

**ANALYSIS OF PEDAGOGICAL
COMPETENCIES OF PROSPECTIVE
TEACHERS IN THE LIGHT OF NATIONAL
PROFESSIONAL STANDARDS FOR
TEACHERS**

By

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NATIONAL UNIVERSITY OF MODERN LANGUAGES

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ABSTRACT

Thesis Title: Analysis of Pedagogical Competencies of Prospective Teachers in the light of National Professional Standards for Teachers

The study aimed to find the gap between perceived and developed pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers (NPSTs, 2009). It explored the pedagogical competencies integrated in the course guide books of B.Ed. (Hons) program with reference to NPSTs. It also compared gender-based difference of perceived and developed pedagogical competencies of prospective teachers. To achieve the objectives of the study an exploratory sequential mixed methods approach was used. The content analysis of course guide books of B.Ed. (Hons) program was conducted based on the themes of NPSTs to check the integration of competencies in content. The responses of prospective teachers were collected through self-reported scale and classroom observation sheet. The population of the study consisted of 1280 prospective teachers of B. Ed (Hons) program from all public sector universities of Punjab province. For assessing prospective teachers perceived pedagogical competencies, a sample of 296 from public sector universities of Punjab province were taken through simple random sampling. Secondly, to assess the level of developed pedagogical competencies of prospective teachers' observations were taken i.e., 30 during their teaching practices in schools using purposive sampling technique. Content analysis was conducted following themes identification, categorization, coding and matching whereas the quantitative data were analyzed through mean, percentages, and t-tests. The study found that the course guide books designed and developed for prospective teachers is in accordance with NPSTs and its sub-standards. It was found that prospective teachers perceived themselves pedagogically competent in all selected standards, however they were observed not competent enough as per their perception. A significant gap was observed between perceived and developed competence level and that gap is different across standards and sub-standards. This gap was a bit low in subject matter as compared to the other two standards. Gender was not a source of variation in the perceived and developed pedagogical competencies. The study recommends that the existing gap may be integrated in curriculum implementation plan for future programs.

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LIST OF ABBREVIATIONS

ADE	Associate Diploma of Education
ADE	Associate Diploma of Education
AV	Audio Visual
BA/ BSc	Bachelor of Arts / Bachelor of Science
B. Ed	Bachelor of Education
CEO	Chief Executive Officer
CLR	Classroom Language Routine
CLRs	Classroom Language Routines
CLT	Communicative Language Teaching
CD	Compact Disc
CPD	Continuous Professional Development
DEO	District Education Officer
EFL	English as a Foreign Language
ESL	English as a Second Language
ELT	English Language Teaching
FPDF	Faculty Personnel Development Program
GoP	Government of Pakistan
GTM	Grammar Translation Method
HEC	Higher Education Commission
Hons	Honours
HDI	Human Development Index
ICT	Information & Communications Technology
IP & S	Instructional Planning & Strategies

K & U	Knowledge & Understanding
MDGs	Millennium Development Goals
MoE	Ministry of Education
NACTE	National Accreditation Council for Teacher Education
NCF	National Curriculum Framework
NEP	National Education Policy
NPSTs	National Professional Standards for Teachers
Ho	Null Hypothesis
PCK	Pedagogical Content Knowledge
P & S	Performance & Skills
L2	Second Language
SSC/HSSC	Secondary School Certificate/ Higher Secondary School Certificate
STEP	Strengthening Teacher Education Program
SLOs	Students Learning Outcomes
S M K	Subject Matter Knowledge
SDGs	Sustainable Development Goals
TP	Teaching Practice
UNESCO	United Nations Educational, Scientific & Cultural Organisation
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development

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Sehrish Mushtaq

Dedication

I dedicate this humble effort, the fruit of my thoughts and study to my mentor

*Dr. Shazia Zamir, & my beloved husband Prof Muhammad Asjad whose
support kept me intact*

CHAPTER 1

INTRODUCTION

Human life has undergone an obvious and a significant change specially during the last thirty years or so due to the adoption of modern education and pragmatic approach in knowledge, science and technology (Kelly, 2004). Education has enabled human beings to bring about a desirable and intended change among people and societies across the globe. Schools, colleges and universities endeavor to implement and achieve curriculum objectives that enable students to understand the natural and social phenomena of universe and society. Educational institutions transform students in terms of human growth and development particularly in the aspects of cognition, behavior and skills. Teachers in the educational institutions are expected to utilize their pedagogical skills in order to maintain students' interest in knowledge and research. Teachers' professional teaching skills have a direct impact on the learning skills of students (Darling-Hammond, *et al*, 2017). Their role is to equip students with life-long learning skills to lead a meaningful and purposeful life (Abdul Jabbar, 2015).

Teachers occupy a pivotal role in the whole educational enterprise. Imparting quality education squarely lies upon the teaching quality and pedagogical competencies of teachers. They provide necessary linkage between the curriculum and the learner through teaching and it is the ultimate accomplishment of academic professionalism (Singh, 2007). Professional teachers provide solid foundations to any education system and guarantee success in terms of learning (Bhargava, 2005). Teachers' regular professional development results in highly successful outcome of students (Swanson, 2020). Consequently, it becomes imperative on the part of education administrators to take concerted steps for better teacher training.

Students' performance and producing quality education is largely dependent upon the competence of teachers (Agra, 2005). Coherent efforts to build prospective teachers' competencies enhance their capacity to meet quality improvement parameters (Sims, et al, 2022). Pedagogically competent teachers are skilled to meet the challenging demands of professional teaching career and have the ability to enhance the quality of teaching. Teachers' pedagogical competency is part of professional development which ensues regular changes and updating the class room teaching practices (Copur-Gencturk & Papakonstantinou, 2016). A competent teacher entails using the best teaching techniques to transfer knowledge and help learners develop essential skills and attitudes (Sharma, 2003). Professional understanding defines the ability to deal with aspects of awareness, diversity, skills, attitudes and collaboration for educational growth and progress of students (Channa & Zafarullah, 2022).

Teachers' role in the educational milieu is multi-dimensional. They promote leadership qualities, collaboration, critical thinking and communication skills besides inculcating civic sense and awareness of global issues among students (Abdul Jabbar, 2015). Pedagogy, knowledge and technology are the three major characteristics, essential to provide learning innovation in teaching (Cooc, 2019). The major aim of teaching is the accomplishment of teaching goals and objectives which are crucial for teachers. Therefore, competent teachers use more efficient and effective methods of teaching, skills, practices and abilities to achieve learning objectives. Teachers' effectiveness could be further enhanced provided they possess knowledge of digital literacy skills. A desired competent teacher is also expected to be zealous, spirited and devoted to educational cause and have the capability to apply knowledge to practical situations and can take appropriate initiatives (Cruickshank, 2009).

Commonly a teacher is associated with someone who possesses deep knowledge of specific discipline and skills in teaching whereas the nature and complexity of teaching profession spreads beyond mere knowledge and skills necessitated to teach efficiently and objectively (Turnuklu & Yesildere, 2007). Teachers are primarily required to possess teaching skills (Hotaman, 2010). The assortment of these multiple facets of teaching skills are termed Pedagogical Competence. Pedagogical competence is so fundamental and specific to teaching profession that it differentiates teachers from the rest of professions (Jahiriansyahet, et al., 2013; Retnowati, 2013). It demonstrates teachers' ability to scrutinize, organize and prioritize all learning material in a manner which could be assimilated with ease by the learners (Rosnita, 2011).

Education has emerged as a single powerful tool over a period of time to influence the development of a child. Pedagogical competence of teachers is liable to transform a nation's youth into valuable and skilled (Irum, *et al*, 2013). Coming over to the context of Pakistan where classrooms offer traditional teaching methods which demand teachers to communicate a lot of material with learners. On the other hand, students are expected to remember the given information and be able to recall it in exact manner during examinations. The drawbacks of this approach come to limelight when students who are qualified through conventional teaching techniques get exposed in conceptual understanding. They lack the cognitive abilities that are needed to analyse and handle information in new situations, synthesize and assess ideas, relate what they learn in school to real-world applications, or come up with novel, unique ideas at their own (Hoodhbuoy, 2009). They possess insufficient skills to evaluate knowledge and understandings, hampered judgments, possible misinterpretations, etc.

The latest trend in education as opposed to traditional method of teaching demands pedagogical competencies from teachers. Pedagogy concerns with teaching of

theory and practice in education and relates to good practices of teaching (Shakeela, Ejaz & Bismillah, 2019). The National Education Policy-2009 (NEP, 2009) acknowledges the necessity and significance of broader competencies among teachers in Pakistan including ability to think critically, creativity, innovation and development of students' thinking skills. These are essential to overcome the challenges associated with the contemporary era. The strategy implies the necessity of re-evaluating teacher preparation so that prospective teachers are aware of their talents and remain prepared for further growth to encounter future students effectively.

Teaching is the mother of professions as all other occupations are built and developed around the teaching profession. Teachers' quality of instructions impact students' future and equip them to lead a meaningful life. Teachers are fundamental in guaranteeing the effectiveness of learning and laying the groundwork for a society that values knowledge and education. A nation's wealth is based on how well its youth are prepared to carry out their many social obligations. To keep up with the profession's rising demand, there is a need to place more emphasis on teachers' ongoing training and development. Planning and developing teachers' professional competencies are required to fulfill the expanding demand for teaching profession (OECD, 2009). Similarly, a system of accreditation and evaluation was devised to gauge teachers' professional and personal competencies.

Professional standards across teaching profession have been developed to ensure quality instructions and learning. Standards are intended to define the essential information, skills and attitudes required to successfully carry out educational task of teaching. These standards do not provide a list of duties but instead focus on outlining the key elements of teaching performance. The standards help institutions to be clearer about the kind of performance or behavior they intend to look for. These outline skills and

knowledge that educators must have in order to offer students and groups of individuals' relevant and worthwhile learning experiences (Hobbiss, *et al.*, 2021).

The government of Pakistan launched an initiative to raise the quality and standard of teachers and bring it at par with the international educational standards. Subsequently, National Professional Standards for Teachers in Pakistan (NPSTs, 2009) were introduced. These NPSTs have been elevated to a crucial tenet in Educational Policy (2010). Standards in teacher education are deemed necessary, it is a reliable system for accrediting teacher education programs as it sets defined parameters. The NPSTs document evolved as a result of joint collaboration between Pakistan Ministry of Education (MoE) in partnership with United Nations Educational, Scientific and Cultural Organisation (UNESCO). UNESCO worked to provide policy guidelines and planning whereas funding was provided by (USAID). In all provinces, stakeholders were consulted when developing professional standards for teachers. The professional standards were initially designed for beginning primary-level teachers in mind, but they can also be modified and applied to teachers, teaching secondary classes.

The NPSTs document has broadly divided Teachers' professional competencies into ten standards. These standards were introduced with an aim to certify teacher education program and ensure quality in teaching profession. A well-designed teachers' training program must specifically incorporate all these NPSTs. These standards exhibit competencies, abilities and characteristics that teachers need to possess. The NPSTs are utilized to establish policies and processes to streamline and systematize institutions that provide teacher training programs. Teachers' professional development conducted within the parameters of standards and competencies parameters ensure quality product of teachers, best learning outcomes of students and good academic results (UNESCO, 2008).

The NPSTs of pedagogical competencies are as appended below:

- i. Subject Matter Knowledge
- ii. Human Growth and Development
- iii. Knowledge of Islamic/ Ethical Values/Social Life Skills
- iv. Instructional Planning and Strategies
- v. Assessment
- vi. Learning Environment
- vii. Effective communication and proficient use of information and communication technologies
- viii. Collaboration and Partnerships
- ix. Continuous Professional Development and Code of Conduct
- x. Teaching of English as a second/foreign language (ESL/EFL)

The worldwide modern approach in education gives preference to standard-based, criteria-based and outcome-based learning in education. It is an effort towards imparting conceptual, meaningful and purposeful education by instructors and teaching faculty. Teachers are given trainings as part of informative process to make them skillful about newest concepts of teaching, make them aware about quality consciousness measures and the impact quality education creates on teaching (NEP, 2009). The three aspects of each NPSTs comprises of following parts;

- a. Knowledge & Understanding (Relates to teachers' knowledge about subject)
- b. Dispositions (Relates to teachers' values, behavior& attitude)
- c. Performance & Skills (Relates to teachers' ability and what he can do)

One part of a bigger international effort to guarantee quality in educational endeavor is the development of teachers and other educators 'professional knowledge in accordance with laid out standards and competencies. Quality assurance in education examines the elements that affect instructions, keeps track of their presence and assesses how they affect student learning (NEP, 2009).

According to the literature that is currently accessible on the topic, limited research has been done in Pakistan to analyze pedagogical competences of prospective teachers in the light of NPSTs. Sarwar and Hussain (2010) in their research article had outlined difficulties and their remedies in Pakistan's teacher preparation programs. Their research investigation concluded that educational institutions in Pakistan completely disregard school needs while preparing teachers for teaching profession. It was discovered that prospective teachers lacked skills in class management, planning a lesson, classroom administration and content understanding despite being imparted training. They viewed that identifying and providing rigorous training in the weak areas could solve these issues.

A specific study that could identify differences between prospective teachers' perceived and developed pedagogical competencies in Pakistan was not existent. Although foreign researches have made significant contribution to the field of learning education programs for prospective teachers, particularly with regard to pedagogical competencies and teaching practices. To fill the void, the researcher felt it necessary to carry out the present study in order to analyze prospective teachers' competencies in knowledge & understanding, behaviour, performance and skills about subject matter knowledge, instructional planning & strategies and assessment. It also reveals the prevalent differences in perceived and developed pedagogical competencies of prospective teachers. As a result, the current study may be useful in bridging the

knowledge, attitudes and abilities of prospective teachers about subject matter knowledge, instructional planning & strategies and assessment among public sector universities in Punjab. These three competencies subsequently form the basis for my present study.

1.1 The Rationale of the Study

The needs and demands of modern education necessitate producing professional teachers with sound professional aptitude, hence contributing towards quality education. These attributes and hallmarks are termed as pedagogical competencies which are summed up in NPSTs (2009). Pedagogical competence has for long remained an area of concern of teacher education programs. The consistent lack in imparting quality education points towards a gap between theory and practice. In Pakistan few studies have been conducted that explored the efforts towards reducing the gap between theory and practice in pedagogical competence among prospective teachers. However, contemporary international researchers have investigated and found it an important area of research for the improvement of teacher education programs.

The present study is an effort to carry out research on this topic in the existing context of Pakistan. The findings of Al-Jaro (2017) research reveals that prospective teachers need to be imparted theoretical as well as practical knowledge of pedagogical skills. Knowledge given through teaching of various courses in educational institutions needs to be supplemented by actual practice. It enhances and strengthens teachers' pedagogical content knowledge along with adopting appropriate teaching methodology. These practical sessions are called teaching practices or teaching practicum. Similarly, in order to evaluate the curriculum for theoretical knowledge on pedagogical competency, curriculum content of the course guides was analysed.

The study conducted survey through self-reported scale to assess the pedagogical competencies of prospective teachers. According to Shakeela, Ejaz, & Bismillah (2019) perception of prospective teachers about the quality of pedagogical course is to some extent questionable. However, Pedagogical practices determine the level of success and practical proof of learning of prospective teachers' knowledge, skills and attitude. As per researcher's knowledge, quantitative and qualitative studies have been conducted on these attributes in the local context but no mixed method study was found related to this area of research.

A descriptive study was conducted by (Anjum & Mahmood, 2019) to make a comparison of competencies of the prospective teachers of Formal and Distance Education Programs. The study analyzed the responses of the prospective teachers through knowledge test and observation sheet. Another study was conducted by (Altaf & Saeed, 2021) which aimed to explore the awareness and practices of NPSTs to set the parameters for specific organizational prospects. It was a qualitative case study design. The population of the study comprised of Education Managers (CEO, DEO and Head Teachers) and in service teachers. Whereas the present study has been done on prospective teachers of public sector universities using mixed method approach by combining qualitative and quantitative methods together.

Content analysis on the course guide books of B.Ed. (Hons) program was not done before and has generally been overlooked in educational research in relation to NPSTs in Pakistan. A need was therefore felt to explore the pedagogical competencies integrated in the course guide books of B. Ed (Hons) program with reference to NPSTs and to assess the level of perceived pedagogical competencies of prospective teachers in the light of NPSTs. It was therefore deemed essential to identify the level of existing gap

of perceived and developed pedagogical competencies of prospective teachers. The theory and practice gap was carried out by taking three NPSTs (2009) namely:

1. Subject Matter Knowledge
2. Instructional Planning & Strategies
3. Assessment

1.2 Statement of the Problem

Hitherto it is evident that there is always a difference between knowledge (theory) and practice, regarding teachers' competence. This gap is widened as prospective teachers lack exposure and practice of classroom teaching. In Pakistan it has been reported by many researchers that competence of the teachers varies and the sources of variation are different. There are many concerns about what they teach, how they teach and what is the actual level of prospective teachers' 'competence'? There are several issues related to teacher education training and professional skills achievement including teaching and learning, assessment and evaluation process, teachers' training deficiency, gap in communication and monitoring, etc. The lack of these factors negatively influences teachers' performance and undermines education quality.

The introduction and implementation of NPSTs are considered instrumental in bringing about a sea change in teachers' pedagogical competency. In spite of the fact that professional training is being conducted for prospective teachers; they still lack in pedagogical competencies. Therefore, a need arises to explore the Pedagogical competencies integrated in the course guide books of B. Ed (Hons) and to identify the difference in the perceived and developed level of pedagogical competencies in relation to NPSTs. It is observed that perceived and developed pedagogical competencies vary across gender. Therefore, gender was particularly considered in this study. Considering the demands of the contemporary education system it was felt necessary to revisit

pedagogical competencies for prospective teachers from a new perspective. NPSTs for practicing teachers in teacher education programs occupy central role in carrying out present study. Therefore, it was felt necessary to analyse pedagogical competencies of prospective teachers in terms of compatibility with NPSTs relevant provisions. The basic aim of the research was to identify the gap between perceived and developed pedagogical competencies of prospective teachers in the light of NPSTs.

1.3 Objectives of the Study

The objectives of the present research study are as under:

1. To explore the pedagogical competencies integrated in the course guide books of B.Ed. (Hons) program with reference to National Professional Standards for Teachers i.e., subject matter knowledge, instructional planning & strategies and assessment.
2. To assess the level of perceived pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers i.e., subject matter knowledge, instructional planning & strategies and assessment
3. To assess the level of developed pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers i.e., subject matter knowledge, instructional planning & strategies and assessment
4. To identify the differences between perceived and developed pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers.
5. To compare gender-based difference regarding perceived pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers.
6. To compare gender-based difference regarding developed pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers.

1.4 Research Questions

Research Questions Related to Objective No. 1, 2 and 3 are as below:

1. To what extent the pedagogical competencies are integrated in the course guide books of B. Ed (Hons) program with reference to National Professional Standards for Teachers?
2. What is the level of perceived Pedagogical Competencies of prospective teachers in the light of National Professional Standards for Teachers?
3. What is the level of developed Pedagogical Competencies of prospective teachers in the light of National Professional Standards for Teachers?

1.5 Hypotheses of the Study

Objective wise null hypotheses of the study are given below:

H_{o1} There is no difference between perceived and developed pedagogical competencies of prospective teachers with regards to Subject Matter Knowledge.

H_{o1(a)} There is no difference between perceived and developed pedagogical competencies of prospective teachers in knowledge and understanding with regards to Subject Matter Knowledge.

H_{o1(b)} There is no difference between perceived and developed pedagogical competencies of prospective teachers in dispositions with regards to Subject Matter Knowledge.

H_{o1(c)} There is no difference between perceived and developed pedagogical competencies of prospective teachers in Performance and skills at with regards to Subject Matter Knowledge.

H_{o2} There is no difference between perceived and developed pedagogical competencies of prospective teachers with regards to Instructional Planning and Strategies.

H₀2(a) There is no difference between perceived and developed pedagogical competencies of prospective teachers in knowledge and understanding with regards to Instructional Planning and Strategies.

H₀2(b) There is no difference between perceived and developed pedagogical competencies of prospective teachers in dispositions with regards to Instructional Planning and Strategies.

H₀2(c) There is no difference between perceived and developed pedagogical competencies of prospective teachers in Performance and skills with regards to Instructional Planning and Strategies.

H₀3 There is no difference between perceived and developed pedagogical competencies of prospective teachers with regards to Assessment.

H₀3(a) There is no difference between perceived and developed pedagogical competencies of prospective teachers in knowledge and understanding with regards to Assessment.

H₀3(b) There is no difference between perceived and developed pedagogical competencies of prospective teachers in dispositions with regards to Assessment.

H₀3(c) There is no difference between perceived and developed pedagogical competencies of prospective teachers in Performance and skills with regards to Assessment.

H₀4 There is no difference between perceived pedagogical competencies of male and female prospective teachers in Subject Matter Knowledge.

H₀5 There is no difference between perceived pedagogical competencies of male and female prospective teachers in Instructional Planning and Strategies.

H₀6 There is no difference between perceived pedagogical competencies of male and female prospective teachers in Assessment.

H₀₇ There is no difference between developed pedagogical competencies of male and female prospective teachers in Subject Matter Knowledge.

H₀₈ There is no difference between developed pedagogical competencies of male and female prospective teachers in Instructional Planning and Strategies.

H₀₉ There is no difference between developed pedagogical competencies of male and female prospective teachers in Assessment.

1.6 Significance of the Study

The present study relates to pedagogical competencies of prospective teachers in the context of NPSTs and their integration in the course guide books of B.Ed. (Hons) program and to identify the gap in the theoretical knowledge perceived through course work and practice of that knowledge in the actual classroom. The study results will provide guidance in educational planning and incorporating NPSTs in teaching. The beneficiary stakeholders of the study either directly or indirectly will include education policy makers, curriculum developers, teacher educators and above all prospective teachers.

- i. Policy Makers:** The findings of this research could be used by the education policymakers to include the identified gaps in the existing teacher training programs in order to formulate directed future policies in order to inculcate quality teaching among teachers. It will be beneficial in raising educational standards which may be retained in all regions of the country and improve education quality.
- ii. Curriculum Developers:** The findings of the study can be helpful for curriculum developers who could align teacher education curriculum according to the NPSTs. It will ensure that relevant and comprehensive

training is imparted to prospective teachers to attain required pedagogical competencies leading to well-equipped and well-groomed educators.

- iii. **Teacher Educators:** They can apply the study findings to improve teaching techniques and methods while delivering subject content. It will make prospective teachers aware about the importance and need of pedagogical competencies and thereby strive to develop these competencies in personal teaching style. These competencies would lead educators towards effective training and subsequently focus on enhancing the quality of teacher preparation.
- iv. **Prospective Teachers:** They are the one who come in actual contact with learners and will practice teaching. They will gain comprehensive knowledge and understanding about the competencies required to be developed among prospective teachers on the lines of NPSTs. It would bring improvement in specific areas resulting in preparing well-trained teachers for teaching profession and would be able to display a skilled, confident and capable teaching attitude in teaching.

Overall, the major methodological contribution of the study relates to identifying existence of significant gap in area of theory and practice among prospective teachers.

1.7 Delimitations of the Study

Following delimitations were made while conducting this study.

- i. The study was delimited to Subject Matter Knowledge, Instructional Planning & Strategies and Assessment since these three NPSTs were fundamental and sum total of educational process.
- ii. The study was delimited to the prospective teachers of second last semester of B. Ed (Hons) program to get their perceived views on self-reported scale and last

semesters' prospective teachers to observe them practicing during teaching practice.

- iii. The criteria for selection of ELT for content analysis featured three facts according to HEC Policy (2010). Foremost was the fact that B. Ed (Hons) program focused on ELT, secondly, all recommended resource material was in English language and thirdly, the medium of instruction was primarily English. Therefore, the study was delimited to six course guides of B. Ed (Hons) Program Functional English - I. English- II (Communication), Teaching of English - I, Teaching of English - II (Teaching English Pedagogy), Methods of Teaching and Assessment.
- iv. The content analysis was delimited only to 'Knowledge & Understanding' sub-aspect of each selected standard as it was manifested in content only.
- v. The study was delimited to only five public sector universities of Punjab and the sample size was justified as per the demands of the research (Appendix-C).

1.8 Theoretical Background of the Study

This study is theoretically embedded to achieve quality enhancement and bring it in consonance with the theoretical framework adopted in the NPSTs (2009). The NPSTs theoretical background was further based on the United Nations declaration of Millennium Development Goals - 2000 (MDGs), Sustainable Development Goals - 2015 (SDGs) and Education - 2030 which focus on quality education. In this connection Education Policy - 2009 also emphasized on achieving quality education. Hence NPSTs (2009) were developed to standardize and improve quality of teaching in Pakistan. The document of NPSTs is further rooted in curriculum development theories, learning theories, teacher training, teaching and teachers' and professional development theories.

In order to achieve Education 2030 goals, nations of the world are required to ensure sufficient recruitment of the school administration and teachers are motivated and well-trained. To materialize and improve quality in education, teachers must be given opportunities of training, service conditions, teachers' deployment and professional development (UNESCO & UNICEF, 2013). Therefore, Education 2030 and Sustainable Development Goals target teachers who are central to implementation and achieving these goals.

It is evident from the international efforts being made to raise the quality of teaching and teacher performance. Professional standards for teachers have been developed in Pakistan as part of the Strengthening Teacher Education Program (STEP) after consultation with all parties involved in each province and area. At the National Steering Committee Meeting held on November 7th, 2008 in Islamabad, representatives of the provinces endorsed the Professional Standards for Teachers (Government of Pakistan, 2009). Finally, National Professional Standards for educators were announced by the Pakistani Ministry of Education on February 23, 2009. This document characterizes the attributes of dedicated professional teacher. Additionally, it establishes long-term objectives for Pakistani educators. NPSTs document serves as a foundation for agreement on the uniformity regarding the elements of value-based education and aid in the presentation of knowledge, understandings, skills and values necessary for efficacious teaching.

1.9 Conceptual Framework of the Study

Conceptual framework relates research problem and research questions to related knowledge base (Rocco & Plakhotnik, 2009). It concentrates on ways and means to explore the research problem and adopts explicit research direction. It further explains the

relationship between identified variables of the study and conveys the process of the whole investigation (Ravitch & Riggan, 2012). A conceptual framework therefore develops hypotheses based on own research problem.

