Pakhtunkhwa. A convenient sample of 105 prospective teachers from B.Ed and M.Ed classes of NUN and 600 male teaches at secondary level of Government schools from Khyber Pakhtunkhwa was selected through convenient sampling technique from five districts out of twenty five districts. The researcher visited to Northern University Nowshera (NUN) and most of the districts in person for the collection of data, where as in some districts the researcher collected data with the help of other well acquainted teachers. This is how the researcher collected the entire data. For the collection of data the researcher used three point questionnaires as

research instrument. After the collection, the data were tabulated, analyzed and interpreted with the help of Chi-Square statistical technique.

5.2 CONCLUSIONS

The findings of the study revealed the following conclusions:

1 Majority of the respondents were of the view that teachers' pedagogical knowledge helped in teaching processes. By applying pedagogical skills and knowledge in classroom environment teachers can easily achieve the objectives according to the nature of the lesson.

2 A lot of the respondents were of the view that pedagogical knowledge of the teachers help the learner's in classroom. Help in learning environment was a key to success in classroom.

3 Numerous of the respondents were of the opinion that for effective teaching, knowledge about curriculum is necessary for teachers in order to achieve the objective of the lesson.

4 Majority of the respondents were of the view that pedagogical knowledge helps in students' motivation. Pedagogical knowledge of the teachers motivate students for learning effectively.

5 A lot of the respondents were of the view that pedagogical skills and knowledge is necessary for solving students' problems. Pedagogical skills and knowledge of teachers help in solving students' problem properly.

6 Numerous of the respondents were of the view that achievement of objectives and aims were only possible through pedagogical skills and professional knowledge.

7 A lot of the respondents were of the view that general pedagogical knowledge affects the process of learning, it showed the importance of

pedagogical knowledge in classroom environment.

8 Numerous of the respondents were of the view that teachers play their role very well due to pedagogical knowledge in learning and teaching environment.

9 Majority of the respondents were of the opinion that teachers know different types of teaching methods due to pedagogical knowledge. Teaching through different methods affect the learning environment.

10 A lot of the respondents were of the view that pedagogy helps in knowing the curriculum. Curriculum is a set of activities for the learners, through which a learner improved his learning abilities in school. It showed the application and importance of pedagogical knowledge

11 Numerous of the respondents were of the opinion that pedagogical knowledge helps in the use of incentives for students. Incentives of students by teachers show practical application of pedagogical knowledge in the learning environment.

12 Majority of the respondents were of the view that pedagogical knowledge helps in the use of reinforcement of students. Reinforcement of students by teachers show practical application of pedagogical knowledge in the learning environment.

13 A lot of the respondents were of the view that pedagogical skills and knowledge helps in knowing special and basic needs of learners. It showed the importance of pedagogical skills and knowledge for teachers in learning environment

14 Numerous of the respondents were of the view that pedagogical Knowledge helps in knowing learning theories. It showed the application of

professional knowledge.

15 Majority of the respondents, both (prospective and working teachers), were of the view that teachers applied their professional knowledge in teaching. The application of teachers' Professional knowledge in teaching creates positive classroom environment in teaching and learning situation.

16 Numerous of the respondents both (prospective and working teachers), were of the view that teachers use their abilities appropriately in teaching learning process, which showed the application of teacher professional knowledge in classroom.

17 Majority of the respondents both (prospective and working teachers), were of the view that there was behavioural change of teachers while teaching in the class generated the ability of the teachers professional knowledge.

18 A lot of the respondents both (prospective and working teachers), expressed that the teachers know the students 'psychology due to professional knowledge.

19 Numerous of the respondents both (prospective and working teachers), were of the view that the teachers are aware of the changing taking place in learning environment. It showed the sense of the application of professional knowledge of teachers in teaching learning environment.

20 Majority of the respondents both (prospective and working teachers), were of the opinion that the teachers practically engaged the learners in the learning processes. The practical engagement of the students in learning processes showed application of professional knowledge in learning environment.

21 A lot of the respondents both (prospective and working teachers), were of the view that teachers involve their students in learning process on the basis of professional knowledge. Applying professional knowledge in classroom environment can motivate the students for learning.