Conceptual framework differs from theoretical framework in that it provides the direction that is missing in theoretical framework. Also called research paradigm, conceptual framework makes things easier by delineating the input as well as output of the research project. One gets to know the variables that need to be tested in a conceptual framework. The conceptual framework, on the other hand, embodies the specific course by which the research will be undertaken in relation to the direction selected by theoretical framework.

The action plan for this study is considered as conceptual framework of this research. A conceptual framework is an efficient way to incorporate theory into a research design. The researcher found that a gap always exists between theory being taught to prospective teachers and the practical implementation of pedagogical skills. To reduce or shrink this gap, educators always tried to bring innovations in teachers training. The researcher implemented research plan to identify the gap between perceived and developed pedagogical competencies of prospective teachers in the light of NPSTs. Pedagogical competencies attain the status of key learning outcome for prospective teachers.

The NPSTs (2009) provides foundation for this study. The NPSTs (2009) has determined ten standards for professional teachers' compliance. Each NPSTs is separately assessed based on its pre- defined sub-standards. The framework related to the present study further narrows down NPSTs by selecting three relevant standards for analysing pedagogical competencies of prospective teachers being undertaken in B.Ed. (Hons) program. These three competency indicators are more aligned with the teachers training

and education at large. The adoption and implementation of these selected NPSTs would invariably result in quality and effective teaching and enhanced learning outcomes. At first stage it was assessed the extent of pedagogical competencies integrated in course guide books by using content analysis strategy. Secondly, the prospective teachers reported their perception on self-reported scale, considered as perceived competencies whereas at third stage selected prospective teachers were observed to assess the level of developed pedagogical competencies. The conceptual framework domain was implemented in three selected NPSTs along with sub standards as given in the figure below;

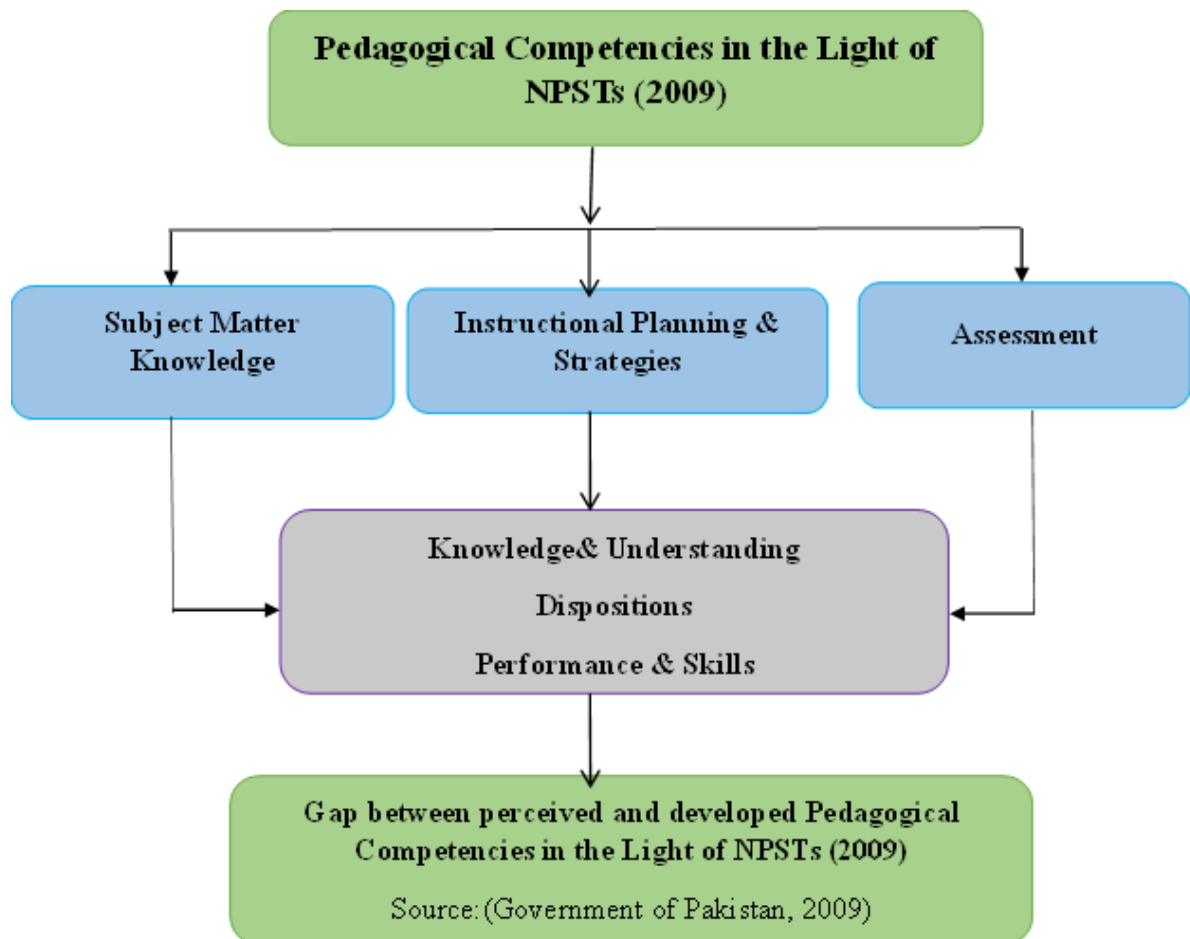


Figure 1.1 Conceptual Diagram of Pedagogical Competencies

1.10 Research Methodology

This study adopted an exploratory mixed methods research design. It applied a methodological triangulation i.e., qualitative and quantitative methods and triangulated results in order to understand the research problem. The present study merged a variety of data results gathered through instruments such as content analysis, surveys and observations to reach findings and conclusions.

1.10.1 Population

All the prospective teachers enrolled in B. Ed (Hons) in public sector universities of Province Punjab were the population of the study. The total number of prospective teachers enrolled in B. Ed (Hons) program were 1280.

1.10.2 Sample and Sampling Technique

The data was obtained on the level of perceived competencies through self-reported scale. The technique of simple random sampling was used for the selection of prospective teachers of public sector universities. The sample size selected from enrolled B.Ed. (Hons) students was 296 prospective teachers. Purposive sampling technique was used to observe those prospective teachers during their teaching practice. The sample size for observation purpose was 30 prospective teachers.

1.10.3 Research Instruments

Data was collected from three sources by using qualitative and quantitative techniques. Content Analysis, Self-reported scale and Observation sheet were used to collect responses from the sampled respondents. The details are as under: -

- i. Content Analysis was carried out on course guide books of B.Ed. (Hons) in the light of NPSTs.

- ii. Self-Reported scale was used to collect data from prospective teachers to assess the level of their perceived pedagogical competencies. It was developed by the researcher herself.
- iii. Observation sheet was used to collect data from prospective teachers to assess their level of developed pedagogical competencies. It was developed by the researcher herself.

1.10.4 Data Collection

The required data were collected from course guide books prescribed by HEC (2012) and prospective teachers enrolled in B. Ed (Hons) program in the public sector universities of Province Punjab. I personally collected the required data from the respondents during my visits to different universities. The sampled prospective teachers were tasked with filling out questionnaires and their willingness was sought to observe them during their teaching practice.

1.10.5 Data Analysis

Content analysis has been defined as “a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” (Hsieh & Shannon, 2005). Content analysis was conducted by the researcher by identifying given data sources, themes, developing sub-themes categories, coding data, assess reliability of data and finally summarizing and analyzing results. The procedure for content analysis included analysis of B. Ed (Hons) course guides for themes and sub themes of each selected NPSTs. The main themes and sub-themes were categorized and later coded. These themes and sub-themes were matched with course guides and placed in tabulated form. The tables depicted inclusion and exclusion of each aspect of themes in the course guides. The tables contained to a

large extent exact wordings or summarized form where text was lengthy from course material with relevant book, unit and page number and were subsequently interpreted.

The quantitative data were adequately compiled after the respondents' responses were gathered through self-reported scale and observation sheet. Statistical techniques including percentages and means were used to assess the level of perceived and developed pedagogical competencies of prospective teachers. The differences between the perceived and developed pedagogical competencies of prospective teachers were determined using a paired sample t- test. The independent sample t -test was used to compare the gender-based difference in the perceived and developed pedagogical competencies of prospective teachers.

1.11 Operational Definitions

There are the terms which were being used many times in the study. It is essential to understand them clearly before the study.

1.11.1 Analysis: The word 'Analysis' in the context of the title of present research means detailed examination of the elements or structure of NPSTs through systematic and rigorous investigation by adopting scientific approach to reach findings.

1.11.2 Pedagogical Competencies refer to mastery, expertise or excellence in teaching profession. Here it means teachers' excellent ability to effectively perform in a classroom learning process and achieve expected outcomes. The key components of pedagogical competencies include capabilities of knowledge, skills and attitude whereas NPSTs are statements which explain expectations and practices from prospective teachers.

1.11.3 NPSTs are the National Professional Standards for Teachers that are elaborately given in NPSTs (2009) document published by MoE, Govt. of Pakistan and provide

guidelines for pedagogical competencies for teachers. In the context of the present study, they reflect pedagogical competencies expected from a teacher.

1.11.4 Prospective Teachers are enrolled in Teachers Training program and are trained to adopt teaching profession on successful completion of training in near future. Here B.Ed. (Hons) students are referred to as Prospective teachers.

1.11.5 Perceived Competence

The term “Perceived Competence” implies to a person’s belief based on subjective judgment. It is one’s own perception about personal ability, skills and proficiency. It can relate to any particular task, domain or aspect of life. In the context of this study, perceived competence is the level of theoretical knowledge of prospective teachers that is learnt through course work of B. Ed (Hons).

1.11.6 Developed Competence

The term “Developed Competence” refers to mastery and expertise in acquired skills, knowledge and abilities. It is the display of high level of proficiency and effectivity depicting individual’s advanced stage of expertise, abilities and capabilities. In the context of this study, developed competence is the level of actual practice of theoretical knowledge of prospective teachers learnt through course work of B. Ed (Hons) in the real classroom situations during teaching.

1.12 Objectives with the Appropriate Analysis Techniques

The following table has been developed to depict all objectives of the study with relevant qualitative and quantitative data analysis techniques.

Table 1.1:

Research Objectives with Appropriate Analysis Techniques

S. No	Objectives	Analysis
1.	To explore the pedagogical competencies integrated in the course guide books of B.Ed. (Hons) program with reference to National Professional Standards for Teachers i.e., subject matter knowledge, instructional planning & strategies and assessment.	Content Analysis
2.	To assess the level of perceived pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers i.e., subject matter knowledge, instructional planning & strategies, and assessment.	Mean
3.	To assess the level of developed pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers i.e., subject matter knowledge, instructional planning & strategies, and assessment.	Mean
4.	To identify the differences between perceived and developed pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers.	Paired Sample t-test
5.	To compare gender-based difference regarding perceived pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers.	Independent sample t-test
6.	To compare gender-based difference regarding developed pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers.	Independent sample t-test

CHAPTER - 2

LITERATURE REVIEW

This chapter critically discusses the available literature on pedagogical competencies of prospective teachers and further narrows it down to National Professional Standards for Teachers (NPST - 2009) in the context of Pakistan. A majority of prospective teachers undertake education programs from universities in Pakistan every year. The major and specific focus of NPSTs is on Pedagogical competencies which form the main topic of discussion in this chapter. This study used literature review to identify the pedagogical competencies of prospective teachers. An essential part of teachers' competency is knowledge, abilities and attitude in teaching/learning process. This chapter examines the significance, main elements and characteristics of teachers' pedagogical competencies with reference to related literature of other researchers.

A review of the literature helps to provide a broader picture, clarify the method of delivering education and challenges faced by teachers in acquiring competency. The scope of teaching profession is gradually evolving, developing and expanding to cater for needs of capacity building and skills development of teachers through training programs. Teaching is associated with a teacher and he educates students. Education basically concerns learning of learners. A teacher achieves teaching objectives by making learning happen. He helps students in developing learning constructs in their minds. Before a teacher embarks upon this arduous journey he is to be trained, equipped and updated with relevant knowledge and skills regularly.

Ideally a teacher is to be professionally sound and competent in all aspects of teaching. Pedagogical competencies reflect a teacher's expertise and professional approach towards teaching profession which is a complex phenomenon with multiple aspects, dimensions and directions. Before defining pedagogical competencies and

exploring its various details and aspects, it is helpful to think about pedagogical competencies in the perspective of competencies in general and categorize competencies into different strata.

Humans possess the highest level of cognitive capabilities and are inherently intended to be educated and to educate others. The main goal of education is to enhance students' cognitive abilities, develop intellectual capacities and utilize knowledge and information to improve upon their own lives as well as the lives of others (Aibhistin, 2006). Educational policies and programs are in place to facilitate individual and societal advancements. Social progress demonstrates unequivocally a community's overall development in terms of its economic, social and cultural facets (Mimar, 2012). People are inspired and equipped by education to live moral, disciplined and orderly lives. Education seeks and increases human independence and understanding thereby attaching meaning and purpose to life. Additionally, it provides a deeper comprehension of one's potentials and skills thereby leading a productive life.

2.1 Role of Teacher & Teacher Education

A teacher role in imparting education is central and undisputed. He is an influential figure in classroom and is considered a lynchpin in the whole educational structure. A teacher is a knowledgeable, skilled and especially trained to teach. He is the one who can effectively explain, educate, impart knowledge and mould the learners according to the objectives of education. Teachers are professionals with a body of knowledge to draw on (Robertson, 2012). Teachers hold paramount importance as they are the architects of the fate of the budding generation. Teachers and parents spend maximum time each day with children and impart to them knowledge, skills and values in enhancing their development (Senege, et al, 2000 as cited in Chamani, 2008). The teacher

brings desired cognitive, psychomotor as well as affective changes in behavioural domain of students (Mbise, 2008). A teacher is an expert professional practitioner who can transmit knowledge that will help students develop, perceive and attain capabilities that are applied to overcome a variety of obstacles in life (Nyerere, 1966 as cited in Chamani, 2008).

Teacher education is the way of education and training of prospective teachers who are prepared to adopt the role of teachers. Prospective teachers training is also termed either preliminary teacher education or pre-service training which comprises of programs that are meant to train teachers to enter teaching profession (Ali, 2011). Prospective teachers training lays emphasis upon theoretical and practical needs associated with teaching by striking a balance and fine blending of theory and practice (Bush, 2006). A trained teacher sustains with the inter correlations how kids learn. Additionally, a trained teacher is able to oversee and structure classroom instruction in a practical manner.

Teacher education is about expected roles, a trainee teacher has to adopt on becoming a teacher. These roles include understanding and awareness of the process of education, the process of pedagogy, growth of personalities, psychology and the prospective teachers professional standing (Yogesh and Nath, 2008). Pre-service training as a concept alludes to educational process in which student teachers develop professionally attaining knowledge, acquiring behaviour suitable for teaching and getting practical training (Fakhra, 2012). All teachers vary from each other in gender, urban/rural background, experience, qualifications, teaching and educational experience, attitudes, behavior and beliefs (Lewin and Stuart, 2003; Pryor, et al., 2012). Teacher education is devised in a manner which caters for the needs and sensitivities of every teacher (Pryor et al., 2012). The pinnacle point of teacher training is 'Teaching Practice' during which

trainee teachers teach a class. The trainee teachers put to test all learnt teaching skills in classroom. It provides them an opportunity to learn their practice consciously and to reflect critically upon their own developing practice (Abadzi, 2006; Zeichner, 1987 as cited in Westbrook, et al. 2013).

In the context of Pakistan, teacher education programs fall short of desired results. They lack enough resources and are found inconsistent with school curricula, have lenient admission standards and provide unsatisfactory quality control. They do not equip teachers for the environment and circumstances peculiar to schools in Pakistan (Levine, 2006). As a result, a large number of elementary teachers have graduated with poor knowledge of school content and methodologies. The curriculum needs to be revised to better accommodate the requirements of culture variations and needs of contemporary world. The quality of teacher preparation programs is imbalanced due to lack of harmony with the ground realities of prevailing educational system (Ghonoodia & Salimib, 2011).

2.2 Pedagogy

Webster's Dictionary defines pedagogy as "the science of teaching". The word 'Pedagogues' has Greek origin where 'paidos' means a boy, 'gogos' means leader and 'agein' means to lead. The 'Pedagogues' during Ancient Greek times used to be a slave boy who accompanied a child to his classes. He used to ensure the child's good conduct in public, fulfilled his needs and helped him in completing his homework. Pedagogy is derived from the word Pedagogues. It means the method of presentation of knowledge and skills in an educational context so as learning of students' takes place. Pedagogy has evolved over a period of time into an intricate set of teaching skills and activities that are used by teachers to enable students to learn (CUREE, 2012). It is an approach towards teaching which influences the growth of learners using theory and practice of education (Susan, 2006). Pedagogy has multiple dimensions. It keeps in loop the relationship

between a teacher and his teaching; learner and the learning; curriculum and culture; and beliefs and values about the educational process. Pedagogy of each individual teacher is unique to her/himself based on his/her peculiar life and teaching experiences (Kay, et al, 2017).

Meaningful pedagogy encompasses teaching practices and activities that brings about cognitive, affective and psychomotor changes in the learner. It is a conscious, sustained and purposeful effort of a teacher to enhance learning ability of students (Bernstein, 2000 & Watkins and Mortimore 1999 as cited in Westbrook, *et al*, 2013). Over the ages it has been the endeavor of educationists and the learned men to ponder over improved ways, means and methods to educate children.

Pedagogy is an art of teaching. Due to its intricate nature and complexity of teaching there cannot be one universal approach. An effective teacher displays and adopts a variety of teaching strategies and techniques which best suit to improve students learning outcomes (Gujjar, Noureen, Saifi, & Bajwa, 2010). Several teaching strategies may best suit to certain disciplines and domains of knowledge as compared to others. Some of the strategies might prove more suitable for students of particular backgrounds, learning approaches as well as capabilities. Effectual teaching relates to knowledge of the wider world and across inter disciplinary subjects. Pedagogical practices are aimed at promoting wellbeing of students by instilling a sense of purpose for being at school through imparting quality learning and teaching (Manoranjan, *et al.*, 2013).

2.2.1 Pedagogical Approaches

The manifestation of teachers' thinking and ideas are embedded in selection and prioritizing pedagogical approaches which are primarily entrenched in the approaches promoted during teacher training. The introduction of recent trends of child-centered or

active learning approach in education practices and curriculum have considerably inched away from traditional teacher-centered pedagogical approach. The child-centered pedagogical approach draws inspiration from psychological theories of learning like behaviourism and social constructivism.

2.2.2 Pedagogical Skills

Pedagogical skills of teachers are best exhibited in students' effective learning. These skills include planning, initiating, leading and developing the education process. It also incorporates teaching subject-based content as well as general knowledge for student education. It lays emphasis on skills to associate teaching with research in the subject of interest. The pedagogical skills of the teachers contribute towards the strengthening of pedagogical practice (Ryegard & Olsson, 2010). Pedagogical skills possess teachers 'innovative skills, mental creativeness, imagination and attitude towards students and the degree of inter-communication between the organization on the one hand and the students on other.

2.2.3 Pedagogical Strategies

The needs of today's learners are continually growing. Teachers are expected to enhance students' skills and capacity to think. It couples with increasing research being conducted in the educational institutions. The role and demands from teachers have increased many folds (Blömeke & Delaney, 2012). The challenges thrown by present day needs are to establish the most viable forms of pedagogy for 21st century learners in the light of research (Lynch and Smith, 2007). Basically, pedagogy defines suitable teaching strategies to be used in the classroom. Effective teachers according to research are those who use multiple teaching strategies in their pedagogy and clothe them according to the students learning needs (Bhowmik, Banerjee & Banerjee, 2013). The first step in the

whole process is the profiling and categorization of students according to their learning abilities, needs, interests and character traits (Lynch, Smith & Doe, 2007).

2.2.4 Pedagogical Principles

UNESCO (2015), report highlights a few pedagogical principles for teachers. These seven principles are primarily based on learner-centered concept of education for learners. It delegated rights to learners and establish a role of pedagogy in improving the quality of student learning (Kay, *et al.*, 2017). These principles are applicable in any learning setting belonging to any culture community or individual without demanding much expenditure. These seven pedagogical principles are enumerated as following;

i. Learner Engagement

Students learn by engaging and motivating them in the process of learning. There can be instances where learners can be found engaging, however students' motivation differs from culture to culture. Some students belonging to a particular culture might have obedience, patience and silence instilled in their nature which results in focus and sustained attention in classrooms and will help teachers to adopt certain pedagogy (UNESCO, 2015). Whereas, the same teaching practices would not be effective enough to motivate learning in classrooms belonging to different social and cultural backgrounds. This motivation experienced in the classroom regarding respect for education and teachers is deeply entrenched among learners in their culture and traditions.

ii. Mutual Respect

The teaching profession demands an unconditional bond of mutual respect among teachers and learners which stems from communal atmosphere. Learners have inexplicable rights to be respected including protection from

corporal punishment, man handling and humiliation at the hands of teachers (UNESCO, 2015). Similarly, in teacher-student relationship there is no scope of any sort of exploitation including its worst form, sexual exploitation. On the contrary, learners in one form or the other experience exploitation in the schools and students are always accompanied with apprehensions, anxiety and fears. It depends on the cultural contexts where the relationship between teachers and students may be more or less formal. Several cultures will allow teachers to be more frank and liberal in views while answering to learners' questions.

iii. Build on prior learning

Teaching is developmental and therefore necessitates to build teaching needs on learners' previous knowledge and skills. Learners relate and assess new knowledge with old knowledge. Based on the old knowledge and previous experience the learners either accepts, amends or rejects the new concepts of knowledge. This form of learning poses several challenges which can be best addressed provided students are motivated, engaging and learning is based on gradual progression of knowledge. It asks for logical and sequential development of knowledge suiting learners' mental requirements (UNESCO, 2015). Resource constraints, cultural and traditional norms at times put restrain on pedagogical development and prove counterproductive.

iv. Classroom Interactions

Teaching takes place in the atmosphere of interaction, mutual communication and purposeful dialogue among students. It is an established fact by now that learning takes place through social interaction

(UNESCO, 2015). Therefore, all learners have this explicable right to express opinions and remain vocal during class participation. This infuses confidence in students to give vent to their aspirations, emotions, feelings and ideas. Through interaction teachers receive evidence of cognitive development in their learners.

v. Relevance of Curriculum to Learners

A good teacher doesn't teach in vacuum or isolation. A teacher's job is to relate knowledge and establish relevance with student's mind. Meaningful learning therefore requires that learning must be related to practical situations and day to day life. What is being taught should be co-related with personal, social, cultural and economic contexts of the real world. This approach to learning is highly practical and enables learners to respond to situations where application of knowledge is needed, for example conflict situation or natural calamity. Similarly, emphasis needs to be laid on relevance of mother language and its use is also quite important (UNESCO, 2015).

vi. Developing Knowledge, Skills and Attitudes

The outcome of effective pedagogy using curriculum is the development and acquisition of knowledge, skills and attitude. There is a marked difference between 'learning by doing' and 'rote learning'. Learning by doing is associated with teachers' interaction with student, engaging the students and increased interaction. The learners' skills and attitudes relate to the concept of developing critical and creative thinking among students and making them a responsible law-abiding citizen of the state (UNESCO,

2015). The new holistic approach to global citizenship, conflict free society and well-being of people are in accordance with this rule.

vii. Curriculum, Pedagogy & Assessment alignment with Learner Needs

Teachers are always short of time and face time constraints to cover the allotted syllabus. Teachers perform onerous tasks and are constantly under enormous pressure and are unable to do detailed discussion with students (UNESCO, 2015). Assessment process provides opportunity to students learning enhancement. Assessment of students is based on conceptual learning and not on rote learning. It needs to be developed on knowledge, understanding and skills of students. It has to be knowledgeable to learners and teachers. This kind of assessment ensures that pedagogy is not only for teaching to test but for meaningful understanding.

2.3 Competence

The dictionary compiled by Ozhegov & Shvedova (1993), gives activity-based description while defining the concepts of competence, competency and competent:

- i. **Competence:** A capacity, a phenomenon to be controlled by somebody.
- ii. **Competency:** It is described as awareness of capabilities.
- iii. **Competent:** It refers to a person who is an expert in a particular field of profession. A person who has competence and willingness or the consent to undertake something or the desire to contribute something.

The word 'willingness' is the state of readiness of a person and also a consent to do something. It is a condition in which everything is done (Ozhegov & Shvedova, 1993). Competency based approach in education is very relevant to educators. The term 'competence' appeared in Webster dictionary in 1596. In the context of performance-based education, it was widely used in United States of America in 1960s and it meant to

train teachers who can successfully compete in their respective profession (Berkaliev, et al., 2007).

2.4 Professional Competence

Competence is the ability to apply theoretical knowledge to practical situation. Competence incorporates knowledge, skills, and values which applies to a set standard of behaviour (Klieme, Hartig & Rauch, 2008). Competence has professional connotation. A professional can be competent provided he acts conscientiously and meet set standards of performance. Competence is deeply associated with achieving standards. Hence professionals are those people who possess enough competence. Professional competence is defined as integrated set of effective performance in a certain professional role (Mulder, 2014). Competence further consists of sub competencies. A competency is a part of broader competence and collection of knowledge, skills and attitudes which can be applied to practical situations. These are also elements of professional competence as well (Mulder, 2014). The three common elements of professional competence are professional knowledge acquisition; skills which are professionally specific know-how based; and attitudes, which are specific to judgment, while making choices and making decision. Professional competence imbibes teachers' personal qualities. It relates to appropriate and effective use of experiences during professional teaching practice.

The professional competence approach is a concept that ensures teacher success in the classroom and students' better learning. Learners are to be instilled in aspects of skills, knowledge, comprehension, dispositions and motivation as these are not inherited among humans rather, they are teachable and can be imparted to students through teaching (Epstein & Hundert, 2002). Professional competence is the application of the concepts of life and profession to situation based on knowledge, skills, attitudes and motivation (Weinert, 2001). Therefore, the concept of professional competence equally

applies to the teaching profession and makes it possible to carry out empirical research on the characteristics of teachers (Goodman *et al.*, 2008). A competent professional assumes an active posture in work situations and transforms knowledge to application level. Competent performance relates to acts in a competent manner assuming an active posture in work situations.

2.5 Pedagogical Competence

Pedagogical competence is the concept of competence involving learning situations. Teachers need to absolutely master pedagogical competence. Pedagogical proficiency forms teachers' aptitude to effectively carry out educational activities. It includes teacher's abilities of planning a lesson, teaching execution, the manner of learning; and students' assessment (Mulder, 2014). The application of pedagogical competence enhances knowledge, dispositions and performance of teachers and improves accuracy in teaching methods. The required goals of pedagogical competence are achieved by following the available framework. Pedagogical competence is productive in achieving self-development of teachers' ability (Ryegard, Apelgren & Olsson, 2010).

2.6 Components of Pedagogical Competence

Mulyasa (2007) has enumerated the following six components of the concept of competence:

2.6.1 Knowledge

Humans are the only living things on planet earth who possess developed cognitive faculty. The acquisition of knowledge is associated with cognition and takes place in mind in the form of mental activity. Cognition is hence psychological or mental process helping in ideas and concepts development. A teacher's knowledge is two pronged. Firstly, it is related to subject specific knowledge and secondly it concerns

teacher's knowledge about learners needs. The knowledge of subject specific and content is very important (Mulyasa, 2007). A teacher's strength lies in knowledge awareness both general and specific of his/her students. Teachers must have an understanding and knowledge of the teaching process and teaching methods. Knowledge about identifying and recognizing students' needs is a teacher's prime responsibility. He/she should have the knowledge that how learners assimilate knowledge in their mind and prioritize learning based on learners' requirements. Teachers must be aware of the aim and purpose of the courses being taught to students. They should be aware of knowledge and skill related to pedagogical competence along with its mandatory application.

2.6.2 Comprehension and Understanding

Understanding and comprehension gives an insight into cognitive and affective domains. A teacher has to have a detailed and a deeper understanding of what is to be taught. The teacher must be aware of the aim, purpose and direction of teaching and what student learning objectives are to be achieved (Mulyasa, 2007). Pedagogical competence emphasizes on clear understanding of the conditions surrounding learners and dealing the learners accordingly.

2.6.3 Ability or Skill

Ability and skills are performance oriented and based on application of knowledge to practical situations. It is the performance of assigned task by a teacher. The ability of application of knowledge indicates a variety of capabilities in a teacher. For instance, evaluation of teaching ability of teacher is shown through the ability of planning and organizing the activity (Mulyasa, 2007). Similarly, the ability to design and demonstrate content in an effective manner falls within the realms of pedagogical competence.

Pedagogical ability and skills make teaching easy for teachers to better understand learners.

2.6.4 Values

Values suggest to abide by standard norms of behavior. Values are psychologically instilled in individual's character. Values are the guiding principles, basic beliefs and attitudes infused to lead mutually acceptable lives in a society. The standard values for teachers include honesty, justice, equality, openness, religious and democratic values (Mulyasa, 2007).

2.6.5 Attitude

Attitude can be both positive and negative. It is a feeling of being happy and sad; likes and dislike; and a response to an external stimulus according to aptitude. It is a feeling of satisfaction, well-being and a sense of belongingness. Positive attitude is central to pedagogical competence in students' learning (Mulyasa, 2007). Attitude determines role and responsibilities of a teacher to teaching profession. The general academic attitude is akin to scientific attitude towards teaching which is in other words logical, systematic and methodical approach. The approach adopted in this manner would help teachers in selection of content, teaching method, assessment and evaluation.

2.6.6 Interest

Interest induces spirit, zeal and enthusiasm among students. It generates the much-required impetus to keep learners upbeat to perform a job. Teaching is all about interest and high spirits. Interest ignites the tendency of a teacher necessary to perform teaching act in order to make students learn. Teaching would be beneficial for students and institutions if it is pursued with interest and commitment (Mulyasa, 2007). The profession of teaching asks for sustained spirit, devotion and commitment. Pedagogical competency

besides being an ability is largely dependent on the will to work with generated interest that would invariably bear positive results upon learners.

These six components of competencies are hallmark for an effective teacher to fully master teaching experience. Here teachers have to shoulder responsibility in order to be aware and well conversant with the competencies demanded of teachers themselves. Teachers must possess dynamic and vibrant teaching skills and the audacity to encounter unique challenges during teaching. Such mindset of teacher would affect the development of his personality and way of performing tasks.

Besides there are three more important aspects of effective pedagogical competence playing its due role in learning. These are;

i. Adapting to the Situation

Pedagogical competence requires flexibility to adopt to emerging situations and developments. The class is homogeneously heterogeneous. A single class contains several groups of diverse learners. A teacher has to remain alive to situations where alternate methods of teaching are to be adopted for the quality enhancement of learners. Students vary in their levels, so the course should be popular and attractive to all learners. Learning occurs with rich content and exact context provided by teacher. Utilizing best pedagogical competence practices would enable handling the varied situation and attitudes of students in the best way. It would further help teachers to achieve learning outcomes and objectives of all students.

ii. Continuous Development

Instructional competency never remains constant. Competency is always being judged against a level of standard. It is a long-lasting affair that

generates in the process new knowledge, new experiences and new learning and professionalism in all fields. Reflective practices and continuous self/professional development yield high results in teaching profession. Through pedagogical competence teachers can regularly evaluate their pedagogical practices to sponsor best learning of the learners.

iii. An Integrated Whole

Pedagogical competence is to present a unified whole. Every aspect of all these components is inter-connected and link one area to another in instructional strategies. The ability to manage and carry out the process of teaching and learning in the classroom is characterized by pedagogical competence (Ryegard, 2010). All the components of pedagogical competencies go hand in glow. The parallel flow of competencies positively affects teachers' performance, their ability to design a lesson plan and choosing the appropriate method. In the real world, pedagogical competencies must be developed through classroom activities that deal with core issues and pupils belonging to different demographic segmentation.

2.7 The Nature and Scope of Pedagogical Competencies

The scope of pedagogical competencies is simultaneously extensive and intensive in nature which reaches down to micro techniques of teaching. Teaching is defined as an act whereas, pedagogy is at the same time an act as well as a discourse (Alexander 2009 as cited in Westbrook, *et al.* 2013). Competence is a set of knowledge, skills and abilities of a person to effectively perform in cognitive, effective and psychomotor domains. Competence is derived from teacher's qualifications and abilities (Usman, 2012). They

implement these abilities and concepts related to cognitive, affective and psychomotor domains in practical aspects of teaching. Competence is exhibited in high rated performance in discharging educational activity. It denotes teachers' teaching ability and adopting appropriate method to conduct educational tasks in classroom. Competence is referred as rational and logical since competence has purpose and direction. Performance determines the display of a person's actual behavior. It is a person's insight into personality which is causally related; criterion-based effecting performance and behaviour. Criterion-based competency oversees performance up to a standard criterion (Spencer & Spencer, 1993).

2.8 Approaches to Pedagogical Competencies

The concepts of "competency" and "competence" are fundamental to the competency-based approach (Kalz et al, 2010). Oxford English Dictionary interchangeably use these two words as synonyms (Stevenson, 2010). Competencies comprise a person's knowledge, skills, cognitive styles, social roles, self-perception, and concepts, among other things (Dubois & Rothwell, 2000). Competence and competency are two somewhat different yet related ideas (Epstein & Hundert, 2002). The torch-bearer of the worldwide system of education is the competency-based approach as a concept of development and quality assurance in education (Zhuk, *et al.*, 2015).

- i. The British approach to competence considers output as the demand of profession and the functional analysis of the professional activity.
- ii. The American competency-based approach is the functional models. It demonstrates the cognitive and functional components of behavioural models.

- iii. UNESCO approach to competence is based on the ability to integrate educational objectives into the context of education. It includes functional components, interpersonal characteristics like social and organisational abilities, ethical principles, and is not just limited to cognitive parts (UNESCO, 2013).
- iv. In Russian language dictionary the term competency is defined as an area of knowledge about a certain sphere (Yefremova, 2006). Among post-Soviet countries competency-based approach was highly specific to retain quality of education (Zimnyaya, 2006). It imposed strict regulation on curricula to determine the content for knowledge. According to Russian scholars, idea of competence is correlated with the concept of professional approach in terms of professional activity (Subetto, 2009).
- v. Generally, teachers' professional competency-based approach describes a distinguishing feature which determines teachers' eagerness and ability to perform a professional activity responsibly. This will be possible through inculcating professional traits in personality and character of teachers (Markova, 1996). Markova (1996), elaborated upon the structure of professional competence and came up with several competencies representing individual's professional experience;
- **Special Competence:** ability to master professional activity and furtherance of professional development.
 - **Social Competence:** mastering of cooperative, collaborative and communicative skills in performance of professional activity.
 - **Social Responsibility:** responsibility and inner urge to produce acceptable results of professional activity.

- **Personal Competence:** striving to achieve excellence in self-development.
- **Individual Competence:** developing mastery in profession by placing personal mark and individuality (Markova, 1996).

Competency-based approach is the ability, student derives from the knowledge and skills acquired; the academic and life experiences; values and attitudes (Barannikov, 2009). It shapes an inherent individual characteristic determining the ability to resolve problems arising in real situation (Dubasenyuk, 2010). Professional competence is an individual's characteristic of his/her professional ability and proficiency to perform certain acts independently and responsibly (Markova, 1996). It is the practical display of aspirations and ability according to knowledge, skills and experience, etc. to conduct meaningful learning (Tatur, 2004).

2.9 Pedagogical Competency and Learning Theories

A theoretical framework is the theory chosen by a researcher to give erstwhile roadmap in conducting research. It is the application of a theory in the research work. It could be even a set of concepts derived from a theory. Theoretical framework offers an explanation or sheds light on a phenomenon or research problem. Here in subsequent paragraphs several theories related to pedagogical competency and its aspects related to the present study will be discussed. In teaching profession, classroom teaching and its implementation is regarded as the major focus and challenge (Woolfolk Hoy *et al.* 2006). Plainly, the theoretical goals of pedagogical competence are to determine certain fundamental qualities of teachers which are needed in effectively carrying out the demands of teaching profession.

Theoretically there lies a difference of approach towards pedagogical competence and teaching competence. Teaching competence and pedagogical competence are both concerned with 'the good teacher'. But it needs to be differentiated that teaching competence has a narrow interpretation and implication. It generally restricts to the meeting or assemblage between the students and the teacher. Teaching competence is an important aspect, yet it only forms one segment of pedagogical competence. In pedagogical competence the focus does not lie exclusively on teaching rather on the teacher's ability to support the students learning. Whereas, teaching competence has historical connotation and is more akin to traditional method of teaching i.e., teacher-centered teaching. Pedagogical competence reflects constructivist method of learning.

Learning relates to students' psychology and has attained new dimensions in the perspective of newest scientific researches in the field of psychological sciences. Among students, learning takes place in a variety of ways depending upon the students' unique personalities, cognitive processes and learning experiences forming prior knowledge (Riding & Rayner, 1998). Learning theories is manifested broadly in following categories;

2.9.1 Theory of Behavioural Learning

The foundation of learning is based on stimuli and respond mechanism among organisms. The behaviorists studied learning attributes while experimenting on animals and found that similar processes corresponded among humans too in the domain of learning. They were of the view that learning deeply relates to happenings in the surroundings. These events in the environment could be gauged by measuring responses to these events (Bush, 2006). Among behaviorists school of thought, learning is an internal mental state subject to fixed behavior which determines the process of learning. According to behaviorists humans possess mind that is blank at birth and is equated to

‘Tabula Rasa’ or blank slate. It’s the environment that shapes experiences in the wake of events and further transpires into students’ learning.

2.9.2 The Theory of Cognitive Learning

Cognitive learning theory dwells on the thinking and ideas formulation process, evolving learners’ concept, critical thinking and problem-solving approach. Learning based on cognitive approach is more productive and meaningful when learners are actively engaged, participate and are involved in the very process of learning. Learning according to cognitivists is contextual. Thereby implying that learners can best learn in context in which knowledge is used (Uden & Beaumont, 2006).

Cognitive theory of learning was introduced in twentieth century. Jean Piaget and Lev Vygotski were influential exponents of cognitivist approach of learning. It came as a reaction to earlier behavioural theory. The theory of behaviourism proved inconsistent, inapt and unable to address more complex issues related to mental processes. So there occurred a gradual shift from behaviorism to cognitivism. It explained how learners make sense by processing information and how mental processes work. Cognitive theory holds the view that students’ old knowledge or previous knowledge and mental processes play a far more important role than stimulus-response (Deubel, 2003). The Cognitive approach establishes itself between stimulus and response of behaviourism (Winn & Snyder 1996).

2.9.3 The Theory of Constructivist Learning

The pioneer in education psychology of Constructivism is Jean Piaget (1972). This theory views that learners construct their own meanings and conceptions of reality in their minds. It further views that learners form ideas based on their previous or prior experiences and consider learning as an active process rather than passive process. Knowledge, ideas and thinking is constructed and formulated in the wake of available

previous information, mental pathways and paradigm that are used to interpret happenings (Klahr and Nigam, 2004; & Mayer, 2004). The main exponents of constructivist learning approach include, Bruner, Piaget, Vygotsky and Dewey. Constructivism adopts student-centered approach in teaching.

Students' learning is a complex affair. Similarly, eclectic theory suggests that learning would be inadequately explained by holding to a single theory. It recommends a blend of all learning theories suiting to occasions and situations (Olsson, Thomas & Roxå, Torgny, 2012). So, teachers cannot discard any of theory rather utilize them as and when required. Eclectic theory development also considers several other less known theories as well. The development of this theory enables teachers to extract most out of all education/learning theories for students' better understanding, learning, assimilation and comprehension.

The term 'Gestalts', suggests personal strands of wants, values, feelings and behavioral inclinations, combined in one whole (Fred, 2001). The Gestalts theory sums up feelings, images, role models and values combined together play a role in shaping teaching behaviour and classroom experiences. These processes take place either consciously or unconsciously in mind. Gestalts theory is less rational and less cognitive way of information processing to indicate the internal entities that unknowingly guide human behaviour.

According to Kolb and Fry (1975) learning from experience is a natural and autonomous process. The role of abstract concepts attains more priority than concrete and personalized concepts, images, feelings and needs. The optimal experiential learning process progresses from action to reflection. It falls short of what is required for professional teaching to establish a developmental link between cognitive, emotional, social and personal growth (Reed & Kromrey, 2001).

Educational psychologists identify several principles of learning. These principles are also termed as laws of learning which are applicable to the learner's learning process. They are evaluated and applied in real-world settings and they are useful in determining what students can learn most effectively. The first three Laws of learning were created by Edward Thorndike and included readiness, exercise and effect.

2.9.4 Pedagogical Competence Model

Theoretical and conceptual development in education is brought about by the understanding of pedagogical theories. The understanding of teaching and student learning could be further increased by simplifying the complex pedagogical processes which in turn proves a driver for pedagogical development. Below is the image of pedagogical competence model created by Olsson & Roxa, (2012). The model involves four essential aspects of pedagogical competence, namely;

- i. Pedagogical practice
- ii. Observation
- iii. Teaching skills
- iv. Planning

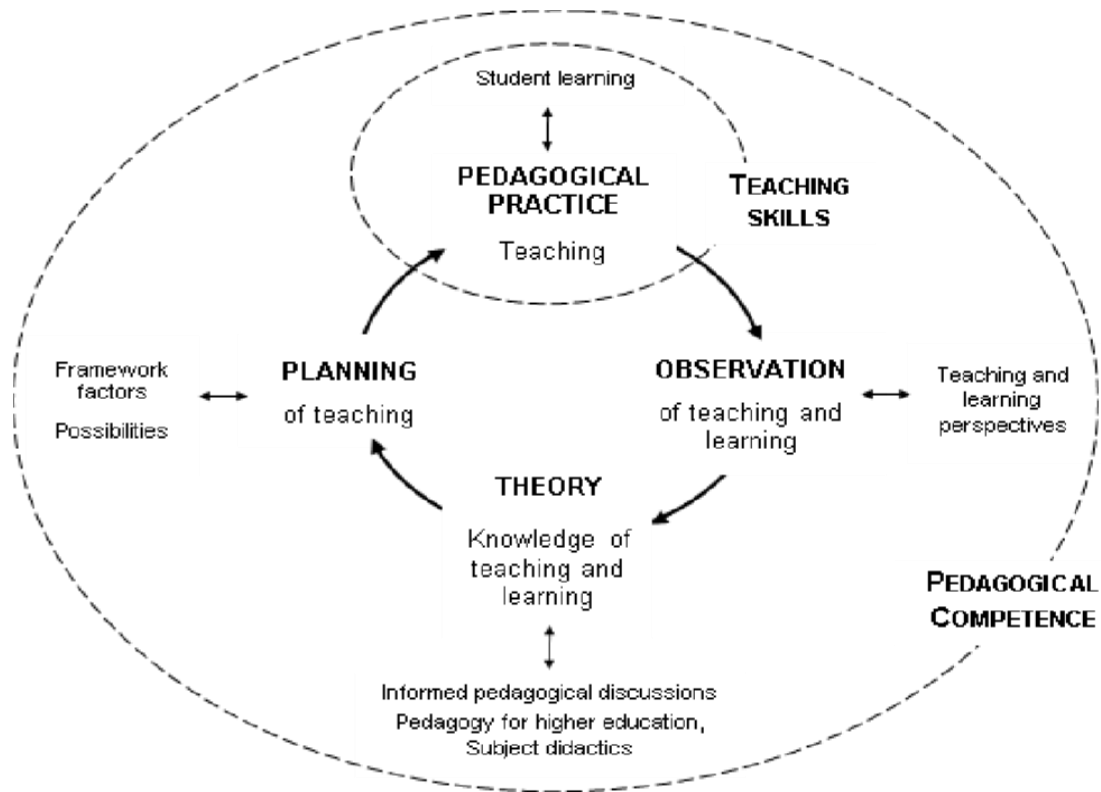


Figure 2.1: Pedagogical Competence Model (Olsson & Roxa, 2012)

Pedagogical practice involves a wide array of teaching activities such as classroom teaching, experimental work, outdoor activities, practices, supervision, assessment etc. These pedagogical practices actively support student learning. A systematic and structured observation of teaching is vital in enhancing the quality of teaching practices. The process of making observations is intimately related to teachers' personal teaching. It is an emergent learning perspective in teaching. Observations ending in subsequent conclusions influence the process of conceptual transformation in academic teaching. Theoretical and personalized knowledge about teaching and learning forms teachers' professional knowledge achieved through formal pedagogical training and pedagogical discussions. Subject knowledge forms basis of theoretical knowledge about teaching of a specific subject (Shulman, 1986). Theoretical knowledge and observations of teaching and learning allude to reflective practices in education which has ushered significant pedagogical development and a change in the concepts of teaching (Argyris &

Schon, 1974). Planning depicts possibilities in achieving quality standards in teaching practice. It constitutes execution of new concepts and transpiring the new idea into practice.

Pedagogical competence is a broader term than teaching skills. It is formed via the circular model that combines practice, observation, theory and planning (Magin, 1999 cited in Olsson & Roxa, 2012). The core feature of a wider pedagogical competency that underpins students' learning is demonstrated via teaching practice and teaching skills. Teachers' subject-matter expertise, pedagogical expertise and curricular expertise are highly valued by students (Shulman, 1986). A pedagogically competent teacher will continuously analyse the impact of their teaching methods on students' learning through observation, reflection and inferences. A pedagogically competent teacher appraises teaching methods in relation to students' learning enabled by theoretical knowledge and observations. If a teacher follows above mentioned steps, then he/she is demonstrating pedagogical competence (Olsson & Roxa, 2012).

2.9.5 Reflections and Pedagogical Competence Model

An efficient and a competent teacher is by nature reflective and critical of his/her own teaching practices and the teaching concept of student learning. Pedagogical competence model is deeply associated with essential characteristic of reflective practices (Kolb, 1984; Lewin, 1942 cited in Olsson & Roxa, 2012). A critical overview of the pedagogical competence model and reflective practices would relate reflection-in-action to pedagogical practice; reflection-on-action would be akin to observations and theoretical knowledge' and reflection-for-action being associated to planning of pedagogical practice. The four aspects of pedagogical competence model show teachers the path to become reflective practitioners which in turn is an important driver for pedagogical development of teachers (Olsson & Roxa, 2012).

The two sources of knowledge in reflective practices are formal knowledge and personal teaching experience (Kreber & Cranton, 2000). In pedagogical competence model these correspond to theory and practice as part of the model. Both sources of information are beneficial in use when teachers reflect on teaching and learning. When teachers put to practice the pedagogical competence model, pedagogical development will be visibly generated (Mezirow, 1991). Reflection is founded on process and premise. Process is the content reflection that hardly questions the viability of the belief system and the conceptions. Process reflection does question knowledge within the parameters of beliefs. Premise reflection questions the knowledge and core beliefs (Kreber & Castleden, 2009). Reflection beyond content necessitates to go outside the pedagogical practice or teaching skills and includes observation, theory and planning. Process and premise reflection raise the possibilities to transform teachers' conceptual knowledge to be more advanced and ushers conceptual change in teaching (Mezirow, 1991).

2.9.6 Bernstein's Contrasting Two Models Pedagogy

Bernstein (1990) took two divergent pedagogical models that focused on teachers' organisation, management, discourse and response to the students. These models are helpful in providing a basis for theoretical framework to comprehend methodological approaches:

- i. **Performance Model:** It is a concrete method. The teacher is in position to control all activities and instructs students as to what and how teaching should take place. The students are explicitly communicated about the lesson structure, expected collective display of behaviour and achieving learning outcomes.
- ii. **Competence Model:** These are the unseen, invisible and untold pedagogies with an informal framework. In such case the teacher responds

to individual student's requirements and the learning outcomes are mostly hidden and unfocused (Bernstein, 1990 as cited in Westbrook, *et al.* 2013).

2.9.7 Sustainable Development Goals (SDGs)

The UNESCO 'Framework for Action Education 2030: proposed Sustainable Development Goals (SDGs) or Global Goals in quality education. Education 2030 focuses on multiple issues confronting education globally. It emphasizes equity, inclusive education, quality education and lifelong learning for all while paying attention to increased access to education. All students need to receive a high-quality education, hence effective pedagogical methods are required (Kay, *et al.*, 2017).

Teachers' competencies determine the quality of performance. Quality education and learning outcomes have been prioritized in the world's education agenda. Although the rapid and readily available global and internet-based communication throws opportunities for increased learning yet a need still exists for easy access of quality education (Cisco Systems, 2009). The SDGs on education for 2030 prioritizes four areas:

- i. Expanding quality learning outreach to all and at different tiers of education
- ii. Focusing on education quality by adopting content, relevance and learning outcomes
- iii. A renewed attention on equity
- iv. A greater focus on gender equality and increased access on girls' education by providing them supportive learning environment.

Quality learning demands committed teachers with high competency level who can practice active pedagogies (UNESCO-IBE, 2013). Majority of the countries including Pakistan are signatory to this declaration. In order to achieve Education 2030 goals,

nations of the world are required to ensure adequate supply of well-trained and motivated teachers and school leadership. To materialize and improve quality in education, teachers must be given opportunities of training, service conditions, teachers' deployment and professional development (UNESCO and UNICEF 2013). Therefore, Education 2030 Sustainable Development Goal target teachers who are central to implementation and achieving these goals.

2.10 Teacher Education and Pedagogical Competencies in Pakistan

Higher Education Commission (HEC) has introduced 'The Qualification Framework' for B.Ed. (Hons) program in Pakistan. It spans over four-years of academic education. This study explores the role of pedagogical competencies as spelled out in the light of NPSTs - 2009, in teacher education program for B. Ed (Hons) program. The program aims at inculcating among prospective teachers' knowledge, skills and application of knowledge and skills. The salient features of the program are given below:

- i. **Knowledge:** Knowledge aspect of this program covers imparting graduates with extensive and comprehensive knowledge of the fundamental ideas in one or more disciplines. They will also have the knowledge about research and principles and method in their discipline.
- ii. **Skills:** An understanding of knowledge is demonstrated through cognitive, technical and communication skills. Cognitive skills give students the freedom to study, analyse and consolidate their information in order to find and offer original answers to solving issues. Designing and utilizing research in a project requires the application of technical skills. Communication skill represents brief detail of knowledge and ideas addressing a variety of audience.

- iii. **Application of Knowledge and Skills:** The application of abilities will be demonstrated by graduate students. In their professional work and scholarly endeavours, they will show initiative and judgment. They will be adept at applying their knowledge and skills in a variety of situations. They will evaluate their own accountability for self-learning and practicing working with others in a reflective manner. They will have complete flexibility to plan and carry out a project work as well as a piece of research.

2.11 Theory and Practice Gap in Teacher Education in Pakistan

Pakistan education is infested with multiple problems. The education system focuses more on theoretical aspects than practical aspects of education. The deficiency in this aspect creates a void in students learning. These issues mainly pertain to teacher education. The prospective teachers carry forward the same deficiency when they become professional teachers. This study pursues content analysis to explore the integration of pedagogical competencies in the course guide books of B.Ed. (Hons) for prospective teachers. The most important challenge would be to identify the gaps in perceived and developed pedagogical competencies of prospective teachers in the light of NPSTs (2009).

The aim of B. Ed. (Hons) pre-service teacher education is to impart knowledge and skills to the prospective teachers and also provides them an opportunity to apply their knowledge in classroom through teaching practice. These teaching practice classes simulate actual classes and prove a starting point to gain specific teaching experience. Professional development always starts with abstract understanding of the situation and materializing it into reality (Ulvik, 2014). The teacher education program of B. Ed.

(Hons) has one-year room for implementing practically the learnt theories and skills in classroom situation. The theoretical part prepares prospective teachers in broadening their pedagogical knowledge, understanding and developing worldview perspective. The practical part of classroom teaching comprises of four to six weeks. The practice teaching gives exposure to the student teachers in a realistic environment (Argyris and Schon, 1974; Dewey, 1928 and Gibbs & Coffey, 2004).