22 Majority of the respondents both (prospective and working teachers), were of the view that knowledge of teaching subject is very much important for teachers in classroom environment. Subject knowledge led the teachers towards the application of professional knowledge in learning environment of students.

23 A lot of the respondents both (prospective and working teachers), were of the opinion that training of the teachers improved the teaching processes in the classroom environment. It showed value to the views of the importance of teachers training in the learning environment.

24 A lot of the respondents both (prospective and working teachers), were of the view that pedagogical training of the teachers improved the teaching processes.

25 Majority of the respondents both (prospective and working teachers), were of the view that teachers teach according to new trends and methods affect the teaching processes. Effectiveness of the teaching process in the classroom environment reflected teachers teaching according to new trends and methods.

26 A lot of the respondents both (prospective and working teachers), were of the opinion that pedagogical skills and knowledge enhance teaching method, teaching through pedagogical skills and knowledge enhance the teaching method in the classroom environment.

27 Majority of the respondents both (prospective and working teachers), were of the opinion that pedagogical skills and knowledge help in lesson Planning, it showed the importance of pedagogical skills and knowledge in teaching learning process.

28 A lot of the respondents both (prospective and working teachers), were of the view that teachers evaluate the students' performance on the bases of their professional knowledge. It showed that application of teachers professional knowledge played a very important role in the learning environment

29 A lot of the respondents both (prospective and working teachers), were of the view that teachers use A.V aids due to pedagogical skills and knowledge. It showed the practical application of teachers professional knowledge in the learning environment.

30 Numerous of the respondents both (prospective and working teachers), were of the view that self knowledge is helpful in teaching processes. Self knowledge of the teachers in learning environment played an effective role in the teaching learning process

31 Majority of the respondents both (prospective and working teachers), were of the view that teachers encourage the students for discussion in classroom during teaching and learning environment. It showed the importance of pedagogical training of the teachers.

32 Numerous of the respondents both (prospective and working teachers), were of the view that teachers adopt new and innovative teaching methods in classroom while teaching to the students. It showed the application of pedagogical knowledge and importance of pedagogical training of teachers.

33 A lot of the respondents both (prospective and working teachers), were of the opinion that teachers make groups for discussion during teaching and assess their students descriptively. It showed importance of pedagogical training in teaching.

34 Majority of the respondents both (prospective and working teachers), were of the view that teachers use new technology, examine home assignment and arrange co-curricular activities for students. This showed the importance of pedagogical training for teachers in teaching.

35 A lot of the respondents both (prospective and working teachers), were of the view that teachers add new information to basic contents and use additional material during teaching. It showed the application of curriculum and school textbooks during teaching in the class.

36 Majority of the respondents both (prospective and working teachers), were of the view that teachers discuss contemporary issues in classroom teaching and refer additional study material to the students. It showed the involvement of curriculum and school textbooks in learning teaching process by teachers.

37 A lot of the respondents both (prospective and working teachers), were of the view that teachers involve their students in discussion. Teachers discuss and share students' problems with them. It leads to the fruitful atmosphere of discussion for solving classroom problems and know about the students personal problems by sharing with them.

38 Majority of the respondents both (prospective and working teachers), were of the view that teachers cooperate with their colleagues and contact parents regarding students progress. It showed the importance of

knowledge of contexts for teachers.

39 Majority of the respondents both (prospective and working teachers) were of the view that teachers involved their students in classroom activities. By involving the students in classroom activities, students become active participants.

40 A lot of the respondents both (prospective and working teachers), were of the view that teachers assign and assess students homework and use different teaching methods in classroom. It showed the importance of home assignment and application of practical teaching in classroom.

41 Majority of the respondents both (prospective and working teachers), were of the view that teachers prepare lesson plan and adopt teaching methods about students' academic needs. It showed practical application of professional knowledge of teachers in classroom situation.

5.3 RECOMMENDATIONS

On the basis of conclusions, the following recommendations were made.

1 The results of the study shows that, majority of the respondents were in favour of making groups for discussion during teaching. Therefore, it is recommended that the teachers must give opportunities to students for group discussion during teaching.

2 The present study reveals that the results of the students can be improved by using new technologies for teaching. It is recommended that the education department should provide trained teachers for the proper use of new technologies i.e. computer, multimedia and internet for teaching purpose.