The debate over integration of theoretical and practical knowledge in professional education has led into a deeper insight (Korthagen & Kessels, 1999; Fraser & Spiller, 2005). The research in theory-practice gap yielded several useful interpretations and identified what constitutes the gap between the two components. The identification of prevailing view about the theory-practice chasm and the associated view of bridging the gap led to developing best practices to transform knowledge practically (Golden-Biddle, *et al.*, 2003). The gap might be prevalent due to the organizational deficiencies preventing professionals from implementing in practice. The theory-practice gap provides an opportunity to solve, resolve and connect essential parts produce useful knowledge (Golden-Biddle, *et al.*, 2003).

Several studies in Pakistan have indicated gaps at conceived and practical level of teacher education program. Theory-practice gap in teacher training program is termed inherent. The internship program for teaching practice plays a determining role in development of prospective teachers in developing competencies and skills (Hussain & Mehmood, 2010). A research study conducted by Fazlur Rahman, Jumani, Akhtar, Chishti, & Ajmal (2011), suggested that trained teachers had positive influence on students' achievement. Similarly, Jumani (2007) viewed that preparation of teaching material for teachers in B. Ed (Hons) program was useful yet a gap was found in the teachers' coordination in implementing classroom teaching. The schools were found

possessing insufficient resources for student teachers to practice pedagogies in classroom which proved a hindrance in learning (GoP, 2006; Hussain, *et al.*, 2010). The present study may suggest empirical evidence to take practical actions to minimize the prevailing gaps both in theory and practice in teacher education at B. Ed (Hons) level in Pakistan.

2.12 State of Teacher Education in Pakistan

The leading challenge to education system in Pakistan is the inculcation of quality consciousness among teachers. In Pakistan teacher training is mostly done by Provincial Education Departments. However, to improve teacher training quality government embarked upon some reforms in the year 2001. In this regard teachers teaching at elementary level need to possess SSC/HSSC qualification. At matriculation level teachers were required to be qualified in three years' teacher training program. However, teachers teaching at HSSC level must have attained one-and-a-half-year teacher training course. Teacher training institutions offered two years' diploma in education (ADE), one-year B. Ed qualification as compulsory pre-requisite for teachers desiring to teach at secondary level. B. Ed was followed by obtaining a four-year degree (BA or B. Sc) M. Ed degree was needed to teach at schools.

To modernize teacher education and bringing it in line with international standards in terms of quality enhancement, USAID had taken steps in collaboration with the government of Pakistan to revolutionize teacher training in Pakistan (Fazal Khan & Majoka, 2014;). Pakistan education has been plagued with non-implementation and delay syndrome thereby missing important educational milestones (Kazi, 1987; Mitchell *et al.*, 2005; Burki, 2005 as cited in Fazal, Khan et al, 2014). The imperialist policy and colonial legacy provide a background to Pakistan's teacher training education that was rudderless. Khan (2013) and USAID (2013) highlighted a host of issues that have permeated in teacher education. These included rigid curriculum; lack of will to and incapacity to

welcome new changes; resistance to innovation; gap in theory and practice; limited practicum opportunities; and trainers lacking teaching experience.

A detailed system of teacher training exists from primary to higher education in Pakistan. The Bureau of Curriculum is mainly responsible for teacher training institutions offering courses in pedagogy, curriculum and content material (UNESCO, 2009). Education policy - 2009 lays stress on the importance and values latest trends in knowledge and education of teachers, teaching methods and techniques however, pace of progress in this area is recorded quite slow. HEC in collaboration with USAID has started initiatives in teacher education as a move forward to bring major structural reforms. One such development is the introduction of two programs in teacher education. These are a two-year Associate Degree in Education (ADE) program and a four-year Degree in Education (B. Ed Hons) program in 2008. Similarly, both programs necessitated special training for teachers of this project. Since then, a visible shift is noticed by involving students in the learning process and their active participation (Hanushek, Kain and Rivkin, 2004; Ladd, 2008). The Higher Education Commission played its role in facilitating development of Pakistan higher education institutions by enabling them to offer quality education with high standard of research (USAID, 2013b).

The present program in contrast with previous traditional teacher training programs gave less time to the classroom practices while teaching. The newly adopted ADE program has apportioned almost half of the time to conduct teaching practicum. The program has moved forward in achieving considerable progress despite numerous challenges on its way.

2.13 Teacher Education Challenges in Pakistan

Efforts have been in place to make implementation of the new Teacher Education Program a success. Researches indicate that various challenges are posed in the implementation of the new teacher training program. These challenges primarily include lack of provision of suitable equipment and technical infrastructure as a major hindrance in the execution of the new curricula for ADE and B. Ed (Hons) program (Ayub & Khan, 2013). Teachers do seem fascinated with the introduction of student-centered approaches in teaching curricula however, there has been dearth of instances where it was revealed that the said activity was implemented in letter and spirit (Akbar, *et al.*, 2013; Mahmood, 2013). A gap between theory and practice was strongly observed in terms of implementation of the new curriculum (Sheikh *et al.*, 2013).

The most daunting challenge prospective teachers encounter is equating new practices being taught during B. Ed (Hons) level with actual teaching duties in schools where the prevailing system does not allow room for implementing new methods and thereby sticking to old classrooms procedures. The teachers also feel handicapped due to non-provision of adequate facilities and instructional aids required for new teaching approaches at schools. The resources constraints prevent the implementation of new programs which exposed prospective teachers to better ways of teaching. The education system is regressive in nature as it reverts back to teaching methods similar to those teachers experienced as students and hence there is little change in thinking paradigm of prospective teachers (Saifi, *et al.*, 2013).

The stakeholders are alive to the sustainability issue of the new teacher training program and have therefore taken measures in areas like management, capacity enhancement, teacher education goals and vision, coordination, accountability,

adaptability and methodical approach. The presence of all stakeholders on the same page as envisaged in National Education Policy (2009). The ownership of the change has been mutually shared by provincial management of education as well as teacher training program (USAID, 2013b). The sustainability issue of the program has been ensured to a large degree by removing and resolving the inconsistent and irrelevant elements. The strengths of the program lie in integrating theoretical and practical components of teacher education programs by training to be teachers on a more practical basis, increasing exposure to the newest trends in educational process and pedagogy and enhanced connectivity among teacher education colleges, universities and schools both inside and outside the country.

2.14 Teachers Competencies at Higher Education Level in Pakistan

Higher education in Pakistan has multiple contribution towards nation building ranging from helping generate knowledge, skills and research, which in turn improves country's economy and development and presenting Pakistan a viable, moderate and democratic state. However, the role of higher education in Pakistan both in terms of quality and quantity input is debatable. The quality of education is reciprocal to the quality of teaching faculty. The efforts to raise the education standard of Pakistan the quality of teaching staff has to be improved (Hussain, Khan & Khan, 2010). Improvement and amelioration of the society is dependent on the quality of teachers' performance for which teacher's training has the most important part to play. An extensive and intensive professional development of teachers in terms both pre-service and in-service training can enhance the capacity of educational institutions teachers in fully utilizing the teaching learning process (Kayani, Morris, Azhar and Kayani, 2011). In due recognition of the situation, HEC accorded professional development of prospective teachers as number one priority and to this end established Learning Innovation division in the year 2003. It was

responsible for further promoting teaching and learning, facilitating and supporting faculty members learning in universities, developing resource base and leadership in the use of technology and approach in education and training. The Learning Innovation division is a hub for teachers and administrators at higher education level in the country. It is also serving as a pivotal point for in-service continuous capacity building and professional development of teachers.

HEC Learning Innovation division introduced long and short-term professional faculty development programs to meet the gaps arising due to lacking in teacher's instruction and pedagogical skills thereby, focusing on teachers' content knowledge and pedagogies. Master trainers were trained to implement same programs in their respective universities through Faculty Personnel Development Program (FPDP). Teachers' competencies are the root indicator of their quality performance. Pedagogical management, assessment and research competencies are essential competencies for university teachers. FPDP's modules were developed keeping in view these fundamental competencies.

Teachers' competencies improve teachers' performance and support professional development and curricular studies. Theoretically, competencies are the knowledge, skills and experience necessary in teaching activities (Selvi, 2010). Operationally, competencies are defined as teachers' knowledge and skills required for effective and quality education dispensation at higher education level (Kataneet, et al., 2012). At grass root level teacher requires pedagogical, management, assessment and research skills to become effective teacher. Competencies of teachers include subject-matter knowledge and instructional ability skills. At higher education institutions level, the function of teacher is teaching and research (Marta, José & Angeles, 2011).

Nguyen; Griffin and Nguyen (2006), have identified three spheres of teachers' competence which were found common among different models of teaching and professional development of teachers. These domains constitute professional knowledge, professional skills and professional ethics or also called professionalism. Effective teaching has several essential facets of teacher personality. All these characteristics and competencies need constant updating of training, improvement and development. The concept of a competent teacher is thinkable only through devising a thorough program of teacher training (Jamani, 2007).

2.15 National Professional Standards for Teachers in Pakistan

Pakistan Human Development Index (HDI) rates it among the line of developing country possessing matching academic potential for further progress. Education in Pakistan has seen times of struggle in the shape of economic, social and political upheavals in its long history. Yet it has emerged and lived up to the aspirations of the nation despite its shortcomings. Pakistan is vibrant and fully alive to the research based global changes taking place in the instructional framework of teaching. In due cognizance, Pakistan is aware to plan, adopt and implement the modern concepts of professional pedagogical skills. This approach to learning ensures quality education which is unthinkable without the vigorous involvement of teachers and their zealous participation in training. To drive educational aim home, teachers need to have multiple traits to improve quality of learning and teaching process. The quality learning parameters are achievable provided the teachers are experts and possess initiative, zest and spirit in teaching students.

Quality assurance in teacher education requires professional standards. The GoP took up the initiative to enhance the teaching quality by improving the quality of teacher training. In the year 2009, NPSTs document was released by the Ministry of Education.

Initially the professional standards were developed for elementary level teachers, however that would be extended and adjusted to other levels as well.

It was implemented and approved after thorough scrutiny by the Planning Division of Education Department. It chalks out standard and criteria based professional development of teachers as a globally acclaimed initiative for ensuring quality teaching. Quality in teaching is related to regular evaluation and monitoring of teachers' performance on students' learning outcomes. Standard related teaching are performance benchmarks that focus on what precisely the teacher must know; be able to clarify clearly what teachers are required to do; have the knowledge to know the effects of quality teaching; effects of learning that usher positive changes; identify practical needs in the teaching system; and lastly set suitable levels for teachers' performance.

Standards and evaluation provide vital proof that standards are being implemented the requirement of standards needs to be fulfilled. Substance, standards and benchmarks are the three components that measure ability, capacity and aptitude of teachers. It offers necessary guideline and determines approaches, methodology and frameworks to utilize teacher training programs. The application and implementation of the professional standards for prospective teachers is needed to bring about a sea change in the teacher training pattern in Pakistan. The National Professional Standards are designed in a flexible manner as they can be refined and modified on need basis.

NPSTs have developed a full range of standards covering all aspects of teaching and teacher related competencies. The teachers training ensures implementation of these standards at all levels of education. The National Professional Standards document contains a total of ten guidelines called standards and each guideline is further viewed from three aspects namely: knowledge of what the instructor knows, dispositions of the teacher conduct, attitude and state of mind and lastly, performance - what are the

teachers' skills or capacity of teaching. These aspects make sub parts of each standard and are meant to illustrate capabilities, aptitude expected from a teacher, identifying approaches and methodology thereby making an effort to certify and give teacher professional license to teach. The standards guarantee effective teaching and achieve expected and intended outcomes (UNESCO, 2008, as referred to in Shakir, 2012).

Standards were developed to establish the fundamental qualities, abilities, and attitudes necessary for professional teachers. They also serve as a roadmap for the important policy and method for the accreditation of educational institutions and teachers. The professional standards for teachers are a developing, dynamic document, not a static one. Subdivision of each standard is as follows:

- i. **Knowledge & Understanding** (What Teacher Knows)
- ii. **Dispositions** (Behavior / attitude / value)
- iii. **Performance** (Skills)

2.16 NPSTs (2009)

The salient features of NPSTs (2009) document are enumerated and discussed below in the form of ten standards:

2.16.1 Subject Matter Knowledge

To make teaching-learning process more meaningful and successful, teachers should be able to develop relationship of curriculum with subject- matter knowledge. The teacher must be well versed with the major features of national curriculum, subject matter knowledge, latest trends in research, inter-disciplinary relationship and its relation to our routine life. Similarly, teacher should have the ability to develop self confidence in learners so as to transfer learning and knowledge to actual life situations (Government of Pakistan, 2009).

2.16.2 Human Growth and Development

Human growth and development play a vital part for teachers in teaching profession. Human growth and development are being studied in educational psychology and has direct bearing upon students learning. Therefore, it is important that teachers are well abreast with its different stages. It is important for an effective teacher have an understanding and importance of these terms. Its implication has a lasting effect on students' academic career. Teachers must know various elements that influence students' performance, diverse learning style, and different methods adopted to gain knowledge and learning. The teacher must also use motivational skills to raise students' self-esteem and confidence. Democratic values are the most cherished values in present day societies therefore teachers must adopt radiate from their action democratic attitude towards learners. Teacher should also evaluate students' potential and keep intact the learning momentum of the learners. Since learning has constructivist and social dynamics, teachers must see how learners master learning skills and learn in an interactive environment provided by the school. The teachers' colleagues, friends and family make a useful triangle in setting ensuring intellectual development (Government of Pakistan, 2009).

2.16.3 Knowledge of Islamic Ethical Value / Social Life Skills

Teachers are expected to possess basic knowledge of social skills and Islamic values at all levels of teaching in education. Ethics are universally acceptable norms and values of society. Knowledge, social skills and ethical values ensure harmony and peace nationally as well internationally. Solidarity and social change are fundamental to peaceful society. A professional teacher portrays practices of social skills while teaching in the life like situations during the classroom teaching. Students in Pakistan must be abreast with knowledge of Islamic values and social life skills to comprehend Islamic

rules while being part of larger society. Islamic principles, rules, regulations and practices inculcate social values among students. Teachers' understanding can help develop students' strong sense with societal norms and practices and understanding of the social and cultural milieu. The inculcation of these skills and values can effectively integrate students in society (Government of Pakistan, 2009).

2.16.4 Instructional Planning and Strategies

Education in educational organization is disseminated according to a well thought out plan. Planning is always done before hand so as to lay out a methodical, systematic and organized strategy to make objectives attainable. Classroom teaching involves effective and efficient use of instructional planning and strategies. Sound knowledge of instructional planning and strategies helps promote students learning in available material and resources. Arranging teaching pedagogy through-out instructional plan would focus upon collaborative and problem-solving methods. A professional and competent instructor must be aware of the teaching methodology of different subjects. Instructional planning and strategies ensure optimum learning of students in classroom and at the same time prove useful for teachers to achieve students learning outcomes in an effective manner (Government of Pakistan, 2009).

2.16.5 Assessment

Assessment is carried out to determine the outcomes achievement in line with the predetermined objectives. It is an integral part of instruction which gives sufficient information about students' actual learning. Assessment evaluates the standard of teaching that how well they are advancing towards achieving educational objectives. There exist several methods of assessment tests. It is crucial that teachers to have a comprehensive knowledge of all the assessment techniques. Teachers have the prime

responsibility to evaluate their students learning after the teaching learning process completes. The assessment could be diagnostic, formative or summative depending on situation (GoP, 2009). Understanding and comprehending the purpose of assessment allows teachers to grade students' attainment of learning in terms of skills and knowledge. Reliable and valid assessment results help in evaluation and provide necessary feedback by means of continuous internal assessment.

2.16.6 Learning Environment

A teacher's major priority is to provide those environment and conditions that are safe and conducive for learning. It should encourage them to interact positively and pave way for fear free participation during learning process. The teachers have to motivate students where they feel the urge, duty and responsibility to undertake studies. Teachers' method and style of teaching has to be convincing and beneficial to learning of students (Hopkins, 2005). It is fundamental for an educator to maintain high degree of morale, motivation, self-esteem and self-efficacy in the classroom. There must be a good environment between teacher and his/her students. Modern psychology pin points that a strong relation, understanding and empathy among the students themselves, among teachers and between the instructors and learners is of crucial importance for learning. This powerful linkage, healthy relation and strong bondage between the teachers and the students guarantee better outcomes of learning. An environment based on mutual respect, well-controlled and well managed classroom, where students are comfortable and self-motivated, displaying an urge by teachers to teach and students to learn, frequent and fearless interaction and students' participation in class activities produce better results.

2.16.7 Effective Communication and Proficient Use of ICT

Effective communication skills are integral to classroom learning and teaching process. Communicative skills are vital for teachers in order to support learning process.

NPSTs has given a few concepts that are deemed necessary for effective communication. These concepts include: teacher comprehension about the importance of social skills in the teaching learning process; teacher is aware about the application of social skills in a classroom; he has knowledge regarding the importance and usefulness of the work of art in classroom; the teacher can recognize the importance of social skills among diverse cultural students in the classroom; the teacher uses ICT and latest technologies; the teacher utilizes other techniques for better learning; and lastly the teacher revives ICT knowledge of students on regular basis.

2.16.8 Collaboration and Partnership

A teacher needs to be amicable and possess traits of cooperation and collaborative skills and further having the ability to enhance group interaction among students. This attribute is required in all workplaces. Colleagues in any organization who cooperate with each other will likely benefit their organization. It is a superior quality of humans to accommodate and accept each other and extend a helping hand. This competence will make teacher superior to others by demonstrating his/her pedagogical skills among a variety of students. Partnership and cooperation enable teachers to know the potential and capacity of school organization. The instructor remains aware of several methods to deal successfully with team. He/she understands the vital role of parents and always possesses the desire for students learning. These steps build a congenial environment and conditions for students' better learning in school (GoP, 2009).

2.16.9 Continuous Professional Development and Code of Conduct

Continuous professional development (CPD) has attained large importance in several professions. CPD role in updating teachers about teaching profession and its demands in the wake of new researches and latest trends is undeniable. A code of conduct

for enhancing CPD is of prime importance for lifelong learning process. Teachers strive to develop professional competencies to bring improvement in their knowledge, skills and teaching practices, teachers can at their own improve professional growth by involving in personal and professional grooming. Instructor must have the capacity to identify and now their strengths and flaws of their professional competency. Then the teachers must possess desire and an urge to make up their deficiencies. Teachers may also have the option to set professional goals even to meet their shortcomings. Similarly, teachers are free to seek assistance from fellow teachers to enhance professionally. The teachers have to show urge and a desire to improve their professional competency. The teachers can utilize available resources to help them apply innovative ideas in teaching students in classroom. This may be achieved through close cooperation with colleagues having more experience and skills in teaching profession (GoP, 2009).

2.16.10 Teaching of English as Second / Foreign Language

The importance of English language abounds. It is the most spoken language globally. More than half of the books and research journals are written in English. Besides it is a powerful language of media, internet and correspondence. It is world's Lingua-Franca. English language efficiency in both verbal and written form is considered a useful skill and tool for any professional. The educational goals and objectives cannot be fully attained unless English language proficiency is mastered. A competent teacher understands the significance of English language and he/she would try to further communicative skills of students. Therefore, he would endeavor to develop proficiency of students in all four language skills like listening, reading, speaking and writing. The teacher is required to use frequently English language with students in delivering the lesson and classroom routines so that knowledge is effortlessly conveyed and expressed meaningfully (Shaista, 2017).

English has undeniable role as medium of education in several countries of the world. It is considered inevitable in several parts of the globe particularly in education and without it, attainment of educational objectives is impossible. English either in the context of a second language or a foreign language has the most importance in teaching learning process. A teacher must be committed to cater for the linguistic needs of students in terms of grammar, vocabulary, articulation, syntax, etc. English is taught by adopting several approaches like direct method and indirect method and (CLT) approach, etc., even a blended approach is appropriate in some situations. English language acquisition has far-reaching benefits therefore it is essential for all stakeholders to take advantage and explore its various aspects. This will definitely help teachers in self and professional development by mastering communicative skills of English (GoP, 2009).

2.17 Composition of Standards

The composition of each NPST is based upon the three main components i.e., knowledge, dispositions and performance skills of teachers. Prospective teachers are observed through the components of knowledge connected with teacher's attitude towards knowledge and learning and the extent of practical utilization of knowledge. Every component is attached to each other and moves towards other components to show its connectivity. The following figure shows this composition and connectivity with the three components of standards.

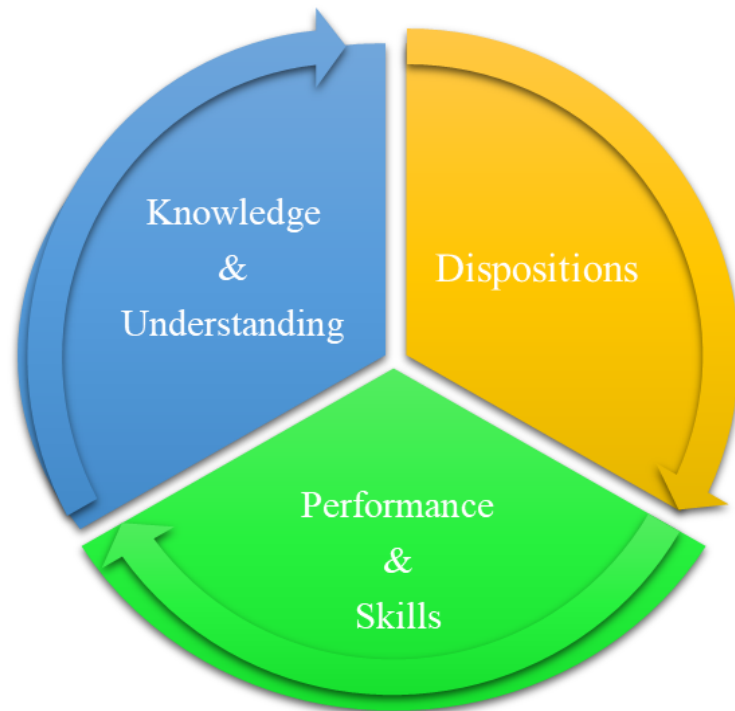


Figure 2.2 Composition of Each NPSTs

Each NPSTs competence is being analysed in three areas related to knowledge and understanding; dispositions; and performance & skills. The study has short listed NPSTs based on the literature review and subsequently selected the most important three competencies to analyze the pedagogical competencies of prospective teachers in respect of;

- i. Subject Matter Knowledge
- ii. Instructional Planning & strategies
- iii. Assessment

2.17.1 Knowledge & Understanding

Knowledge relates to information. It makes part of both theoretical as well as practical information regarding various ideas, thoughts and concepts. It is in other words a set of valuable information related to facts, truth, reality, principles, etc. of any natural

reality. Teachers are an embodiment of knowledge and are having specialty in a particular specialized discipline. The two main aspects of knowledge are professional knowledge and content knowledge. Professional pedagogical knowledge stands for specific, exact, to the point and useful information regarding a profession. It encompasses methods, techniques, approaches and professional integrity. Efficient instructors can effectively exhibit pedagogical knowledge by possessing multiple intelligences; sensitivity to multi-cultural trends and a fine blend of all a teacher possesses (Banks, *et al.*, 2005). Whereas content knowledge relates to facts, concepts, ideas, theories and principles of any discipline. Both forms of knowledge support students in academic growth and learning. The sum total of all educational activities and processes are to open up new horizons of knowledge for students.

The attributes of an expert professional teacher possess a store house of content knowledge, techniques of problem-solving, dealing with diverse learners and heterogeneous class, decision based on realities and remaining aware to students' needs, sensitivities and interests. Research studies suggest evaluating teachers on the basis of knowledge they possess on the subject. Despite accumulating academic knowledge, teachers are required to relate knowledge derived from practical experiences in the classroom. Blömeke & Delaney (2012) viewed that teacher's knowledge forms a major component of teacher professionalism. Professional competence involves more than just knowledge. It is the sum total of skills, attitudes and motivational variables contribute to the mastery of teaching.

Teaching is a complicated affair and teachers have a multi-faceted role demanding a set of professional knowledge to address the needs of students in an educational setting. Teachers are very well familiar with students of their social, religious, cultural and personal background. Therefore, teachers are aware of the learners' host of problems,

issues and needs that they bring to classroom have direct bearing on their learning. By virtue of being teachers they exactly know how to organize and present teaching lessons and at the same time keeping in view the diverse nature of students in terms of physical, social and intellectual aspects of their learners. Teachers at the same time know the content of course/subject and topic and organize material according to the needs of their class. They also know and have understanding of fundamental concepts, structure and inquiry processes of the program they teach. Teachers understand the developmental learning requirements according to the age and level of students. They utilize student's personal knowledge and situation to the best possible content teaching. The teacher with all these qualities plays significant role in teaching of students early age requirements like developing students' linguistic, literacy and numeracy skills (Ministerial Council for Education, 2011). Teachers display their ability to merge information and communication technology to the best use of students learning and broaden students' width and breadth of knowledge.

2.17.2 Dispositions

Dispositions is a set of values reflecting behavior, attitude and values essential for effective teacher preparation program (Erickson, Hyndman & Wirtz, 2005). Dispositions are rooted in belief system that guide our behavior. Social and professional values are attitudes specifically related with attitudes like care, empathy, enlightenment, accommodation and patience. Other attributes of dispositions include dispensing justice, truthfulness, adaptability, honesty and responsibility. These attributes are a binding factor in establishing students' firm faith to elevate their thinking horizon, aim high and enable them to achieve higher morality in professional and mutual understanding. It ensures safe, helping and cooperative learning environment (NACTE, 2002). Prospective teachers joining teaching profession require incorporating these values in behavior, attitudes,

emotional stability, and principles. Real lifelike and practical situations warrant from educators to attach greater importance to ethics, morality and values.

Professional skills, expertise and knowledge need to be sustained through ethical guarantees, moral uprightness and integrity. Social life skills are effective for better comprehension, psychological well-being, social development and intellectual progress of students. A lot of responsibility lies on teachers to effectively motivate students in a manner that give them opportunity to explore their latent talents, cognitive strengths deemed compulsory to enhance learning skills.

The buzz word of present times is professionalism. It demands from teachers to carry out teaching activities in a professional manner. They are to be trained and educated in lifelong learning processes. Indulging in reflection-on-actions forms a vital and effective part of multiple needs of learners along with diverse social and cultural requirements. Teacher training needs to focus on the highest form of considerations to inculcated among students' ethical responsibilities as part of discharging professional obligations. This approach will not only nurture a positive and a respectful relation among students but will also help in better understanding students' psychology. Teachers at the same time also get a feeling of fulfillment in terms of ethical, moral and caring relation with students. It in turn guarantees achievement of students' educational outcomes much easier (Noddings, 2002).

Professional and competent teachers are the need of our present times in the teaching profession. Teachers who are equipped with latest tools of knowledge, attitude and pedagogical skills will contribute towards deep learning of students coupled with critical thinking, problem solving techniques and social interaction. Dispositions, judgment and assessment are desired of a professional teacher and for quality assurance of teacher education (Roth & Swail, 2000).

2.17.3 Performance and Skills

Each NPSTs of pedagogical competence is analysed through the aspect of skills and their performance. It is the pragmatic and practical level of application of knowledge and learning. Teachers endeavor to enhance learners' skills, understanding and knowledge through apt methods of teaching. These in turn shape students' aptitude and desire translated in the form of actions, capabilities and performance. To transform these skills and performances into learners necessitates regular drills and practices to master pedagogical skills. The hallmark of a thorough professional educational expert is to utilize all these acquired skills and be able to incorporate them while teaching in practical class room environment. The practical manifestation of pedagogical skills of a professional and an efficient teacher can be seen only while delivering knowledge and skills to students in real life situation.

The teacher needs to possess a well thought out instructional plan thereby making apt decisions to safeguard students learning interests, reflective practices, self-evaluation and be able to demonstrate skills of classroom management. These attributes of a professional teacher possessing pedagogical knowledge are fundamental to an experienced and well-qualified educator. All these actions are required on the part of teacher as binding for producing quality teaching to learners (Darling-Hammond, et al., 2005).

Professional teachers are skilled and competent enough to make learning fruitful, engaging and valued. Ideal teachers are expected to be well trained and be able to execute their teaching responsibilities within the laid-out parameters. They are expected to create and maintain safe environment for teaching which is all inclusive, engaging and employ equitable justice. These aspects of teachers teaching on implementation would ensure quality teaching.

Teaching is all about planning in advance. Teachers need to possess a bunch of effective teaching strategies and utilize them in implementing a well-designed lesson to teach. A constant evaluative process would determine the affectivity of teaching to ensure they are meeting the learning needs of their students. Professional teachers interpret student assessment to diagnose learning issues and improve their performance. They efficiently operate teaching and learning process and effectively plan for learning of students, improving learning program and incorporating parents in a comprehensive strategy to bring positive changes in students learning (Ministerial Council for Education, 2011).

2.18 Role of Pedagogical Competencies in the Current Study in the light of NPSTs

In the current study, pedagogical competence means to assess core pedagogical competencies of subject matter knowledge, instructional planning and strategies and assessment in the teaching process. Teachers are desired to remain abreast with these skills and competencies. Pedagogical knowledge is determined through standards as enumerated in NPSTs. Dispositions and performance skills practices of the teachers are viewed as important components of each standard. Prospective teachers will be observed while keeping in view these three national professional standards. These competencies were computed on three lines, whether teachers possess sufficient knowledge; their attitude towards that knowledge; and their practices and skills for application of knowledge.

2.18.1 Subject-Matter Knowledge

The significance and contribution of S M K is not ever diminishing. The refinement of teachers' pedagogical competencies plays a vital role in learning dispensation. S M K is important for a proficient teacher. A competent teacher must be

knowledgeable about the essential concepts of content knowledge. A study pointed towards a great quantity of elementary teachers did not possess sufficient knowledge about NPSTs (Safia, 2005). Though, it is considered fundamental for modern day teachers in Pakistan in the wake of global standards movement. Teachers need to have foremost awareness about NPSTs. Despite the fact teachers' understanding of these pedagogical competency standards is very low. By adhering to standards, teachers would be able to raise competency level, deliver effective knowledge and connect knowledge subject with their students.

2.18.2 Instructional Planning and Strategies

The pathway to achieve educational objectives is curriculum. Objectives are formulated to make learning possible in the domains of knowledge, skills performances and application and attitudes also known as 'KSA'. Students expected or intended learning outcomes are evaluated through evaluation in the form of tests. Desired students' learning outcomes are attained by utilizing material, resources and pedagogical methods. Teachers teaching methods and instructions bring about learners learning besides bringing a permanent and positive change in the behavior and attitude. The instructional methods and techniques include lectures method, discussion method, activity method, project method, etc., are used to help students learn. Students go through metamorphoses during stay in school spanning over several years. Outside school too several factors contribute to these changes including elders, friends, family members, relatives, neighbors, acquaintances, social media, places of worship, TV, etc. Achievement is a term restricted to learning taking place at formal schools. Whereas, the learning related to non-formal and out of the school are described in broader sense by using terms likeability and aptitude. The impact and reflection of instructions and mentoring including guidance, counseling and motivation is visible upon students. Teachers pride in teaching is

associated in actual display of these reflections in students' cognitive, affective and psychomotor development. Effective and efficient teachers plan well in advance to amend curriculum to make it suitable for peculiar characteristics of students. Teachers have to reflect and integrate all information regarding students. They also need to plan the content of subject being taught, the curriculum followed, teaching experience, availability of resources and AV aids, classroom conditions and environment, etc. (Bahl, *et al*, 2014).

According to Robertson (2012) the standard and quality of teachers in imparting knowledge has significantly reduced. It has affected teachers' professional standing having in-depth knowledge necessary for teacher as professional, possessing academic freedom, lack of understanding of global curriculum and initiation of reforms. Unqualified, untrained and undereducated teachers pose a direct threat to teaching profession in terms of delivering the basic concepts of knowledge and understanding. Teachers possess a variety of heterogeneous characteristics as they come of different genders, cultural backgrounds, locality, teaching experience, academic qualifications, behavior, habits, attitudes, languages, and religion and philosophical paradigms related to teaching and learning (Pryor, 2013). Pryor. (2013) is of the opinion that all such characteristics of teachers differ greatly from country to country and culture to culture. Each country has its peculiar circumstances owing to terrain, culture, traditions, customs, needs, requirements and outlook having direct bearing on educational process and therefore requires training that addresses teachers' heterogeneous needs.

Teaching is all about looking back and continuously reflecting upon own teaching and thereby taking measures to alter and improve teaching practices as expounded by David Kolb (1984) in experiential learning theory. Zeichner & Liston (1987) viewed that trainee teachers have to adopt an approach to reflect critically on developing a practice of their own embedded in social context where they are placed so that teaching evolves a

definite meaning for students. Shulman's (1987) describes the importance of knowledge as an effective tool with teacher which has always an influential role. The knowledge can be viewed in the domain of content knowledge, pedagogical knowledge and curriculum knowledge. Similarly, its prime importance for teachers to have knowledge of learners themselves, their needs and interests in educational contexts and meeting educational objectives. The hallmark of effective teaching is based on teachers' concept about Pedagogical Content Knowledge (PCK). The teachers' effective representation and display of content knowledge enable students to better grasp knowledge and understand concepts. PCK is also used as scaffolding not only to anticipate difficulties and challenging situations but also utilizing pictures and images, examples, oral explanations, use of similes and actions. Teacher learning necessitates colleagues' interaction among staff members as a social engagement step for teachers towards teacher-learning concepts and theories of cognition (Shulman & Shulman, 2004). Cognition has been recently psychologically investigated and has proved that learning is a social process primarily. Constructivism is the theory that holds the view that old and new knowledge interacts resulting assimilation of new knowledge. At the same time knowledge is also the product of various, mental, social and physical activities which flourishes in cultural context. Learning through participation and activities results in social interaction in situational context. The theory of learning demands simulating real situations by exposing teachers to model teaching practices which are central to mastering pedagogy (Mourshed, 2010).

2.18.3 Assessment

Assessment process relates to information obtaining to determine the level of objective and goals achievement. Assessment relates to testing of students learning and it is a special type of assessment. Tests are assessments but all assessments may not be tests. Tests are taken at the end of a lesson or unit and progress is assessed at the end of

semester or annually. Assessment is always designed to connect it to goals and objectives both in implicit or explicit terms. A test or assessment gives useful information about an objective and goal to determine whether the objective is obtained or otherwise. Assessment of skill attainment is simple as it may exist or it may not, besides they are demonstrable and observable. The assessment of understanding is difficult and complicated.

Formative assessment is an integral part of teaching and learning process. It comprises of interactions in classroom, asking questions, classroom activities and feedback sought during the learning process (OECD, 2011). Assessment is formative provided it shapes subsequent learning. Formative assessment has attained an important role in education in recent years (Black & Wiliam, 2006). Diagnostic assessment is conducted at the beginning. It is useful and comprehensive assessment to find out delay or disability in early development and learning like speech, language and reading (Asghar, 2014).

Summative assessment is actually, to sum up, the teaching-learning process. It occurs unusually at the end of the process to provide information and feedback about it. Normally children have these assessments at the set point during or at the end of the semester or course. It is to know what the children have learned and how well they have learned. Achievement is commonly measured in the form of grades or marks to answer some questions. The summative assessment focuses on the final result so it is product-oriented and focuses on the process to get the product. Once the course is finished no further revision is made and if the revisions are allowed to make then it is no more summative. Rather it becomes formative assessment where children can get the opportunity to improve. According to Asghar (2014) as summative assessment evaluates the academic achievement of children at the end of the teaching process so they are said

to be the assessment of learning. Assessment of pedagogical competence of prospective teachers in the actual classroom can be accessed through testing of their knowledge they deliver and the attitude of how they behave in the classroom. Their performance and skills can easily be assessed.

2.19 Review of the related studies on Teachers' Pedagogical Competencies and Standards.

Literature review reveals that international researchers have investigated and found it an important area of teacher preparation programs. Summers, *et al.* (2005) conducted research to study the differences between the traditional classroom and online distance learning in a statistics class. The study purpose was to measure two outcomes: students' final grade and their satisfaction with the course. The findings demonstrated that there was no obvious distinction between the outcomes of the results of formal and distance education students. It was observed that there were some concerns of distance learners. The online learners were considerably less satisfied with the online courses.

Pedagogical competence was measured by using an embedded model of teacher performance. There were four elements which were measured; pedagogy, personality, social and professional competence of teachers. It was assumed in this article that the variable of competence of teachers determines the level of quality performance of teachers. These might be difficult for academics because not all teachers have these competencies. The purpose of the study was aimed to analyze the effect of these professional training on teachers. The findings of the study show that the pedagogical, professional training and personality competences have a considerable impact on the trainees' performance while the component of social competence hasn't any significant impact (Wardoyo, 2015)

Hanpanich, *et al.* (2015) conducted a comparative study to examine professional standards of Asian teachers in Thailand. The study suggested that an effective and practical policy need to be implemented so that Asian origin teachers use English as medium of instructions. The study further suggested that due to fast changing situations educationists may update and bring change from time to time in evaluating standards after every five years. Such steps would ensure quality in teaching as well as maintaining better standards and adopting new standards.

NPSTs have been analysed and researched critically from various angles in terms of outcomes keeping in view current national and international scenario. The researchers have viewed that much needed teacher quality is requirement of the day. Similarly, CPD of teachers is both important for self and professional development of teachers. A minimum of one hundred hours of training is required for a teacher in a year. Besides teachers' bilingual capacities, teacher interaction in community and several other conventional and unconventional methods of teaching add to teachers' good teaching practices. The international research carried out in several countries of the world including Australia, UK, USA, Netherland, Thailand and Pakistan on pedagogical competency have mentioned the importance of adhering and adopting professional standards with a broader outlook and deep insight.

Deniz & Ilik (2021) conducted research on teachers' professional competence development for prospective teachers. The study results found that teachers possessed moderate level of professional competencies and recommended intensive professional development training in content knowledge and integration of all educational aspects. Lohmann, Breithecker, Ohl, Gieß-Stüber, & Brandl-Bredenbeck (2021) researched education for sustainable development. It assessed teachers in professional competence, through qualitative content analysis of the main categories of professional knowledge and

beliefs. It also recommended a model for sustainable development in education by adopting professional action competence.

Fauziyah, Yusuf & Andayani (2021) conducted research on performance of teachers related to pedagogy competence as an important factor in improving quality of education and find its effect on the teacher's performance. The study revealed that teachers sound pedagogy competence has a sound bearing on the teacher performance in classroom. Sahana (2018) conducted a study on the impact of teachers' pedagogical competencies about the efficiency of teaching-learning process in the context of student-centered approach. It defined the concept of pedagogical competence in order to understand the fundamentals of pedagogical competence development and to understand the extent of pedagogical competence besides knowing future issues and challenges.

In Pakistan very less research has been conducted to examine the theory and practice gap of teachers' pedagogical competencies. The research study conducted by Kalim & Bibi (2024) identified three core teacher competencies i.e., Instructional, Personal, Professional competencies required of teachers in 21st century. The findings showed varying differences among teacher in competencies ranging from gender to age. Another research study Ali, Lodhi & Butt (2022) evaluated the competencies level of secondary school teachers in two NPSTs namely; Subject Matter Knowledge and Assessment. Teachers' competencies in these two standards were calculated and it was found that a gap existed between teachers and students' perceptions. Parveen, Nazir & Zamir (2021) analysed teacher competency in fundamental domains of knowledge, skills and attitude to determine teachers' efficacy level. The findings of the study showed deep relationship among knowledge, skills and attitude in terms of teacher competency.

Fasiha, Altaf & Muhammad (2019) conducted research on 'Teachers and Education Managers Perceptions and Practices Regarding National Professional

Standards for Teachers' The study results indicated the newly inducted teachers in public sector schools were comparatively more vibrant, spirited and knowledgeable and were found aware and equipped on different facets of NPSTs. Their competency level was also found higher than their predecessor teachers.

Sarwar & Hussain (2010) aptly identified the issues and subsequent solutions for Pakistan's teacher preparation programs. They found that teacher education training institutions prepare prospective teachers without keeping in mind the ground realities and requirements of schools and students. The research concluded that prospective teachers were found weak in content knowledge, discipline, advance planning and classroom management. These problems were to be rectified by a more rigorous training in the lacking aspects.

Teacher training programs prepare teachers for teaching and to boost their competency level. Many researchers added a significant contribution in identifying the role of prospective teachers and their competency level. In 2015, a study was conducted on fifty prospective teachers enrolled in B.Ed. (1.5years) at Allama Iqbal Open University, Islamabad in order to assess the pedagogical competencies of these prospective teachers in distance education program. Their professional competence was evaluated through a self-developed questionnaire. This questionnaire covered five standards from NPST (2009) i.e., knowledge of subject, teaching methodology, assessment, environment and use of ICT. The findings of the study indicated various concerns about the competence of these teachers. One of the major findings was that this program does not fulfill quality in teaching-learning process and almost all five standards in this program needed to be improved (Iqbal, Khalid & Hussain, 2015)

In another contemporary study, Jumani, Akhlaq, Malik, Chishti & Butt (2010) conducted research on the professional competence of mathematics teachers. It involved

both formal and distance education system. The major focus of the study was to assess the teaching skills and teaching attitudes of the teachers. They used random sampling technique on 600 distance and 600 formal system respondents. The findings and results of the study showed that the area of teaching skills of the distance education teachers was higher than the formal education program learners. Furthermore, it was observed that the teaching attitude of distance teachers was significantly better than formal education teachers. They further suggested that duration of teacher training workshop should be enhanced and the last semester of B.Ed. program should be focused on teaching skills and practices of various subjects (Jumani, Akhlaq, Malik, Chishti & Butt, 2010).

Shakir & Adeeb (2014) conducted a research study to assess the professional growth of teachers on the base of NPSTs. This research was based on five professional standards of professional teachers. Teachers of all over the Punjab province were its population. The findings of this research showed that more than half the percentage of the teachers had poor knowledge about the professional code of conduct. Teachers felt incompetent while applying action research (Shakir & Adeeb, 2014).

Mehmood & Salfi (2012) had carried out research on future teacher vision through quality imperatives of professional standards. It draws the purpose and importance of standards for maintaining teachers' competency and how standards could be used to play an important part in uplifting the quality of teaching. Ghazi, *et al.*, (2013) conducted similar research highlighting the importance of teachers' professional competencies in the aspect of subject matter knowledge. The study found that training workshops may prove helpful in improving content knowledge of teachers. It also suggested that teachers may be involved to update their knowledge and information base in daily life by positively utilizing internet resources to for self-development.

Mushtaq, Mustafa and Ghaffar (2015) conducted research on NPSTs. The study did show that Pakistan is gradually improving the quality of teaching at school levels. It was highlighted that NPSTs can definitely improve the situation provided suggestions of the study are implemented to improve the quality of education. Teachers happen to be the best guide for the young generation of the country. Regular intensive training sessions, seminars and training workshops based on continuous professional development pattern may bring drastic changes in the country education system thereby paving the way for establishing solid academic foundation of education. Furthermore, it also suggested that teachers should remain abreast with the latest developments globally in the movement for educational standards.

Atta, *et al.*, (2012) conducted a research study on NPSTs in relation with classroom teaching found that the teachers' subject matter knowledge falls short of criteria evolved. A large number of teachers were found coming to classes without preparation and lesson plans nor did they fully put to use instructional strategies to bring improvement in classroom practices. However, some of the teachers did utilize knowledge for students learning enhancement and social skills in this way they build a successful career in education for themselves. Most of the teachers were found disinterested in dispensing efficient assessment methods and neither tried to encourage and motivate students in classroom activities. Therefore, a dire need was felt for developing standards for teachers in Pakistan which came in the shape of NPSTs document. It is contemporary and latest trend in education all over the world. It is designed to achieve educational objectives on the part of teachers. The policy makers framed a viable strategy to updated teachers' knowledge by maintaining a regular check on teachers during actual implementation of NPSTs in teaching learning process.

Nasir, *et al.* (2020) assessed teaching competencies of teacher in terms of NPSTs. The competencies taken for evaluation of prospective teachers showed a significant difference in the competency levels.

Having gone through related research studies internationally as well as nationally it can be reviewed that pedagogical competencies are utmost important. The training imparted to prospective teachers hold the key to quality learning of students. Their professional development goes a long way towards career development and making teaching-learning process more effective. The present study is therefore proposed to study the gap between perceived and practiced/developed pedagogical competencies of prospective teachers in the light of NPSTs.

2.20 Summary

This chapter covers detailed aspects related to pedagogical competency achieved through adhering to well defined standards. It defines the meaning, scope and nature of pedagogical competency in greater detail. The emerging importance of pedagogical competency in terms of imparting quality learning is highlighted. It also throws light on theoretical framework thereby explaining related theories on the subject. In conceptual framework the researcher has tried to relate theoretical framework to the topic of the study and thereby merging theories with the concept of present study. It helps in evolving a sound base for adopting subsequent procedural framework of the study. The chapter evaluates in detail related literature available on the research topic. Review of literature was of great help in taking guidance while formulating research instruments for the present study. The literature covered research material of both national and international research conducted on competencies and standards-based education. The major focus was on attaining certain standards related to teaching through teacher trainings.

In Pakistan NPSTs document containing ten standards with further three sub-standards have been prepared and implemented among prospective teachers in B. Ed (Hons) program. The chapter dealt in detail with all standards particularly subject matter knowledge, instructional planning and strategies and lastly assessment. This chapter particularly highlighted on the basic learning domains of knowledge, skills and attitudes necessary for teachers in classroom. The NPSTs have given a chance to teachers to equip themselves with pedagogical competencies in performance of their teaching skills and abilities.

In Pakistan professional standards for teachers are introduced in teachers' training courses/programs and thereby a need was felt to identify the gap between theory & practice by the prospective teachers in actual teaching. This chapter paved the way in analyzing all aspects related to the topic by reviewing available literature in greater detail. The literature review made sound understanding of the research variables and familiarized the researcher in understanding of the topic and developing research tools.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter describes the research strategy used to conduct the current research issue and to support the adoption of particular research techniques. The research design, research paradigm, population and sample size are described in this chapter. Additionally, it focuses on the research tools, the data collection process, the pilot study, the validity and the reliability of the tools. The current study has an exploratory sequential mixed methods research design aimed to address prospective teachers' pedagogical competencies (Creswell & Plano, 2007). It explores the integration of pedagogical competencies in the course guides; and perceived and developed level of pedagogical competencies of prospective teachers. The first phase related to qualitative exploration of course guides for which content analysis was conducted. Findings generated from the content analysis were used for the development of a survey instruments that were used to collect data from a larger population of prospective teachers. The second phase of this study was a quantitative description of perceived and developed competencies which included self-reported scale survey and observations. The findings generated from both phases of the study were finally triangulated to provide a more complete description of B.Ed. (Hons) course guides; and perceived and developed pedagogical competencies in the light of NPSTs.

Data was collected from the following three sources;

- i. **Content Analysis** to check the integration of NPSTs in the course guide books of B.Ed. (Hons) published by Higher Education Commission of Pakistan (HEC, 2010).
- ii. **Self-Reported Scale** to assess the level of perceived pedagogical competencies of prospective teachers.

- iii. **Observation Sheet** to assess the level of developed pedagogical competencies of prospective teachers during teaching practice.

3.1 Research Paradigms

A research paradigm is a researchers' philosophical outlook that guides him/her in the pursuit of truth and reality. A research paradigm therefore denotes the philosophical world view and the approach to understand and pursue truth (Maxwell, 2005). The process of research is guided by researchers' beliefs about ontological, epistemological and methodological position. The three major research paradigms are Positivism, Interpretivism and Pragmatism. Positivism believes that knowledge is confined to the senses only. It holds that senses are the only gateways of knowledge. It enables humans to register external and internal stimulus which is verifiable, acceptable and objective method of reaching facts, truth and reality. Whereas anything that falls beyond the domain of senses is out rightly rejected as it comes beyond the affirmed source of knowledge (Bryman, 2012). All scientific work falls in the domain of Positivism and rely on quantitative data (Creswell, 2015). The Interpretivist paradigm holds opposite view to positivism as it believes in subjective interpretation as a verified, reliable and acceptable reality that follows scientific scrutiny in qualitative work. Qualitative researchers use the tools such as interviews, focus groups, text analysis and participant observation to understand, explain and interpret situation (Taylor & Medina, 2011). The Pragmatism paradigm is flexible as compared to Positivism and Interpretivism paradigms. It accommodates both opposing point of views and considers reality could be singular as well as multiple by attaching value to both objective and subjective information to meet research objectives (Creswell, 2007). It has reduced quantitative and qualitative divide and thereby holds a pluralistic view by using multiple methods for the research problem (Feilzer, 2010).

Keeping the above in view the present research has adopted Mixed-methods as a research methodology and thereby the research paradigm of the overall research is based on Pragmatism paradigm. The study uses Pragmatism paradigm to integrate multiple research methods to address research questions (Creswell & Plano Clark, 2011). The research tools taken separately for qualitative data followed Interpretivism paradigm whereas quantitative data was interpreted according to Positivism paradigm approach.

3.2 Research Design

The mixed methods research design is a process for gathering, analysing and mixing both quantitative and qualitative data at same point during the research study (Tashakkori & Teddlie, 2003; Creswell, 2013). To achieve the objectives, the study adopted mixed methods research approach thereby incorporating multiple research methods to collect, analyse, interpret and report qualitative and quantitative data by data triangulation to reach findings (Dawadi, Shrestha & Giri, 2021). Pedagogical competency is the achievement of excellence of a teacher. It is the ability to effectively perform in learning process and achieve expected outcomes from students. Knowledge, skills and attitude constitute the fundamental ingredients of pedagogical competencies. The present study focused on prospective teachers' pedagogical competence aligned with NPSTs. The study observed how competent were prospective teachers when compared with NPSTs criteria. The scope of the study was strictly confined to three selected NPSTs. The NPSTs document set the criteria for pedagogical competence of prospective teachers. thereby, the study analysed the selected NPSTs integration in course guides. The researcher took their view through self-reported scale to check their perceived views about pedagogical competence as elaborated in NPSTs. The researcher finally observed prospective teachers during teaching practice to identify the gap between what was taught to them and how much they were actually competent against a particular NPSTs.

Keeping in view the above adopting a single type of data was insufficient to uncover the truth. Therefore, mixed methods research approach was preferred and data was triangulated from three sources to reach conclusions. Exploratory sequential research design was adopted for this mixed methods research approach. It is a two-phase design where in first phase qualitative data is collected and analysed, then followed by second phase of quantitative data collection and analysis thereby leading to interpretations and results triangulations (Creswell & Creswell, 2018). The data is gathered in a sequential order according to priority and integrated during different stages of the research process (Cresswell, *et al.*, 2003).

Patton (2002) substantiates that research studies where only one or two methods were used were found liable to contain errors and mistakes which were particularly indicative of the method adopted than those studies that employ numerous methods in which diverse types of data provided cross data validity checks. This provides a strong justification for adopting mixed methods for my present study. The decision to use a mixed methods approach is further backed by claims made by Johnson and Onwuegbuzie (2004) that combining qualitative and quantitative data allows for a more thorough grasp of the issue and the ability to triangulate the results. A methodological triangulation is applied in this mixed-methods study by using a variety of data gathering instruments (such as content analysis, surveys and observation).

3.3 Population of the Study

The collection of all components related to the study topic in which a researcher is interested to gather data and further wants to draw inferences or conclusions on the basis of the selected information (sample) is called population (Levin & Rubin, 2019). The population of the study consists of 1280 prospective teachers enrolled in B.Ed. (Hons) program in all public sector universities of Punjab province (Source: www.nacte.org.pk).

The following table shows the details about the number of prospective teachers in the public sector universities of Punjab province offering B.Ed. (Hons) program:

Table 3.1:

Population of the Study

S. No	Male	Female	Total
1.	386	894	1280

3.4 Sample and Sampling Techniques

Sampling offers a foundation for roughly estimating and predicting unknown information by looking into the current situations and effects that are common across the entire population (Kumar, 2011). In most cases, it is an unavoidable part of study because of limitations of time, money, effort and other material resources. The most important quality of a sample is its representativeness, which makes it feasible to confidently generalize the results (Ary, *et al.*, 2010). To assess the level of perceived pedagogical competencies through self-reported scale, a sample of 296 prospective teachers were selected through simple random sampling method in accordance with Krejcie & Morgan (1970) statistics. According to (Ghauri & Gronhaug, 2005) every case of the population has an equal chance of being included in the sample. The researcher obtained list of students from public universities of the Punjab province. Prospective teachers from public sector universities were selected who were currently studying in the last semester of their coursework.