3 The study exposes that majority of the respondents were in favour of home assignment. Therefore, it is recommended that, the heads of schools

must have a proper check in this regard.

4 The study shows that co-curricular activities play a pivotal role in teaching process. It is recommended that co-curricular activities must be included in curriculum.

5 The study reveals the fact that the teachers can improve the students' results by the regular addition of additional material and suggesting additional study to students. Therefore, the teachers must be rich in additional knowledge and guide their students to study subject related books

6 The present study shows that in teaching process the students were completely involved and the teachers discussed classroom problems with them. Therefore, it is recommended that the teachers must be professionally trained to involve their students in classroom matter by discussing classroom problems with students.

7 The study results exposes that the teachers asured to share students problems with them. It is recommended that the teachers must provide guidance and counseling to the students regarding (personal problems).

8 The study results showed that, the troika of the teaching learning process is teachers, students and parents. Therefore, it is recommended that the heads should facilitate their interactions. regarding the progress of the students

9 As lesson plan is the blue print of the whole activities inside the class. Therefore, the teachers must prepare and use lesson plan in class room.

10 The present study exposes that the teachers keep in mind students educational needs (individual differences) during teaching. Therefore, it is needed that teachers must keep in mind students' mental level for making learning process easy.

This reaserch study was conducted at secondary level in Khyber Pakhtunkhwa. In future similar studies can be conducted at college and university level. Observational method may be adopted in future along with the survey descriptive approach was used in this study. The parameter of the study was confined to only male secondary schools in Khyber Pakhtunkhwa. In future the study can also be conducted in female secondary schools in Khyber Pakhtunkhwa.

**A STUDY OF TEACHERS' PROFESSIONAL KNOWLEDGE
AND ITS PRACTICE AT SECONDARY LEVEL IN
KHYBER PAKHTUNKHWA**

Questionnaire for Working Teachers' of Khyber Pakhtunkhwa

- i) Name:- _____
 ii) Qualification:- _____
 iii) Designation:- _____
 iv) Institute:- _____
 v) Teaching Experience:- _____

Respected Sir,

This questionnaire is meant for the collection of data regarding "A study of Teacher's Professional knowledge and its Practice at Secondary Level". This questionnaire will be used only for research purpose for the degree of Ph.D in education. The information you will provide, will be strictly confidential and used only for the sole purpose of this study. Your cooperation will be highly appreciated. Please tick the appropriate response honestly.

Yours Sincerely,
 Nawab Gul
 PhD Education Scholar
 (NUN) PAKISTAN

S.No	Statement	Mostly	To some extent	Not at all
	Pedagogical skills and knowledge			
1	Teachers' Pedagogical knowledge helps in teaching.			
2	Teachers' Pedagogical knowledge helps the learners.			
3	Teachers' knowledge of curriculum is necessary for effective teaching.			
4	Teachers' Pedagogical knowledge helps in students' motivation.			
5	Teachers' Pedagogical skills and knowledge is necessary for solving students' problems.			

6	For achieving teaching goals pedagogical skills and knowledge is helpful			
7	For achieving teaching aims pedagogical skills and knowledge is helpful			
8	Teachers' general pedagogical knowledge affects the process of learning.			
9	Teachers' play best role due to pedagogical skills.			
10	Teachers' play best role due to pedagogical knowledge.			
11	Teachers' know different types of teaching methods due to pedagogical knowledge.			
12	Teachers' Pedagogical knowledge helps in knowing the curriculum.			
13	Teachers' Pedagogical knowledge helps in the use of reward.			
14	Teachers' Pedagogical knowledge helps in the use of reinforcement.			
15	Teachers' Pedagogical skills and knowledge help in knowing special and basic needs of learners.			
16	Teachers' Pedagogical knowledge helps in knowing learning theories.			
	General professional knowledge			
17	Teachers apply their professional knowledge in teaching.			
18	Teachers use their abilities appropriately.			
19	Professional education is the source of change behaviour.			
20	Teachers know the psychology of students.			
21	Teachers are aware of the changes taking place in learning environment.			
22	Knowledge means the process in which practical engagement of the learners is ensured.			
23	Teachers involve their students in learning process.			
	Factors Contributing Effectiveness of Teachers			
24	Those teachers who have command on their subjects teach well.			
25	The main purpose of training is to enhance the teaching process.			
26	Teaching process is improved due to pedagogical training.			

27	Teachers' teach according to new trends and methods.			
28	Teachers' Pedagogical skills and knowledge enhance teaching method.			
29	Teachers' Pedagogical skills and knowledge helps in lesson planning.			
30	Teachers evaluate the students' performance on the bases of their professional knowledge.			
31	Teachers' use A.V. aids due to pedagogical skills and knowledge.			
32	Teachers' self knowledge is helpful in teaching			
	Teaching and Pedagogical Training			
33	Teachers' encourage the students' for discussion.			
34	Teachers adopt new and innovative teaching methods.			
35	Teachers make groups for discussion during teaching.			
36	Teachers go for descriptive assessment of students.			
37	Teachers use new technology i.e internet etc.			
38	Teachers give and examine home assignment.			
39	Teachers arrange co-curricular activities.			
	Curriculum and School Text Book			
40	Teachers add new information to basic contents.			
41	Teachers use additional material during teaching.			
42	Teachers suggest additional study to students.			
43	Teachers discuss contemporary issues with learners in class.			
	Knowledge of Learners and Contexts			
44	Teachers involves their students in discussion.			
45	Teachers know individual differences of students.			

46	Teachers discusses class room problems with students.			
47	Teachers share students' problems with them.			
48	Teachers cooperate with their colleagues.			
49	Teachers contact parents regarding the progress of students.			
	Difficulties in Practical Teaching			
50	Teachers organize outside classroom activities.			
51	Teachers assign and assess homework.			
52	Teachers use different teaching methods.			
53	Teachers prepare lesson plans.			
54	Teachers keep in mind students' educational needs during teaching.			

**A STUDY OF TEACHERS' PROFESSIONAL KNOWLEDGE
AND ITS PRACTICE AT SECONDARY LEVEL IN
KHYBER PAKHTUNKHWA**

**Questionnaire for Prospective teachers' of Northern University
Nowshera**

- i) Name:- _____
 ii) Qualification:- _____
 iii) Designation:- _____
 iv) Institute:- _____
 v) Teaching Experience:- _____

Respected Sir,

This questionnaire is meant for the collection of data regarding “A study of Teacher’s Professional knowledge and its Practice at Secondary Level”. This questionnaire will be used only for research purpose for the degree of Ph.D in education. The information you will provide, will be strictly confidential and used only for the sole purpose of this study. Your cooperation will highly be appreciated. Please tick the appropriate response honestly.

Yours Sincerely,
 Nawab Gul
 Ph D Education Scholar
 (NUN) PAKISTAN

S.N O	Statements	Mostly	To some extent	Not at all
	General professional knowledge			
1	Teachers apply their professional knowledge in teaching.			
2	Teachers use their abilities appropriately.			
3	Professional education is the source of change in behaviour.			

4	Teachers know the psychology of students			
5	Teachers are aware of the changes taking place in learning environment.			
6	Knowledge means the process in which practical engagement of the learners is ensured.			
7	Teachers involve their students in learning process.			
	Factors Contributing Effectiveness of Teachers			
8	Those teachers who have command on their subjects teach well.			
9	The main purpose of training is to enhance the teaching process.			
10	Teaching process is improved due to pedagogical training.			
11	Teachers' teach according to new trends and methods.			
	Pedagogical skills and knowledge			
12	Teachers' Pedagogical skills and knowledge enhance teaching method.			
13	Teachers' Pedagogical skills and knowledge help in lesson planning.			
14	Teachers evaluate the students' performance on the bases of their professional knowledge.			
15	Teachers' use A.V aids due to pedagogical skills and knowledge			
16	Teachers' self knowledge is helpful in teaching.			
	Teaching and Pedagogical Training			
17	Teachers' encourage the students' for discussion.			
18	Teachers adopt new and innovative teaching methods.			
19	Teachers make groups for discussion during teaching.			
20	Teachers go for descriptive assessment of students.			
21	Teachers use new technology i.e. internet,etc.			
22	Teachers give and examine home assignment.			
23	Teachers arrange co- curricular activities			
	Curriculum and School Text Book			
24	Teachers add new information to basic contents.			