Secondly, to assess the level of developed pedagogical competencies of prospective teachers, observation sheet was used for 30 prospective teachers (10% from the top mean scores on self-reported scale) during their teaching practices in schools using purposive sampling technique. Likewise, a research study conducted by Anjum &

Mahmood (2019) had also developed a self-developed observation checklist to measure the pedagogical practices of prospective teachers. They used the sampling technique of selecting 40 prospective teachers with 10% top of mean scores on pedagogical knowledge test and 10% from the bottom of mean scores) during their teaching practices in schools using purposive sampling technique. I applied the same pattern of selecting prospective teachers for observation purpose. to my research study. However, I kept top mean scores only for sampling. In order to validate the observations, a single prospective teacher was observed thrice.

The sample size was determined according to Krejcie & Morgan (1970) statistical table. Thus, a total of 296 prospective teachers constituted the sample of the study. Out of 296 respondents those who achieved top mean score i.e., above 10% in survey of self-reported scale were selected for observation purpose. In this way 30 prospective teachers were selected as sample for the purpose of classroom observations.

3.5 Research Instruments

The NPSTs (2009) document contains ten standards which indicate various competencies. The existing study selected three pedagogical competencies from NPSTs with sub parts (MoE, 2009). For this purpose, two different instruments were developed by the researcher herself to achieve the objectives of the study. Mahmood, *et al.* (2013) in their study highlighted four indicators of pedagogical competencies of teachers, subject knowledge, teaching strategy, resource material and assessment criteria. The three competency indicators, subject knowledge, teaching strategy, and assessment criteria are more aligned with NPSTs. There are several competencies based on different criteria required from a teacher. However, minimum essential standards that complete the teaching learning cycle are; ’

- i. Subject Matter Knowledge (SMK)
- ii. Instructional Planning & strategies (IP&S)
- iii. Assessment

Each standard with the composition of three sub-standards:

- i. Knowledge & Understanding (K&U)
- ii. Dispositions
- iii. Performance & Skills (P&S)

The abbreviations mentioned above will be used for respective standard and sub-standard in the study. The researcher developed the instruments in accordance with selected standards. The tools used in the study were self-reported scale and observation sheet. The self-reported scale was used to assess the level of perceived pedagogical competencies of prospective teachers. The observation sheet assessed the level of developed pedagogical competencies of prospective teachers. The self-reported scale and observation sheet consisted of three main indicators drawn from the core competency factors of (NPSTs, 2009). The first part of self-reported scale, and observation sheet consisted of demographic variables. Self-reported scale contained on sixty-five (65) statements, and observation sheet had thirty (30) items only.

3.5.1 Content Analysis

Content analysis is the study of any recorded material to analyze public documents, reports, newspapers, books, journal articles, letters, etc. (Chelimsky, 1989 as cited in Reddy & Narayan, 2016). This method is used to find out about specific phenomenon besides what can be observed or sensed (Krippendorff, 2013). Content analysis is a systematic, rigorous approach to analyze documents in qualitative research studies (White & Marsh, 2006).

The main emphasis of content analysis is on the themes identification, categorizing, systematic coding, analysis and interpretation of textual content. Adopting structured category formats increase coding efficiency by using clearly defined criteria. For effective validation of the research findings, the content analysis process is made explicit, precise and replicable. The B. Ed (4 years) program curriculum contains several courses divided into content, non-content and core courses taught in eight semesters. In the context of this study the content analysis is limited to the analysis of four course guide books related to English Language Teaching (ELT) and ELT methodology of teaching taught for developing pedagogical competencies among prospective teachers. An additional two course guide books are related to English subject whereas the other two books are related to 'Method of Teaching' and 'Assessment'.

The B.Ed. (Hons) program curriculum has no such books for each course however, Higher Education Commission (HEC) has developed and designed detailed course outlines in the form of course guides books as teachers' manuals. These course guide contents are exhaustive and elaborative. The contents organized in the form of units containing topics and themes. Each unit contained brief description of the unit, expected outcomes, micro teaching aspects and suggested summative assessment at the end of each unit which provided both broader and detailed parameters. Similarly, competency development which determined the expected outcome of prospective teachers was measured and assessed through a number of rehearsals, exercises, activities and tasks incorporated in the course guides.

Chelimsky (1989) views that content analysis can be used for making comparisons among and within documents. The comparison can be either among statements derived from a single source document or from statements derived from two or more different sources. The content analysis portion of this study draws a comparison

among two documents. The NPSTs pedagogical competencies are compared with B. Ed (Hons) course guides. It includes course guides of English teaching, Methods of teaching and Assessment. In the first step main NPSTs themes were identified. Similarly, in second step sub-themes were categorized. In third step different aspects of sub-themes were given codes. In the last step relevant content was searched in course guides and placed against each code. Subsequently the content was analysed and interpreted accordingly. The NPSTs were compared for analyses among the six teaching course guides of B. Ed (Hons) of which four course guidebooks related to English subject and the fifth course book was Methods of Teaching and sixth was Assessment.

The content analysis addresses the first objective of the present research. The steps and procedures adopted by the researcher to carry out content analysis included analyzing B. Ed (Hons) course guides for themes and sub themes categories of each selected NPSTs. In this study the themes of NPSTs document for content analysis were used as content analysis protocol.

Table 3.2:
Depiction of themes and sub themes with coding scheme

S.N	Main Themes	Sub- themes Categories	Coding Scheme
1	Subject Matter Knowledge	1.1 Knowledge & Understanding	1.1.1 Knowledge of National Curriculum Framework of English Subject
			1.1.2 Basic concepts and theories of acquiring knowledge in English Subject
			1.1.3 Evolving nature of the discipline of English
			1.1.4 Need for keeping abreast with new ideas & understanding of teaching English
			1.1.5 Emerging concepts, theories as a result of latest trends & research in English
			1.1.6 Detailed knowledge of subject matter of English
			1.1.7 Relationship of English with other disciplines & its utility
			1.1.8 Relationship of reading & writing principles of English subject
2	Instructional Planning and Strategies	2.1 Knowledge & Understanding	2.1.1 Aims, goals & objectives of English subject
			2.1.2 Principles of acquisitions of reading & writing skills
			2.1.3 Resources & material availability
			2.1.4 Students' needs, development & prior knowledge
			2.1.5 Techniques for developing instructional methods, material and environment
			2.1.6 International approaches and use of various technologies
			2.1.7 Effect of out of school activities including homework
			2.1.8 Methods of teaching & classroom management
			2.1.9 Special methods of teaching English discipline of knowledge
3	Assessment	3.1 Knowledge & Understanding	3.1.1 Types of assessments to evaluate learning
			3.1.2 Results of assessment to evaluate and improve teaching & learning
			3.1.3 Measurement theory & assessment-related issues

3.5.2 Self-Reported Scale

Self-reported scale is a reliable research tool extensively used to collect data in different research fields (Aithal & Aithal, 2020). The present survey opted for self-reporting data for large scale data collection and consistency in survey results as like surveys, questionnaires, interviews, etc. self-reporting scale is also used by researchers as a research instrument to collect information directly from study participants. In social sciences self-reported scale is extensively used as a valid source of information collection (Brener, Billy & Grady, 2011). There is substantial evidence that self-reported scale is a valid way used to assess processes of learning and its validity will enhance when triangulation of different methods is integrated and converged (Pekrun, 2020). Self-reported scale has significance in terms of giving accurate, clear and explicit instructions to respondents which are understandable and contain several response options. The questions of self-reported scale are structured that minimize ambiguity and enhance reliability.

Statistical validity measurement can be easily employed to increase reliability and validity of collected data. Moreover, the questions are framed in a manner to maintain neutrality, prevent bias and avoid leading participants towards a particular response (Moroney & Joyce, 2019). It is also significant in obtaining thoughtful and accurate responses from participants in answering questions. Self-reporting data can be conveniently triangulated with other data sources like observations, interviews, etc., to cross-validate the obtained information (Kachroo & Kachen, 2018). Self-reported scale gives freedom to randomize the order of questions to minimize order effects that could influence responses. Similarly, it provides opportunity of pilot testing to rectify issues of clarity, wording, bias, language, sequence, difficulty level, before administering the actual survey. It is also effective in maintaining respondents' anonymity and confidentiality to

encourage honest and accurate reporting. The instrument was developed and validated by domain experts.

The researcher constructed a self-reported scale for pedagogical competencies while keeping the study's objectives in sight. The tool was designed upon a thorough review of the related literature and the document of NPSTs. The self-reported scale for prospective teachers was based on NPSTs with its pre-defined sub standards. The self-reported scale contained sixty-five items which were divided into three sub-scales such as:

- i. Subject Matter Knowledge
- ii. Instructional Planning & strategies
- iii. Assessment

These three pedagogical competencies merged into a single research instrument. The items of self-reported scale were developed on '5-point Likert scale' Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (DA) and Strongly Disagree (SDA) (Cresswell, 2013, p-195).

According to a recent study (Sozen & Guven, 2019) mean values for this type of Likert scale ranges from 1.00-1.80 for Strongly Disagree, 1.81-2.60 for Disagree, 2.61-3.40 for neither Agree nor Disagree, 3.41-4.20 for Agree and 4.21-5.00 for Strongly Agree. Through these 65 statements, I assessed the level of perceived pedagogical competencies of prospective teachers in the light of NPSTs.

3.5.3 Observation Sheet

Observation sheet is a research instrument primarily used to determine the success level of achievement of a predetermined objective (Arikunto, 2010). The present study developed a systematic observation sheet where themes and sub themes categories

were pre-defined according to NPSTs. I tried to accurately assess the level of developed pedagogical competencies of prospective teachers and record observations from a pre-defined list of behaviours as exactly as possible during classroom activities. It also identified the differences between perceived and developed pedagogical competencies of prospective teachers based on NPST-2009. The observation sheet was divided into its already defined same themes and sub-themes of NPSTs being used in the self-reported scale, however it comprised of only those sub aspects which were strictly observable. It assessed the prospective teachers' teaching on a sheet having five levels coded rating scale. The observation sheet was developed to explore the problem in quantitative terms.

3.6 Validity of Research Tools

Accuracy, credibility, dependability and confirmability are the common criteria used for validation in qualitative research (Mayring, 2004). Validity of qualitative research is achieved through quality, rigor and relevance of the data and findings (Garrett, 2012). Validation of content analysis is embedded in the systematic procedures and process of rigorous analysis, examination, contents verification, summarizing and reporting of written data (Krippendorp, 2013). The content analysis validity is subjective in nature and therefore depends heavily on researcher judgments, honesty and trustworthiness (Koller, et. al., 2017; Chapelle, et al, 2011). The present study focused on achieving the validity of qualitative content analysis through the laid-out process and procedures of selecting themes and subthemes, categorization and coding as laid out by Cohen, Manion & Morrison (2007), Zhang & Wildemuth, (2009) and Krippendorp (2013). The content analysis explored whether the alignment of selected NPSTs with course content of B. Ed (Hons) course guides were being appropriately represented and relevant. The themes and subthemes were pre-defined and the researcher determined the connection between the themes and its actual representation in the course guide.

Validity is the first measure in quantitative study. It determines the extent to which a concept is accurately measured in quantitative research (Heale & Twycross, 2015). The following steps were taken to guarantee the validity of the quantitative data collected for this research. For the study, the instruments were validated using the experts' inputs. For validation purpose, the researcher formulated the self-reported scale and observation sheet in person as per each research objective based on three dimensions of NPSTs. The researcher sought out experts whose feedback was used to develop the tools. They provided the researcher with some insightful recommendations for its development and refinement. Both tools were finalized and administered on the study's sample after being shaped according to the advice and suggestions of domain experts. Psychometric properties of self-reported scale regarding pedagogical competencies were checked by Exploratory Factor Analysis (EFA), Item-total correlation and reliability analysis in the form of Cronbach's Alpha (Prudon, 2015).

3.7 Reliability of Research Tools

In qualitative data reliability refers to credibility, neutrality, dependability and trustworthiness of data analysis and interpretation (Cohen, Manion & Morrison, 2007). The content analysis carried out in present study ensured that data extracted from the original source was first verified for accuracy in terms of form and context. Standardized and credible process and procedures for content analysis as given by Cohen, Manion & Morrison (2007), Zhang & Wildemuth, (2009) and Krippendorp (2013) were adopted. The content analysis was organized from selection of themes, coding sub-themes to categorization of textual material. It helped lend authenticity to the subsequent text analysis and interpretation.

The second measure of quality in a quantitative study is reliability. It determines the extent of accuracy and consistency of research instrument to produce the same results if used repeatedly in same situation (Heale & Twycross, 2015). For this purpose, prior to the large-scale quantitative data gathering, the research tools were piloted. It was done to assess the reliability of the tools on large scale data (Prudon, 2015). For pilot testing, a sample that was relevant and shared significant attributes with the major sample was chosen for the main study but was not a part of it. The sample was selected in two stages. At the first stage 60 prospective teachers were approached to fill the self-reported scale. Piloting was done to test if the research instruments were capable of collecting the data required for the study. The respondents involved in the pilot study did not constitute the final sample population for data collection.

Table 3.3:
Reliability Statistics of Self-Reported Scale

National Professional Standards for Teachers	Cronbach's alpha	Number of Items
S M K	0.743	18
IP & S	0.801	27
Assessment	0.824	20

Table 3.3 shows that Chronbach's Alpha value for all the three subscales ranged between 0.743 (the subject matter knowledge) and 0.824 (Assessment) whereas the overall reliability was (0.789).

Similarly, pilot testing of observations was conducted over six prospective teachers and observations were noted to clear the consistency and understanding of the observation sheet. It was noticed during piloting that there were some prompts which

were not observable or behavior has not occurred so, these prompts were removed from the final observation sheet.

3.7.1 Exploratory Factor Analysis of Self-Reported Scale

The self-reported scale was constructed by the researcher under the guidance of research supervisor. The researcher developed the items of the instrument after taking a comprehensive review of available literature in the form of associated researches and sought guidance from the concepts of Creswell (2012), Braun and Clarke (2008). The usability and reliability of questionnaire was tested by exploratory factor analysis (See Appendix-F) and Cronbach's Alpha. This newly developed instrument for pedagogical competencies covered seventy-two (72) items. The items of the research instrument were applied on rotated component matrix and dispersed into factors. After factor analysis seven (7) items were dropped which have score less than 0.30. Thus, sixty-five (65) items were left which were classified in to Nine (9) factors. For taking the final approval, the instrument was presented to the experts and they approved to retain sixty-five (65) items of the instrument (Appendix-D). The factors of the instrument having sixty-five items of pedagogical competencies are given below;

Table 3.4:
Factors of Pedagogical Competencies with Number of Statements

S. No	Factors	Statements	Grouping of Statements
1	Subject Matter (K&U)	09	1 – 09
2	Subject Matter (Dis)	06	10 – 15
3	Subject Matter (P&S)	03	16 – 18
4	Instructional Planning & Strategies (K&U)	11	19 – 29
5	Instructional Planning & Strategies (Dis)	06	30 – 35
6	Instructional Planning & Strategies (P&S)	10	36 – 45
7	Assessment (K&U)	04	46 – 49
8	Assessment (Dis)	04	50 – 53
9	Assessment (P&S)	12	54 – 65

Table 3.4 shows that the first factor S M K related to ‘K & U’ has nine items; ‘Dispositions’ includes six items and ‘P & S’ encompasses three items. The second factor IP & S related to ‘K & U’ has eleven items; ‘Dispositions’ have six items and ‘P & S’ encompasses ten items. The third factor Assessment ‘K & U’ includes four items, ‘Dispositions’ covers four and ‘P & S’ involves twelve items.

The item numbers of each dimension were based on factor loadings value. Items with weak factor loadings i.e., below .30, were not taken into consideration (Fabrigar, *et al.*, 2012).

3.8 Item-total Correlation

Table 3.5:

Item-total Correlation of Self-Reported Scale

S. No	Items Correlation	S. No	Items Correlation	S. No	Items Correlation	S. No	Items Correlation
1.	.477	22.	.485	43.	.624	64.	.519
2.	.753	23.	.731	44.	.627	65.	.380
3.	.539	24.	.541	45.	.733		
4.	.685	25.	.694	46.	.647		
5.	.793	26.	.784	47.	.433		
6.	.572	27.	.550	48.	.415		
7.	.344	28.	.477	49.	.601		
8.	.477	29.	.753	50.	.617		
9.	.753	30.	.539	51.	.614		
10.	.539	31.	.684	52.	.485		
11.	.684	32.	.789	53.	.731		
12.	.789	33.	.549	54.	.541		
13.	.549	34.	.359	55.	.694		
14.	.315	35.	.492	56.	.784		
15.	.492	36.	.749	57.	.550		
16.	.749	37.	.527	58.	.349		
17.	.527	38.	.684	59.	.485		
18.	.684	39.	.789	60.	.731		
19.	.789	40.	.563	61.	.425		
20.	.549	41.	.395	62.	.686		
21.	.349	42.	.601	63.	.778		

Table 3.5 explains the item-total correlation of self-reported scale appeared to be .793 to .315. The item-total correlation was calculated using item analysis in SPSS on a

sample of 60 prospective teachers. According to De Vaus, 2004, a value greater than .3 is acceptable for item correlation.

3.9 Arrangement of the Research Tools

According to the pilot study, instruments exhibited satisfactory reliability values and were appropriate for the current study. Based on the discussion in prior sections of research instruments, the instruments were given final form.

3.9.1 Coding Procedure of Tools

i. Content Analysis: The steps and procedure adopted included analysing B. Ed (Hons) course guide books for themes and sub themes of each NPSTs. Themes and sub themes were systematically coded, categorized and analysed, the themes and categories presented in the form of themes and sub themes as provided in the NPSTs which were compared for analysis among the six teaching course guide books of B. Ed (Hons) program. Structured category format increased coding efficiency by clearly defined criteria.

ii. Self-Reported Scale

A 5-point Likert scale on a scale from 1 to 5 was used to record the replies on the surveys. It receives a variety of agreements or disagreements on different instruments. For each level of the scale a number is assigned. The scoring values of items are allocated as; Strongly Agree (SA)= 5, Agree (A)= 4, Undecided (UD)= 3, Disagree (DA)= 2 & Strongly Disagree (SD)=1.

iii. Observation Sheet

An observation sheet with five levels coded rating scale was used to keep a record of survey responses. It received a variety of clearly evident or not evident observations on different instruments. For each level of the scale, a number was

assigned. The scoring values of items were arranged according to the range of scores; Not Evident= 1, Slightly Evident= 2, Somewhat Evident= 3, Fairly Evident= 4 & Clearly Evident= 5.

3.10 Data Collection

The data for content analysis was gathered from B. Ed (Hons) course guides in accordance with NPSTs themes and sub themes by adopting systematic procedure of coding, categorization, labelling and analysis of content. Quantitative data from respondents from selected universities was personally collected by me. Self-Reported scale (Appendix-D) was distributed and collected from the prospective teachers while studying in their second last semester. Observations sheet (Appendix-E) of the prospective teachers were taken in the actual classrooms during their Teaching Practice (TP) classes. I, visited the educational institutions to observe the developed pedagogical competencies of the prospective teachers during the teaching practice. In the first step the researcher received teaching practice plan from Teaching Practice Supervisor. Permission from concerned head of the department of selected university was sought for collecting data. After the coordination with Teaching Practice Supervisor, prospective teachers were observed in the respective schools. Only 10% i.e., N=30 prospective teachers who scored agreed or strongly agreed to self-reported scale were selected for observations. They were nominated for observations on the basis of their responses in self-reported scale and their mean score was above 0.3 and have attained high level of perceived pedagogical competencies.

3.11 Ethical Considerations

Basic research ethics are always expected of the researcher. Mirza, Bellalem & Mirza (2023) views that researcher need to seek voluntary informed consent before data collection session from each participant. The researcher must explain and assure the

participants about the purpose of research, confidentiality, anonymity and use of data. No third party should have access to data other than the researcher. Therefore, basic ethical considerations of research are always expected from the researcher while collecting data. In the context of present study, the researcher made every effort in this regard. The respondents who took part were given the assurance that the information they provided would only be utilized for the purpose of research study only. The confidentiality and anonymity of respondents were ensured to obtain more reliable and authentic responses and data.

3.12 Data Analysis

The content analysis steps and procedure adopted by the researcher included analyzing B. Ed (Hons) course guides for themes and sub themes of each selected NPSTs. The main themes were identified and categorized according to sub-themes. In the next step each sub theme was coded. Then the relevant, related and matching aspects were searched page by page in all course guides and placed against each code. All relevant material was categorized in the form of table for each NPSTs sub-theme with book number, unit and page number for easy access and verification. The tables depicted inclusion or exclusion of sub-themes in course guides and contained exact wordings from course material and were subsequently interpreted.

Quantitative data were analyzed by using SPSS software version 21. According to the research instruments frequency, percentage, mean score, paired sample t-test and independent sample t- test were applied.

3.13 Research Alignment

Table 3.6 below describes an alignment of objectives, hypotheses and research questions that were used in this study. Similarly, it also described a justification of

statistical techniques that were used on the basis of objectives, hypotheses and research questions of this study. The second and third objectives had no hypotheses because these two were only used to assess the level of perceived and developed pedagogical competence in the form of percentages, frequency and mean values. While the formulation of hypotheses only occurs when the researcher discovers mean differences between two variables (Farrugia, Peterisor, Farrokhyar & Bhandari, 2010). Claims were made directly from the subject of the investigation and hypotheses were developed from a theoretical viewpoint. Hypothesis is a quantitative concept whereas, a proposition is a qualitative one. Both require testing (Thabane, Thomas & Paul, 2009). The statistical analysis in hypotheses **H₀₁**, **H_{01a}**, **H_{01b}**, **H_{01c}**, **H₀₂**, **H_{02a}**, **H_{02b}**, **H_{02c}**, **H₀₃**, **H_{03a}**, **H_{03b}**, & **H_{03c}** are based on Paired sample t-test. Paired sample t-test is carried out for same set of subjects used in each sample for two measurements of the same characteristic (Venables & Ripley 2002), The statistical analysis in Hypothesis **H₀₄**, **H₀₅**, **H₀₆**, **H₀₇**, **H₀₈** & **H₀₉** are based on independent sample t-test. In case of *two independent groups* when significant difference is determined with regard to a characteristic then the independent-samples t-test is used (Kassambara, 2019).

Table 3.6:
Alignment of Research Methodology

Sr. No	Objectives	Hypotheses/Research Question	Analysis Techniques
1.	To explore the pedagogical competencies integrated in the course guide books of B. Ed (Hons) program with reference to National Professional Standards for Teachers i.e., subject matter knowledge, instructional planning & strategies and assessment.	To what extent the pedagogical competencies are integrated the course guide books of B. Ed (Hons) program in the light of National Professional Standards for Teachers?	Content Analysis
2.	To assess the level of perceived pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers i.e., subject matter knowledge, instructional planning & strategies, and assessment.	What is the level of perceived Pedagogical Competencies of prospective teachers in the light of National Professional Standards for Teachers?	Frequency, Percentage, Mean
3.	To assess the level of developed pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers i.e., subject matter knowledge, instructional planning & strategies, and assessment.	What is the level of developed Pedagogical Competencies of prospective teachers in the light of National Professional Standards for Teachers?	Frequency, Percentage, Mean
4.	To identify the differences between perceived and developed pedagogical competencies of prospective teachers in the light of national professional standards for teachers.	H ₀₁ , H ₀₂ , H ₀₃ : There is no difference between perceived and developed pedagogical competencies of prospective teachers with regards to Subject Matter Knowledge, Instructional planning & Strategies and assessment.	Paired Sample t- test
5.	To compare gender-based difference regarding perceived pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers.	H ₀₄ , H ₀₅ , H ₀₆ : There is no difference between perceived pedagogical competencies of male and female prospective teachers in Subject Matter Knowledge, Instructional planning & strategies & Assessment.	Independent sample t- test
6.	To compare gender-based difference regarding developed pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers.	H ₀₇ , H ₀₈ , H ₀₉ : There is no difference between developed pedagogical competencies of male and female prospective teachers in Subject Matter Knowledge, Instructional planning & strategies & Assessment.	Independent sample t- test

3.14 Summary

This chapter included the above table (3.6) regarding alignment and justification of analysis on the basis of objectives, hypotheses and research questions which were described in the study. The next section will describe a comprehensive content analysis and statistical analysis along with its interpretation about the pedagogical competencies of prospective teachers.

CHAPTER 4

RESULTS AND DATA INTERPRETATION

This chapter is divided into two parts. Part I of this chapter not only addresses the first objective but also provides a detailed qualitative content analysis in the light of NPSTs. Whereas, part 2 covers research objectives from 2 to 6 as it is the quantitative part of the study. The previous chapter highlighted the detailed procedure of developing themes for content analysis, self-reported scale and observation sheet on pedagogical competencies of prospective teachers in the light of NPSTs. The tools for quantitative data collection were passed through a process to make them reliable and valid at the same time. The quantitative data were processed through SPSS and tested according to numerical procedures. It was followed by a detailed analysis of data. The data were presented in tabulated form with explanation. The complete analysis was in the form of descriptive statistics through which the prospective teachers perceived and developed pedagogical competencies differences were assessed through inferential statistics. Similarly, gender-based difference was checked by using t-test. This section of the study is arranged in the following manner;

1. **SECTION A - Content Analysis:** Analysis of six course guide books of B. Ed. (Hons), published by Higher Education Commission of Pakistan (HEC).
2. **SECTION B - Descriptive Statistics:**
 - i. Graphical representation of demographic elements
 - ii. Descriptive means of prospective teachers regarding their perceived pedagogical competencies
 - iv. Descriptive means of prospective teachers regarding their developed pedagogical competencies

3. **SECTION C - Inferential Statistics:**

- i. Hypotheses analysis - t-test (18 in numbers)

SECTION – A: CONTENT ANALYSIS

4.1 Objective 1:

To explore the pedagogical competencies integrated in the course guide books of B.Ed. (Hons) program with reference to National Professional Standards for Teachers i.e., Subject Matter Knowledge; Instructional Planning & Strategies; and Assessment.