25	Teachers use additional material during teaching.			
26	Teachers suggest additional study to students.			
27	Teachers discuss contemporary issues with learners in class.			
	Knowledge of Learners and Contexts			
28	Teachers involve their students in discussion.			
29	Teachers discuss class room problems with students.			
30	Teachers share students' problems with them.			
31	Teachers know individual differences of students.			
32	Teachers cooperate with their colleagues			
33	Teachers' contact parents regarding the progress of students.			
	Difficulties in Practical Teaching			
34	Teachers organize outside classroom activities.			
35	Teachers assign and assess homework.			
36	Teachers use different teaching methods.			
37	Teachers prepare lesson plans.			
38	Teachers keep in mind students' educational needs during teaching.			

List of Visited Schools in District Mardan

- Govt. High School Babuzia Mardan.
- Govt. High School Katlang Mardan.
- Govt. High School Jamal Garhi Mardan.
- Govt. High School Dheri Likpani Mardan.
- Govt. High School Gaddar Mardan.
- Govt. High School Shankar Mardan.
- Govt. Centennial Model High School Bank Road Mardan.
- Govt. High School Bicket Gunj Mardan.
- Govt. High School Mardan. No 1
- Govt. High School Mardan. No 3
- Govt. High School Baghdada Mardan.
- Govt. High School Gujar Ghari Mardan.

List of Visited Schools in District Nowshera

- Govt. High School No, 1 Nowshera.Cantt.
- Govt. High School No, 2 Nowshera Cantt .
- Govt. High School No, 1 Nowshera Kalan .
- Govt. High School No, 2 Nowshera Kalan .
- Govt. High School A.C. Centre, Nowshera.
- Govt. High School Risalpur, Nowshera.
- Govt. High School Rashakai, Nowshera.
- Govt. High School Kotarpan, Nowshera.
- Govt. High School Bara Banda, Nowshera.

- Govt. High School Ziarat Kaka Sahib, Nowshera.
- Govt. High School Manki Sharif, Nowshera.
- Govt. High School Saleh Khana, Nowshera.

List of Visited Schools in District Swabi

- Govt. High School No1Swabi.
- Govt. High School Maneri Bala.
- Govt. High School Maneri Payan
- Govt. High School Topai.
- Govt. High School Lahore,.
- Govt. High School panj peer ,
- Govt. High School Kala Swabi.
- Govt. High School Gullo Dherai Swabi
- Govt. High School Sher Dhara Swabi,
- Govt. High School Ayub Khan Killi Swabi
- Govt. High School Yar Hussain Swabi
- Govt. High School Mansab Dar Swabi

List of Visited Schools in District Haripur

- Govt. High School Ghazi Haripur.
- Govt. High School Hamlet Haripur.
- Govt. High School Kotehra Haripur.
- Govt. High School Kondi Haripur.
- Govt. High School Sari kot Haripur.
- Govt. High School Sari Haripur.
- Govt. High School Gadwayein Haripur.
- Govt. High School Panniyian Haripur.

- Govt. High School Kot Najeebullah Haripur.
- Govt. High School Sarai Gadai Haripur. .
- Govt. High School No 1 Haripur. .
- Govt. High School No 2 Haripur. .

List of Visited Schools in District Dera Ismail Khan

- Govt. High School Morali Road, Dera Ismail Khan.
- Govt. High School Dhap Shomali, Dera Ismail Khan.
- Govt. High School Kolachi, Dera Ismail Khan.
- Govt. High School Darband khord , Dera Ismail Khan.
- Govt. High School Malana, Dera Ismail Khan.
- Govt. High School Mandhran Kalan, Dera Ismail Khan.
- Govt. High School Banno Road Dera Ismail Khan.
- Govt. High School No 1, Dera Ismail Khan.
- Govt. High School No2 Near Tonk Adda , Dera Ismail Khan.
- Govt. High School No 3 Sarkolar Road Dera Ismail Khan.
- Govt. High SchoolNo 4, Dera Ismail Khan.
- Govt. High School No 5, Dera Ismail Khan.

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