Content analysis of current research was done to explore the pedagogical competencies integrated in the course guide books of B.Ed. (Hons) program with reference to NPSTs (2009). It has paved way for developing professional standards for accreditation of teacher education programs at national level in Pakistan. The NPSTs document is a step forward to ensure quality learning through quality teaching implementation by adopting standard-based approach to produce professional educators.

NPSTs (2009) is simultaneously a broad and a detailed set of ten professional standards. The scope of the present study in terms of content analysis is delimited specifically to three out of ten NPSTs. They are;

- i. Subject Matter Knowledge (S M K)
- ii. Instructional Planning & Strategies (IP & S)
- iii. Assessment

Literature on pedagogical competencies identifies above mentioned three standards as the three basic and vital components of pedagogical competency (Mudavanhu, 2015; Fajet, *et al.*, 2005; Darling-Hammond, 2000; Goldhaber & Brewer, 2000; Pring, 2000 & Bucat, 1998). Pring (2000) suggests that pedagogy includes teaching

methods as well as ways of assessing learning. Moreover, the instructional process for effective learning unfolds in the same manner in first step by focusing planning instructions on subject matter and selecting relevant contenting a sequential order. In the second step it involves delivering the actual instructions in classroom. The third step pertains to assessing the outcome of expected learning. These three steps of instructional process need to be aligned with one another and should be logically related to the actual instruction and the assessments. This proposition provides solid rationale behind selecting the three NPSTs for the present study.

Similarly, curriculum is the tool to materialize the basic aims and objectives of education and the basic elements of curriculum are knowledge, method and evaluation that correspond to the three selected NPSTs. Furthermore, UNESCO has transpired these three elements of curriculum into four pillars of learning for students in the 21st century comprising of: learning to know, learning to do, learning to live and learning to be (Rodrigues, *et al*, 2021). Hence, these three standards are fundamental and reflect the sum total of education process.

For the purpose of content analysis this study views only ‘Knowledge and understanding’ sub-aspect of the above mentioned three standards. Since, ‘Knowledge and understanding’ is manifested in content only. Whereas, ‘Dispositions; and Performance and skills’ necessitate demonstration of practical aspects and form part of observable behaviour. Skills are demonstrable and they either exist at some level or they don’t. Assessment of understanding is much more difficult and complex. Skills can be practiced and observed whereas understandings cannot be practiced or observed (Kizlik, 2011). Therefore, dispositions; and performance & skills have been assessed in self-reported scale and classroom observation sheet.

Table 4.1:*NPS Ts with the sub aspects covered in each Research Tool*

S. No	Selected NPSTs	Aspects of Each Selected NPSTs	Aspects Covered in Content Analysis	Aspects Covered in Self-Reported Scale	Aspects Covered in Observation Sheet
1.	Subject Matter Knowledge	i. Knowledge & Understanding	✓	✓	✓
		ii. Dispositions	-	✓	✓
		iii. Performance & Skills	-	✓	✓
2.	Instructional Planning & Strategies	i. Knowledge & Understanding	✓	✓	✓
		ii. Dispositions	-	✓	✓
		iii. Performance & Skills	-	✓	✓
3.	Assessment	i. Knowledge & Understanding	✓	✓	✓
		ii. Dispositions	-	✓	✓
		iii. Performance & Skills	-	✓	✓

The aim of content analysis is to carry out a detailed analysis in order to check whether the points mentioned in each NPSTs-2009 are incorporated or not. Content analysis will determine the degree and extent of NPSTs alignment with B.Ed. (Hons) course guide books.

The points covered in each aspect have been tallied with six course guidebooks of B.Ed. (Hons) published by HEC for teachers training to check the integration. The NPSTs ‘S M K’ has been delimited to English courses. Three course guide books are included for content analysis of English subject. Whereas as two course guides related to English teaching pedagogy and one course guide corresponds to the rest of NPSTs. All B.Ed. (Hons) course guide books utilized in this study are given numbers and will be referred according to book number as following;

Table 4.2:
NPSTs covered in B. Ed (Hons) Course Guide Books

Book No	National Professional Standards for Teachers	B. Ed (Hons) Course Guide Books
1	Subject Matter Knowledge	Functional English-I
2	Subject Matter Knowledge	English-II Communication
3	Subject Matter Knowledge/ Instructional Planning and Strategies	Teaching English
4	Instructional Planning and Strategies	Teaching English-II (Teaching English Pedagogy Option)
5	Instructional Planning and Strategies	Methods of Teaching
6	Assessment	Assessment

4.2 Content Analysis of Subject Matter Knowledge

The content analysis of B.Ed. (Hons) course guide books explores the main NPSTs theme 'S M K' in the sub theme category of 'K & U' related to English subject. The 'K & U' aspect had eight sub aspects which are given coding scheme from 1.1.1 to 1.1.8 and are covered in subsequent tables. The related content description is placed against relevant book, unit and page number

Table 4.3:*Content related to Knowledge of National Curriculum Framework (English Subject)*

Book	Unit	Description of Contents	Page
1	Course Description	This course guide has been designed in consonance with National Curriculum Framework for English (2006) & NPST (2009).	Iii
2	Course Description	The experts in preparing the course guide took guidance from two documents, namely, National Curriculum Framework for English (2006) & NPST (2009).	Iii
3	Course Description	This course guide has been developed in accordance with National Curriculum Framework for English (2006) & NPST (2009).	Iii
4	Course Description	<ul style="list-style-type: none"> • The syllabi of the course guide have been developed keeping in view NPST (2009) document. 	Iii
	2	<ul style="list-style-type: none"> • This book describes competence in teaching English & Understanding Benchmarks & Standards for ELT as given in National Curriculum Framework for English 2006. 	23, 24
	3	<ul style="list-style-type: none"> • Developing Competency, Benchmarks & Standards in reading, writing & oral skills; assessment in ELT. 	52

Table 4.3 indicates that English course guides are developed taking guidelines from two major documents i.e., NCF for English (2006) and NPSTs (2009). The NCF for English (2006) primarily relates to achieving the objectives of teaching and learning in English teaching through curriculum teaching. It deliberates that SLOs of English subject are attainable provided the teachers possess knowledge of Competency, Benchmarks & Standards and adopt competency-based approach to teaching of English. The second document NPSTs (2009) relates to teachers' competency in delivering the curriculum as it is intended. The NPSTs strive to achieve quality in education through quality teachers. To achieve the teaching objectives, the NPSTs document sets ten standards with detailed sub aspects of each standard that a teacher needs to possess in teaching. Keeping in view the importance and relevance of these documents the developers of English course guides were strictly guided by these documents.

Table 4.4:*Contents related to basic concepts and theories of acquiring knowledge in English**Subject*

Book	Unit	Description of Contents	Page
1	Course Description	<ul style="list-style-type: none"> • “This course presents the basics for developing English language proficiency of student teachers four language skills.” 	9
2	Course Description	<ul style="list-style-type: none"> • “The course aims at developing Student Teachers proficiency in English language, language confidence and interpersonal skills. It focuses on effective communication skills and presentation by using clear and appropriate English.” • “The course adopts an integrated approach by teaching the four language skills i.e., listening, reading, speaking, and writing in natural sitting. “ 	9 10
3	Course Description	<ul style="list-style-type: none"> • “The course is designed for Student Teachers to enable them to teach children English language through an interactive and communicative approach.” 	9
	1	<ul style="list-style-type: none"> • “This unit sets the broader parameters of the course. This course is aimed to gain theoretical understanding of the basic principles of second-language acquisition and effectively apply these principles in the classroom.” • “The course focuses on teaching the four language skills i.e., listening, reading, speaking, and writing as the basic level of communicative competence in spoken and written English.” • “It explains how second language is learnt and the theories related to second language acquisition.” • “Four approaches to teaching second languages used across the world over the past 40 years are taught to students. These are the GTM Method, Behaviourism and the Audio-lingual Method, the Natural Approach and the Interactionist Approach.” 	21 22
4	1 6	<ul style="list-style-type: none"> • “The course introduces students to the approaches, theories and methods in teaching of English & developing the four language skills.” 	8 68

Table 4.4 highlights content related to teaching basic theories and concepts of learning knowledge of English Subject. The domain of the content is restricted to Communicative Language Teaching (CLT) through an integrated teaching approach. The table traces the historical and theoretical development of language teaching and various

major approaches adopted till now. The table shows major language teaching methodologies i.e., GTM; the theory of behaviourism in ELT and Audio-lingual method of extensive drills; the natural approach; and the Interactive approach being adopted time to time. The course guide defines the effective process of mastering the basic language skills of listening and reading input skills and speaking and writing as output skills. The process of acquiring knowledge of English language could be improved by adopting an integrated concept of CLT approach.

Table 4.5:

Contents related to evolving nature of the discipline of English

Book	Unit	Description of Contents	Page
1	1	<ul style="list-style-type: none"> The book is designed on the communicative & interactive approach in language teaching/learning in vogue all over the world. It adopts syllabus & methodology of CLT. 	9,10
2	-	<ul style="list-style-type: none"> The course requires an integrated approach to language teaching and utilizing all the basic skills of language. The tasks, material and method adopted in this course use communicative & interactive approach in language teaching/learning. 	10 16
3	1	<ul style="list-style-type: none"> The book is based on adoption of latest communicative & interactive approach in language teaching/learning. The focus of post-method era is on giving preference to classroom interaction. 	38 82
	4	<ul style="list-style-type: none"> Emphasis on communicative approach to teaching grammar. Contextualization & integration of CLT. 	83
4	1	<ul style="list-style-type: none"> The current course aims at providing orientation based on latest research in the field of ELT, particularly in Pakistan. 	8
	3	<ul style="list-style-type: none"> The book is based on adoption of latest communicative & interactive approach in language teaching/learning. Awareness about key research in ELT. 	18,23 31
	6	<ul style="list-style-type: none"> Bloom's Taxonomy of Educational Goals and Objectives to help student learn how to write learning goals/objectives of ELT. 	68

Table 4.5 shows content related to evolving nature of English discipline. The English course guides are designed on the latest trend of communicative and interactive approach in language teaching. The teaching material, tasks and pedagogical approach are based on CLT being a globally evolving concept in ELT especially in EFL and L2

context. The course necessitates an approach that best integrated language learning skills. The focus of the guides remained on basic skills of language and grammar teaching and literature in the context of Pakistan. The course guides are founded on the key concepts and emerging trend of communicative and interactive language learning.

Table 4.6:

Contents related to the need for keeping abreast with new ideas and understanding of teaching English discipline

Book	Unit	Description of Contents	Page
1	1,2	<ul style="list-style-type: none"> This course guide emphasizes on CLT, integrated & competency-based approach to language learning. It focuses on tasks based, group work activities of collaborative team and team-work learning environment. 	11
	3	<ul style="list-style-type: none"> In communicative approach student centered, active learning is preferred where teacher acts as facilitator. 	21
	4, 5	<ul style="list-style-type: none"> The course engages students to develop critical thinking, creativity, learning by doing, understanding conceptual clarity in developing practical knowledge of English language through activities and assignments. 	42
2	1-5	An integrated approach of CLT based on group tasks and assignment preparation to foster critical thinking through teaching practical knowledge of English language.	8,11, 28,57
3	1-6	An integrated approach of CLT to develop basic skills of listening, reading, writing and speaking proficiency skills of language. The activities are based on group work and to foster critical thinking through teaching practical knowledge of English language.	5-13, 34-38 54-63
4	1,2	<ul style="list-style-type: none"> The course guide is based fundamentally on adopting CLT& integrated approach by teaching oral & written communicative skills through literature. 	5,9,11
	3,4,5	<ul style="list-style-type: none"> This course endeavors to develop pedagogical skills and competencies of prospective teachers by involving and engaging them in tasks-based group work, teamwork, assignment, critical thinking & practical knowledge of English language. 	26-51

Table 4.6 indicates the contents related to necessity of adopting latest ideas and understanding of teaching in English Subject. The course guide lays stress on CLT, integrated and competency-related methodology in language teaching which necessitates matching task-based activities involving groups and teamwork. The CLT approach adopts the new ideas of student-centered active learning through mutual cooperation, collaboration and team work to promote critical thinking, creativity, learning by doing, understanding conceptual clarity in ELT skills. The understanding of the importance of

achieving effectiveness in basic skills of listening, reading, writing and speaking is emphasized.

Table 4.7:

Contents related to the emerging concepts, theories as a result of latest trends & research in English

Book	Unit	Description of Contents	Page
1	-	<ul style="list-style-type: none"> • The course adopts an integrated approach to language teaching by teaching the four language skills namely; listening, speaking, reading and writing. • English will be strictly followed as the medium of instruction. • Student Teachers are encouraged to use websites resources and get interactive exercises from websites. 	9 10
2	-	<ul style="list-style-type: none"> • This course guide adopts an integrated CLT approach to language learning. 	10
3	2	<ul style="list-style-type: none"> • Listening The unit draw Student Teachers' attention to the differences between listening and hearing. Instruct them to brainstorm, write their own definitions of the two skills, and then discuss them with the class. • This unit invites prospective teachers to develop their theoretical knowledge and practical teaching skills by working on communicative nature of tasks. Relevant activities, approaches and methods are included to teach English as a second language to young learners. • Reading After helping Student Teachers clearly understand these two concepts, discuss with them their experiences of intensive and extensive reading. • Speaking Introduction to sound system. Pronunciation learning through drills. Speaking activities • Writing This component of the unit will introduce Student Teachers to the kinds of knowledge and skills involved in writing in a second language. It will also examine some of the approaches to writing that have been used in ESL teaching (controlled writing, guided writing, genre-based writing, the product approach, and the process approach) and outline practical activities and tasks that can be used to help young learners develop their writing skills. • Introduce key terms and approaches to teaching second-language writing, such controlled writing, guided writing, genre-based writing, the product approach, and the process approach. Student Teachers should become aware of the advantages and disadvantages of each approach. 	53 52 68,69 71 72
4	-	<ul style="list-style-type: none"> • The course builds upon previous English Language courses and involves students in real ELT situation. The course aims at providing practical classroom teaching experience to students and orientates them with latest research in ELT in the context of Pakistan. 	8

Table 4.7 highlights contents related to emerging concepts, theories as a result of latest trend and research in English subject. The course guides on English bound students and teachers alike to adopt English the medium of teaching and restrict using vernaculars. The course guides have adopted a progressive, looking forward a comprehensive approach to language teaching by teaching the four language skills with innovative methods. Students are encouraged to get assistance from website resources for retrieving interactive exercises and material. The students are given knowledge based on latest research in language teaching. They are kept abreast of latest theories, concepts and emerging trend in ELT. The four basic skills are designed to be taught through integrated CLT approach.

Table 4.8:*Contents related to detailed knowledge of subject matter of English*

Book	Unit	Description of Contents	Page
1	1	• Using simple words and phrases in logical sequence; use of verbs with adjectives; command/request sentences; modal auxiliaries; self-introduction and dialogues.	15-34
	2	• Expressions of greetings, gratitude, invitations and regrets.	36-45
	3	• Carrying out, structuring & writing clear, comprehensible instructions.	47-54
	4	• Narrate stories & jokes, conduct interviews, solve puzzles & riddles, picture stories & depiction, songs & lyrics and differentiate between function and lexical words.	56-78
	5	• Descriptive & narrative writing style, correct grammatical sentence construction.	80-84
2	1	• Effective communication of ideas; concept of verbal communication skills; class discussion; sharing stories; grammatical accuracy in oral & written communication; joining sentences, making sense of text, cohesion, paragraph writing.	16-33
	2	• Oral presentation; power point presentation.	35-44
	3	• Sound patterns & tone; articulation of basic sounds; intonation pattern.	46-51
	4	• Modes of communication; speeches, announcements, commentary, presentations, group discussion, interviews.	53-57
	5	• Text comprehension; collect & synthesize information; power & speed reading	59-62
3	1	• L2 acquisition; GTM, Behaviourist/Audio-lingual method; Natural approach & Interactionist approach; characteristics of successful language learner; factors affecting L2 acquisition; communicative approach to teaching English.	19-45
	2	• Receptive & productive skills; listening & reading skills; extensive & intensive listening & reading skills; teaching listening & reading skills techniques, pre, while & post listening reading; skim & scan reading.	47-65
	3	• Teaching Speaking & writing skills& activities; pronunciation; key concepts in writing.	67-77
	4	• Communicative grammar teaching approach; Contextualization of grammar concepts, tense, parts of speech, SVO word order, simple, compound & complex sentences.	
	5	• Vocabulary; functional & lexical words, high & low frequency words.	79-86
	6	• Basic principles & concepts in Language assessment; ways of testing, marking strategy & giving feedback, designing tests.	88-94
4	1	• The book is based on the review of Book 3. It involves students in real ELT situation of practical experience. It orientates students about ELT latest research.	8
	2	• Three different syllabi for selection of any one according to instructors & institute ease.	11-25
	3	• English as medium of instruction, challenges, opportunities & suggestions to ELT. • Presents to adopt communicative approach to teaching English & integrates language teaching through teaching of literature in the form of poetry, drama, stories & role play.	27-90

Table 4.8 shows content related to the detailed knowledge of the subject matter on English. The course guides have adopted a systematic, methodical and a logical sequence of teaching grammar and literature through an integrated CLT approach. The course

adopts a well devised and well thought out plan of action starting from the use of simple words and phrases; use of verbs with adjectives; command/request sentences; modal auxiliaries; self-introduction and dialogues. The grammatical part is embedded in the text and tasks. Functional English related to common use in day-to-day conversation is rehearsed through drills. Practice of effective verbal and written expression of ideas using accurate grammar in communication is carried out in sentence construction. Pronunciation aspect is an essential aspect of speaking skills therefore sound patterns and tone; basic knowledge of phonetics; vowels and consonant sounds; basics of sound articulation; and intonation pattern are duly taught and practiced to students. Verbal and written communication practiced in all possible forms. Listening and reading skills and techniques are presented in integrated CLT approach. Basic principles and concepts in language assessment; ways of testing, marking strategy giving feedback and designing tests are also included. Students are familiarized with all major learning theories including CLT for L2 acquisition.

Table 4.9:

*Contents related to the relationship of the subject to other disciplines and its utility
(Related to English Subject)*

Book	Unit	Description of Contents	Page
1	NIL....	–
2	NIL.....	–
3	NIL.....	–
4	NIL.....	–

Table 4.9 related to contents on the relationship of English subject to other disciplines and its utility shows that the English course guides do not refer to such things.

Table 4.10:

Contents related to the relationship of reading and writing principles of English subject

Book	Unit	Description of Contents	Page
1	-	<ul style="list-style-type: none"> • The course is aimed at achieving proficiency in reading, writing, speaking and listening skills through an integrated approach in teaching. 	9
	5	<ul style="list-style-type: none"> • This unit solely focuses on writing styles and writing mechanics of word order, use of tenses, sentence structure, punctuation, parts of speech & error free grammar text. 	80-84
2	-	<ul style="list-style-type: none"> • The course enables learners to develop four skills of reading, writing, speaking and listening through an integrated approach in teaching. 	10
	1	<ul style="list-style-type: none"> • Students are given texts to read to make sense of the given text. 	30-31
	3	<ul style="list-style-type: none"> • Practice paragraph writing and making students understand writing devices like topic & supporting sentence, concluding sentence, grammatical accuracy, cohesion & clarity. 	32-33
		<ul style="list-style-type: none"> • The unit explores techniques of writing, paragraph writing, reading & pronunciation. 	46-51
	4	<ul style="list-style-type: none"> • The unit focuses on persuasive writing, writing letters/applications for various purposes. 	53-57
	5	<ul style="list-style-type: none"> • The techniques of power reading & speed reading. 	59-62
3	2	<ul style="list-style-type: none"> • This unit defines reading, purpose & power of reading. Developing reading comprehension skills through various activities & enumerates factors affecting reading skills in L2 teaching. 	52-64
	3	<ul style="list-style-type: none"> • Differentiate between intensive and extensive reading; pre, while & post reading activities; & micro teaching of reading skills. • Knowledge and skills involved in writing in English. language. • Various ESL teaching approaches adopted to writing like controlled writing, guided writing, genre-based writing, the product approach, and the process approach and highlight advantages and disadvantages of each approach. • Practical activities for learners to develop their writing skills. 	71-77
4	3	<ul style="list-style-type: none"> • Students are taught reading and writing skills through competency-based teaching approach of language learning. 	55-60

Table 4.10 shows the contents related to the relationship of reading and writing principles of English Subject. The course guides specifically focus on achieving language proficiency in reading, writing, speaking and listening skills by adopting a comprehensive

and integrated approach in teaching. As listening is deeply related to speaking so is proficient writing the product of sound reading habit. The course guides do not draw any interrelation between reading and writing but lay emphasis separately on each language learning skill. Writing styles, word order, tenses, sentence structure, punctuation, parts of speech and grammar rules are being taught to students for effective writing. Paragraph writing practices include learning writing devices like topic selection, key sentence, supporting sentence, concluding sentence, unity of sentences, correct use of grammar and precision. The different modes of writing like persuasive writing, narrative writing, writing letters, applications, essays, creative writing are being taught and practiced. The ESL teaching approaches in writing includes controlled and guided writing, genre related writing, product and process approach by highlighting advantages and disadvantages of each approach. Students' reading comprehension skills are developed by introducing them to the meaning of reading, its purpose, power reading, techniques of power reading and speed reading. Students are made to differentiate between intensive and extensive reading, pre reading, while reading and post reading activities through micro teaching of reading skills. Pronunciation teaching receives special attention in language teaching. The students are taught through integrated approach of teaching and learning through multiple interesting activities. Students are taught reading and writing skills through competency-based teaching approach of language learning.

4.3 Content Analysis of Instructional Planning & Strategies

The NPSTs second selected standard IP & S 'is being covered in course guide 'Methods of Teaching' of B.Ed. (Hons) program. The NPSTs are examined here for K & U aspect. There are nine sub aspects which are given coding scheme 2.1.1 to 2.1.9 and are covered in subsequent tables. The relevant content description is placed against related book, unit and page number.

Table 4.11:

Contents related to Aims, Goals and Objectives of English Curriculum & its importance in Instructional Planning

Book	Unit	Description of Contents	Page
1	-	<ul style="list-style-type: none"> • The basic aims, goals and objectives of the course are to develop English-language proficiency of prospective elementary school teachers and making them confident in reading, writing, speaking and listening. • The broader instructional planning parameters involve an integrated approach that provides opportunities to develop their listening, speaking, reading, and writing skills. • Integrated approach of teaching English language reduces confining teaching grammar in isolation and at sentence level. • The course develops students' language abilities with focus on social interaction, giving specific attention to the accurate use of grammar structure, pronunciation, and use of active vocabulary in descriptive, narrative and instructional texts. • The course helps integrate the four language skills in natural settings through pair/ group work and active learning strategies, such as role play, debates, presentations, and brainstorming. • Teachers and student are encouraged to use online resources in conjunction with the course guide and make the best use of interactive exercises on various websites. • Instructors will use English as the language of instruction even if student are unable to communicate fluently in English. Switching to vernaculars will be forbidden. • If problem arises in communicating, students and teachers will use alternative strategies, such as slowing down, repetition, asking others to explain, or using simpler vocabulary. 	9,10
2		<ul style="list-style-type: none"> • The aim of this course guide is to make students independent users of English language by involving them in the learning process. • The course requires an integrated approach to language teaching, which enables learning of all the four skills of language (i.e. listening, speaking, reading, and writing) in natural settings. • The learning and teaching approaches are balanced out so that students learn about language and use of English in different contexts. • Students are encouraged to respond through group and pair work as well as active learning strategies such as role plays, debates, presentations, and brainstorming. • Student may lack the necessary skills to communicate in English at the beginning. However, teachers will still use English as the language of instruction and avoid switching to local languages. Instructors may use alternative strategies such as slowing down, repeating a text, asking others to explain, or using simpler vocabulary. 	10
3		<ul style="list-style-type: none"> • The CLT goal is the acquisition of communicative competence by second language learners and proposes a communicative syllabus and methodology as the way to achieve this goal. • The CLT theory and practice adopts a blend of teaching practices, a set of generally agreed upon principles applied in various ways depending on the cultural context, the level and age of the learners, and the proposed learning outcomes. • This course of teaching English aims to equip student with effective methods and strategies they can use to help their students attain a basic level of communicative competence in English by adopting some traditional methods such as drills, task-based learning and problem-solving methods. • The course will enable student to be in a position to select the most relevant and appropriate methods, strategies, and techniques of teaching their students to communicate successfully in speech and writing. 	10

- 4
- The course guide adopts communicative approach to ensure maximum participation of learners through interaction and activities. 23
 - The learners will also be involved in research projects in ESL contexts to identify the prevalent problems in actual teaching-learning practices and to seek possible solutions.
-

Table 4.11 shows contents related to “the aims, goals and objectives of education and curriculum in English subject and its importance in instructional planning”. Aims, goals and objectives are the driving factor behind the education system. The B. Ed (Hons) English course aims to develop English language proficiency of prospective teachers in reading, writing, speaking and listening by adopting an integrated approach. The course aims to achieve the objectives of CLT by focusing on social interaction, accurate use of grammar, pronunciation and use of vocabulary in different forms of writing like descriptive, narrative and instructional texts. The course adopts student-centered method of teaching which is a deviation from the traditional method. The four language skills of language teaching are taught by adopting student-centered approach of teaching through pair/ group work and active learning strategies, such as role play, debates, presentations, and brainstorming in natural settings. This method is helpful in developing critical thinking and problem-solving methods among students. Teachers encourage students to use web-based learning. English teachers encourage students to communicate in English to overcome shortcomings and interference of local languages is ruled out in order to make students independent users of English language. The CLT theory and practice adopts a blend of teaching practices, applied to different level and age of the learners’ problem-solving methods.

Table 4.12:

Contents related to the principles of acquisitions of reading and writing skills at different stages of development

Book	Unit	Description of Contents	Page
1	1	<ul style="list-style-type: none"> • Instead of teaching grammar in isolation and at sentence level, this course develops the language abilities of student through an integrated approach that teaches the four language skills listening, speaking, reading, and writing in natural settings. 	9
	4	<ul style="list-style-type: none"> • Reading and writing is practiced for comprehension of text and teaching grammar and communicative language skills. 	56
	5	<ul style="list-style-type: none"> • The course guide focuses on an integrated and interactive approach to language learning. Reading and writing practices are embedded throughout the units with teaching grammar and improving communicative skills. 	79-84
2	1	<ul style="list-style-type: none"> • The course guide adopts an approach that is intended to provide student with opportunities to develop communication skills in four language areas: reading, listening, speaking, and writing. • Each unit has text for reading incorporating learning activities. • The teaching method for learning writing skills and its practices are given in each unit to students in exercises, activities and assignments. 	16
3	-	<ul style="list-style-type: none"> • The course focuses on ways to teach young learners the four language skills-listening, reading, speaking, and writing - to enable them to reach a basic level of communicative competence in both spoken and written English. 	9
4	3	<ul style="list-style-type: none"> • Competency based ELT derive reading and writing competencies based on standards and benchmarks. 	55-60

Table 4.12 highlights contents related to “the principles of acquisitions of reading and writing skills at different stages of development”. The B. Ed (Hons) English course intends to concentrate fully on developing proficiency of four language skills. The course adopts an integrated and interactive approach in developing the four language skills listening, speaking, reading, and writing in natural settings. Reading and writing is practiced for comprehension of text and teaching grammar and communicative language skills. However, separate emphasis on relating reading with writing has not been mentioned anywhere in the course. Reading and writing practices are interwoven in the units with teaching grammar and improving communicative skills. The course guide provides opportunities through the selected text material and activities to develop

communication in four language skills. The course is based on competency-based approach to ELT by achieving reading and writing competencies at standards and benchmarks level.

Table 4.13:

Contents related to the availability of appropriate resources and materials including the use of instructional technology for instructional planning to promote students' attention and thinking

Book	Unit	Description of Contents	Page
1	1-5	Each unit contains an exhaustive list of references, websites and books. Students are encouraged to take assistance from using internet. The course guide gives sources of getting the relevant material and exercises from websites.	10,17,18, 38-45, 49-54, 58, 81,82
2	1-5	The course guide contains a list of references, websites and books at the end of each unit. Students are encouraged to take assistance from using internet. The course guide gives sources of getting the relevant material and exercises from websites.	13,18,19,3 6, 47
3	1-6	The course guide contains a list of references, websites and books at the end of each unit. Students are encouraged to take assistance from using internet. The course guide gives sources of getting the relevant material and exercises from websites.	16,20,49,5 3,98
4	1-6	Each unit contains an exhaustive list of references, websites and books. Students are encouraged to take assistance from internet by retrieving the relevant material and exercises for practice.	15,16, 21,25, 29,35, 37,38,44, 50,72,73,

Table 4.13 describes the contents related to “the availability of appropriate resources and materials including the use of instructional technology for instructional planning”. The material for activities is very cautiously selected for the English language course from an exhaustive list of different books, reference sand net-based resources. The course developers have used instructional technology for instructional planning keeping in view the nature and method of ELT. Since the course objective is fundamentally CLT based hence an effort has been put to select material that helps in teaching grammar, oral and written communication skills in embedded text. The books contain material, text, assignments and resources which are helpful and easily available in promoting students

integrated learning and fostering critical thinking. Students are advised to take maximum assistance from using internet sources for exercises. The course guides have cited sources of websites in almost every unit of the course.

Table 4.14:

Contents related to plan instructional strategies based on students' needs, development progress and prior knowledge

Book	Unit	Description of Contents	Page
1	1-5	<ul style="list-style-type: none"> • The course is for beginners and primary in nature which adopts developing basic language skill with a focus on communicative aspect. The course moves from simple to complex in developing proficiency in the four language skills. • The instructional strategies adopted in the course guide are based on an interactive approach to students, students are made to converse and express themselves by placing them in a variety of situations. • The course enables students to learn day to day conversations and functional English. • Each unit has tasks-based exercises which checks prior knowledge of students. 	1-84
2	1-5	<ul style="list-style-type: none"> • This guide book progresses on prior knowledge and confidence of students built upon in first semester. • Sound communication skills both verbal & written, and presentation skills are being taught in this book through multiple task exercises. • It enhances students mastering in four language skills. 	1-62
3		<ul style="list-style-type: none"> • This course guide focuses on the integrated approach to CLT. • The subsequent units strive the acquisition of languages and familiarize students with the most influential English as a Second Language (ESL) teaching methods and approaches that have been used in recent years. 	11
4		<ul style="list-style-type: none"> • The course orientates students with pedagogical competency necessary to become an effective teacher. • The course enables student to master the pedagogies related to teaching and assessment in the English language. • Student will be able to integrate practical activities meant for the development of the four skills with the pedagogies. • Students will gain practical experience in the teaching of grammatical as well as lexical aspects of the English language. • Student-centered and communicative approaches will be followed. 	11
5	6	<ul style="list-style-type: none"> • This course covers two different formats for lesson plans that derive from different theories about learning and instruction formats (direct instruction and indirect instruction). • Lesson plans have objectives, a plan for attaining the objectives (including the resources needed to teach the lesson), and the means for collecting evidence that students achieved the learning objectives. • This unit includes supported practice for writing learning objectives, creating assessments, and writing a teaching plan. exigency • Student will develop a lesson plan with their classroom observation triads. Some work will be in class and some will be assigned as homework. 	66

Table 4.14 indicates contents related to plan instructional strategies based on students' needs, development progress and prior knowledge. The elementary school teachers teach students from class 1 to 8. The needs, development progress and prior

knowledge of students in each class is different necessitating to plan instructional strategies and practices accordingly. The course starts for beginner students and generally progresses communicative aspect of language by developing students' proficiency in the four language skills. The instructional strategies adopted in the course guides are very focused in making students converse and express themselves proficiently and using correct grammar. The guidebooks progress on prior knowledge and confidence of students built upon in first semester. It enables students mastering the four language skills. The course trains students in pedagogical competency required of an effective English language teacher. Students are taught how to integrate practical activities in the development of language skills with pedagogies. Student-centered and communicative approaches are being followed.

Table 4.15:

Contents related to the Techniques for developing/modifying instructional method, materials and the environment to help all students learn

Book	Unit	Description of Contents	Page
1	1	<ul style="list-style-type: none"> The unit provides student an opportunity to interact with one another in oral and written forms; introduce and develop conversational topics in a logical sequence. 	15
	2	<ul style="list-style-type: none"> The unit develops students' social interaction in English through interpersonal skills, class activities, student actively converse to congratulate, express gratitude, make invitations, and respond in oral and written contexts. 	36
	3	<ul style="list-style-type: none"> Learning techniques how to carry out instructions, structure & develop instructions 	53
	4	<ul style="list-style-type: none"> The unit engages students in written and visual texts through shared, guided, and independent readings of narratives. respond to narrative and imaginative texts by composing stories and sharing them in written and oral form. 	56
	5	<ul style="list-style-type: none"> Students learn changing narration, converting a dialogue into a report, a story into a news report, a picture into a short story, writing mechanics, punctuation, structure sentences, sentence fragments, and run-on sentences, subject – pronoun agreement. 	80
2	1	<ul style="list-style-type: none"> The students are given language learning opportunities such as reading a newspaper on a daily basis and discussing interesting news items every day. Practicing verbal and written practices, whole class discussion, grapevine activity, generating questions, sharing stories, KWL (Know/want to know/learn), etc. 	16
	2		34-44
	3	<ul style="list-style-type: none"> Making & practicing presentations; & presentation evaluation techniques. 	46-50
	4	<ul style="list-style-type: none"> English sound practices, comparing textual material by critically evaluating. 	53-57
	5	<ul style="list-style-type: none"> Extempore speech practice, interviewing skills, interviews for job, CV presentation & application writing Collecting, summarizing, synthesizing & presenting information; note-taking. 	59-62

3	1	<ul style="list-style-type: none"> • The unit familiarize with theories regarding L2 acquisition. The Grammar Translation Method (GTM) and learning Spanish language as L2 by working on handouts. The Audio-lingual method of learning L2 uses drills & jazz chants. The Natural Approach uses ‘total physical response’ activities, use students’ names, physical characteristics, pictures, personal details, using mixture of words from first language and the target language. The Interactionist approach to learning L2 uses task-based learning like solving puzzles in pairs/groups, word game & focused group discussions. CLT method of L2 learning involves activities such as role-playing, information sharing and problem solving to encouraging students to interact and communicate meaningfully in the classroom. 	23-37, 43-45
	2	<ul style="list-style-type: none"> • Various techniques to developing and modify instructional method, materials and the environment to help students learn the four major skills are emphasized. It draws a difference between listening& hearing and extensive & intensive listening. Engaging learners in social activities for purposeful communication in L2 class. Using classroom routines for listening like seeking permission to enter the classroom, greetings and social talk, taking attendance, homework inquiry, lesson introduction and passing instructions during the lesson. While reading we want to know, some information to check, some opinion to match against, etc.’ Activities of reading purposefully textual material for learners’ better comprehension. 	50-65
	3	<ul style="list-style-type: none"> • Speaking activities for the CLT classroom using songs to encourage speaking, asking & answering simple questions, discussion game, using pictures in a speaking exercise, using a story for acting and developing speaking. CLT writing activities includes describing a view, writing a personal experience, a dialogue between friends, writing a short humorous skit, writing a news report of some school activity. 	69-75
	4	<ul style="list-style-type: none"> • Activities of Teaching grammar through CLT approach uses contextualized grammar instead being taught in isolation. Students carry out a communicative task and then with teacher reflect on the linguistic features of the task and assess the grammatical accuracy of own performance. 	81-86
	5	<ul style="list-style-type: none"> • Vocabulary-teaching activities are conducted by using flash cards, odd one out, worksheets on various themes, questionnaire, etc. 	89-94
4	5	<ul style="list-style-type: none"> • Language teaching-learning instructional methods include active lecturing, ambassadors, brainstorming, gallery walk, graffiti wall, group work, KWL (know-want-learn), mini-lecture, minute paper, pair share, poster session, reader’s theater, roundtable technique, text-against-text, SWOT analysis to assess strengths, weaknesses, opportunities, and threats; and quizzes. 	100-105

Table 4.15 depicts contents related to the techniques for developing instructional method, materials and the environment to help students learn English language. The syllabus provides opportunities to students to interact in both oral and written expression. and add logical sequence to introduce conversation. The students are motivated to interact socially and develop interpersonal skills in English in a variety of exposures. Prospective teachers will learn techniques how to develop instructions. Various teaching methods are employed to engage students in independent readings of narratives. Students learn direct and indirect reporting speech, making a report from a dialogue and a news story, and evolving a short story from a picture. It also teaches writing mechanics of an

effective and logical piece of writing. Similarly learning grammatical aspects are vital like punctuation marks, basic sentence structure, sentence fragments called clauses and phrases, run-on sentences, subject - pronoun agreement, etc. Students are put to employ and practice verbal and written activities, ask questions, share stories, making and practicing presentations; and presentation evaluation techniques and critically evaluating textual material.

Major ELT theories regarding second language acquisition namely; the Grammar Translation Method (GTM), the Audio-lingual method, the Natural Approach and the Interactionist approach are critically evaluated. Students can freely use any of the above theory or a blend of theories according to classroom needs. The latest CLT technique/method of learning English language is highly prevalent and a recommended method. CLT in L2 context demands task-based activities in pairs/groups. CLT method of L2 learning involves activities which encourage students to interact and communicate meaningfully in the class. The course presents techniques of instructional methods and material in natural environment to give students confidence to develop language skills development proficiency in all four major skills of language learning. The learning approach is based on listening, reading, speaking and writing activities. It adopts integrated CLT approach to help students retain the element of interest in students to learn English language. Similarly, teaching grammar and vocabulary through CLT approach contextualizes grammar activities instead being taught in isolation.

Table 4.16:

Contents related to international approaches and the use of various technologies, to promote thinking & understanding

Book	Unit	Description of Contents	Page
1	1	<p>International approaches to promote thinking and understanding;</p> <ul style="list-style-type: none"> The course guide adopts the latest worldwide practiced approach of CLT by discouraging the traditional method of teaching language. This course develops the language abilities of student through an integrated approach that provides opportunities to develop their listening, speaking, reading, and writing skills. The course simultaneously focuses on social interaction, accurate use of structures, improvement of pronunciation and development of active vocabulary in descriptive, narrative, and instructional texts. It also strives to critical thinking of students. 	9
	1-5	<p>Use of various technologies to promote thinking and understanding;</p> <ul style="list-style-type: none"> The course encourages use of CD, computer, internet, recordings and use of other technologies to promote thinking and understanding. The exercises, work sheets and material are retrieved from internet. Students can get assistance from the selected references, websites and books given in the course guide. The homework is mostly assigned in manner which instills the habit of using internet, BBC World Service (2011), Learning English and other related sources have been repeatedly cited. 	10,17,18,38-45,49-54,58,81,82
2	1	<p>International approaches to promote thinking and understanding;</p> <ul style="list-style-type: none"> The course adopts latest approach in ELT which are internationally in vogue. The book aims at developing students' interpersonal skills, building confidence and understanding to effectively communicate a thought, idea, or message. The focus of this course is on Classroom Language Routines (CLRs) considered essential language tools for teaching functional language. The unit is intended to provide student opportunities to develop their communication skills in the four language areas: reading, listening, speaking, and writing. The basic aim within this view is to improve English Language Teachers' knowledge of the world in a broad communicative context. Language is seen as vehicle and not an end in itself. There will be more meaningful comprehension, enhanced communication skills, and insights into correct vocabulary and grammatical usage. The tasks and activities are intended to be interactive and communicative in nature. The teachers are language facilitators and all classroom activities are student centered. 	16,33,34
	1-5	<p>Use of various technologies to promote thinking and understanding;</p> <ul style="list-style-type: none"> The course encourages computer-based learning. The lessons are integrated with modern technology and web-based learning. Technological use provides easy and ready access to learners and helps promote critical thinking and deep understanding of lesson. The exercises, work sheets and material are mostly retrieved from internet. Students can get assistance from the selected references, 	13,18,19,36,47

websites and books given in the course guide. The course has primarily sought resource material from BBC World Service (2011), Learning English.

3	1	<p>International approaches to promote thinking and understanding;</p> <ul style="list-style-type: none"> • The course adopts a research based and practical approach to teaching ELT. For the last 40 years many ELT methods and approaches were adopted. Many methods were discarded, and others are influential in use till today. • Language specialists took part in a search to find an effective method to teach English. 	38
	4	<ul style="list-style-type: none"> • The research showed that learner preferences do not suffice single teaching method to all learners. Today the post-method era tries to discover what actually goes on in the classroom between teachers and students and on what learners' experience during a lesson including teachers' and students' perceptions of what has been taught and learnt are often significantly different. • Grammar-translation and audio-lingual methods could not help learners communicate fluently in L2, language specialists adopted an approach based on language functions and strategies by asking and answering simple sentences in context rather than focusing on teaching grammar. The perceived goal of communicative approach was to make learners communicatively competent to use language fluently and comfortably for a variety of purposes. • A decade later CLT researchers found learners who had gone through the new approach became more fluent in speaking L2 than grammar-based learners, they made lots of grammatical mistakes in both speech and writing. Subsequently, CLT today makes learners both fluent and accurate in the use of L2. 	82-83
	1-6	<p>Use of various technologies to promote thinking and understanding;</p> <ul style="list-style-type: none"> • The course encourages and puts to use latest technology available in the form of, computer, internet, etc. and use of technological gadgets to promote thinking and understanding. The exercises, work sheets and material are mostly retrieved from internet. Students can get assistance from the selected references, websites and books given in the course guide. 	16,20,4 9,53, 98
4	1-3	<p>International approaches to promote thinking and understanding;</p> <ul style="list-style-type: none"> • The course concentrates on internationally prevailing CLT trend in ELT pedagogy. CLT is a more comprehensive and integrated approach to language learning through combining literature, grammar and four language skills by utilizing technology in incorporating student centered, constructivist and activities-based teaching to develop critical thinking. 	7-84
	1-6	<p>Use of various technologies to promote thinking and understanding;</p> <ul style="list-style-type: none"> • The course incorporates maximum use of technology available in the form of computers, internet, etc. and use of other technologies to promote thinking and understanding. The exercises, work sheets and material are mostly retrieved from internet. Students can get assistance from the selected references, websites and books given in the course guide. 	15,16, 21,25, 29,35, 37,38,4 4,50,72 ,73

5	1	<p>International approaches to promote thinking and understanding;</p> <ul style="list-style-type: none"> • This course introduces globally known teaching methods broadly divided into two categories: teacher-centered methods (direct instruction) and learner-centered methods (indirect instruction or inquiry-based learning). • An effective teacher knows several methods and selects the one method or combination of methods most likely to achieve a particular lesson’s objectives with a particular group of students. • Since teaching and learning interact, a course about teaching must also be about learning. • The content and structure of the course is based on two claims about learning. First, learning results from what a student already knows, thinks, and does – and only from these actions of the student’s mind. • A teacher enables students to learn by influencing what the student learns. Second, as students progress through school they should learn to become their own teachers. That is, students should learn how to learn using their teachers as models. <p>Use of various technologies to promote thinking and understanding;</p>	9
	1-6	<ul style="list-style-type: none"> • The course encourages use of computer, internet, recordings and use of other technologies to promote thinking and understanding. The exercises, work sheets and material are mostly retrieved from internet. Students can get assistance from the selected references, websites and books given in the course guide. 	<p>17,18,2 2,28,47 ,52,77, 90,91,9 4</p>

Table 4.16 highlights contents related to international approaches and the use of various technologies, to promote thinking and understanding in the English language course guides designed for B. Ed (Hons). The interpretation of the table heading show two prominent aspects i.e. international approaches and use of technologies in ELT and its effect upon students thinking and understanding. As regards international approaches to teaching of ELT, the course guide adopts the latest worldwide practiced approach of CLT and downplaying the role of traditional method of teaching language. This course develops students’ language abilities by adopting integrated approach that provides ample opportunities to develop listening, speaking, reading, and writing skills. The course simultaneously focuses on social interaction, correct usage of sentence structures, accurate pronunciation and active vocabulary development in written form. It also strives to critical thinking of students. The focus of this course is on Classroom Language Routines (CLRs) considered essential language tools for teaching functional language.

Language is considered a vehicle and not an end, therefore, emphasis is laid on comprehension, effective communication skills, correct vocabulary and grammar use. All the tasks and activities are interactive and communicative in nature. The teachers are language teaching facilitators and all classroom activities are student centered.

The course adopts a research based and practical approach to teaching ELT. Over decades several ELT methods and approaches were adopted and many of them were discarded whereas some are implemented till today. Research on English language indicates that single ELT method to all learners is not enough. Therefore, a blend of variety of teaching methods is necessitated. Today education discovers the constructivist approach in language learning process. A lot goes on in the classroom between teachers and students and on what learners' experience during a lesson. Teachers and students' views and opinions on what has been taught and subsequently learnt significantly differ. CLT researchers on learners' language assimilation indicate that those teachers who had followed new CLT approach were efficiently fluent in speaking English language in comparison with grammar-based learners. They committed a number of grammatical mistakes in spoken as well as written form of expression. Therefore, CLT has today become the most frequently adopted method all over the globe. Learners adopting CLT method are found both fluent and accurate in English language usage.

This course acclaims teaching approaches divided into teacher-centered approach which is a direct instruction method and student-centered method which is an indirect teaching method. The learner centered method is also called as inquiry-based learning based on interest, needs, choices and opportunities provided to students. It is in contrast with teacher-centered approach that exhibits teachers' authority in the classroom and where students attain a secondary role. Students are passive in the education process. Resultantly, they are given less importance and remain under confident and non-

expressive. An efficient teacher displays variety of methods and thereby selects the teaching method that is most effective for larger number of students in their learning. Teachers may also combine two methods or adopt a blend of several methods of teaching depending on and situation. They may even work out a particular method on a particular group of students.

The course guides promote extensive use of CD, cassette, computer, internet, recordings and use of other technologies to promote thinking and understanding. The exercises, work sheets and material are retrieved from internet. Students can get assistance from the selected references, websites and books given in the course guide. The homework is mostly assigned in manner which instills the habit of using internet. BBC World Service (2011), Learning English and other related sources have been repeatedly cited. The course concentrates on internationally prevailing CLT trend in ELT pedagogy. CLT is a more comprehensive and integrated approach to language learning through combining literature, grammar and four language skills by utilizing technology in incorporating student centered, constructivist and activities-based teaching to develop critical thinking.

Table 4.17:*Contents related to the effect of out of school activities including homework*

Book	Unit	Description of Contents	Page
1	-	-	-
2	1	• The out of class assignment asked student to write a paragraph on a topic they selected at their own and swap it over with a partner and give comments on each other's paragraphs.	33
3	2	• Homework: students are made to imagine and write down a variety of classroom instructions their teachers normally resort to on daily basis. Ask Student Teachers to work with a partner and think of as many real classroom instructions as they can to provide learners with useful listening.	55
	4	• Ask Student Teachers to write a reflection on the lesson on adjectives that they were taught. What were the positive or good features of the lesson? How might the lesson be improved? What would they do if, after Exercise 2, they realized that most of the class did not understand adjectives?	86
4	3	• Homework: Give student the key article 'English as the Language for Development in Pakistan: Issues, Challenges, and Possible Solutions', to be discussed in the next class. Reading this article will also consolidate their understanding of the topics.	28
		• Homework: Have student write a critical summary on the given article for their portfolio.	29
		• Homework: Have the student read the following two articles: • Tomi, A. (1996). Challenges and rewards in the mixed culture classroom. ▪ Wu, Y. (2001). English language teaching in China: Trends and challenges.	30
		• Homework: Ask student to browse key research in the field of English language teaching and important issues in the field.	31
		• Homework: Have the participants read material on the topic they identified. Ask them to look for gaps in information or areas that need further exploration.	33

Table 4.17 shows content related to the effect of out of school activities including homework in English course guides. The students are regularly given out of class assignments and homework. The homework tasks and assignments are developed to maintain students' interest and are mostly internet based. Students' task/assignment are chosen to be innovative, creative, related to previous or upcoming lesson. These homework tasks/assignments are checked the next day, graded and students are told to rectify mistakes to bring improvement. The homework is kept as portfolio so as students

refer back to their tasks as part of reflective process involved in teaching/learning.

Assigning homework is part of the integrative learning in CLT context.

Table 4.18:

Contents related to the general methods of teaching and classroom management

Book	Unit	Description of Contents	Page
1	-	The course uses the following approaches to in ELT; <ul style="list-style-type: none"> • CLT approach • Integrated approach of embedded • Proficiency in four language skills; listening, speaking, reading, and writing • Both student and teachers are encouraged to respond to pair and group work and active learning strategies, such as role play, debates, presentations, and brainstorming • Use of online resources given in the course guide • Making best use of interactive exercises on various websites • Use of English as the language of instruction • No use of vernaculars if there is a problem communicating then use alternative strategies, such as slowing down, repetition, asking others to explain, or using simpler vocabulary 	9,10
2	-	<ul style="list-style-type: none"> • To make student Teachers independent users of language, it is essential to involve them in the learning process. Therefore, the course adopts; <ul style="list-style-type: none"> • An integrated approach to ELT • Learning the four language skills; listening, speaking, reading, and writing in natural settings • Learning the use English language in different contexts • Group and pair work as well as active learning strategies such as role plays, debates, presentations, and brainstorming • Use English as the language of instruction • Switching to Urdu or other languages is discouraged 	10
3		<ul style="list-style-type: none"> • CLT aims at acquisition of communicative competence by second-language learners by adopting a communicative syllabus and methodology as the way to achieve this goal. • The current CLT aims to equip student with effective methods and strategies to attain basic communicative competence in English. • CLT based learning and problem solving select methods, strategies, and techniques that are most relevant and appropriate for teaching their students to communicate successfully in speech and writing. 	10
4		<ul style="list-style-type: none"> • This course aims to develop students' pedagogical ability to teach English courses in elementary grades. • The current course offers insights into the intricacies of teaching English through contextualized experiences, microteaching sessions, and more significantly by exposing teachers to research in the field. • It addresses the issues and problems of second language pedagogy in Pakistan. Focusing on Pakistan's multilingual and plurilingual settings, and problems of learning English for Pakistani learners particular students enrolled in grades 6 to 8. • It adopts the latest research in the field of teaching English in Pakistan as well as possible solutions through action research and mini research projects. 	8,9

Table 4.18 relates to content on the general methods of teaching and classroom management in ELT class. The course adhered in these course guides is CLT approach being in vogue all over the world in recent years. It boosts integrated approach of embedded learning of ELT to improve language proficiency in all major skills like

speaking, listening, reading and writing. CLT approach lays emphasis on group and pair work activities and active learning strategies. This approach adopts activities that are helpful in generating activities such as role play, debates, presentations and brainstorming. These cater for interactive, communicative, expressive and confidence building measures. It also familiarizes students to bring in maximum use online resources as given in the course guides. Teachers and students alike are inspired to use English as the medium of instructions and forbid them switching to any other language in case of facing difficulty in communicating instead students are advised to use alternative strategies to overcome these difficulties. This is surely going to help students to become independent users of English language. This course offers a deep insight by involving ELT embedded and contextualized experiences, microteaching techniques, and above all orientating teachers to research in ELT. The course simultaneously throws detailed light on challenges faced by English teachers. It also focuses on issues and problems of ELT pedagogy in the context of Pakistan. It suggests practical solutions to such issues and problem emerging from time to time in ELT pedagogy. The course views Pakistan's multilingual and plurilingual environment and problems of learning English for Pakistani learners, particularly students enrolled in grades 6 to 8.

Table 4.19:*Contents related to the Special methods of teaching English discipline of knowledge*

Book	Unit	Description of Contents	Page
1	1	<ul style="list-style-type: none"> • The course guide is aimed at selecting, developing and adopting CLT teaching, integrated teaching method, focusing on developing four language skills, student centered and communicative approach of students' involvement in tasks to learn functional English language. 	9
2		<ul style="list-style-type: none"> • The course focuses on adopting methods and techniques of verbal and written communication by developing proficiency in four language skills by adopting student centered approach of involving students in tasks and activities in simulating practical situations. 	9
3		<ul style="list-style-type: none"> • Since 1980s, CLT has evolved and current communicative language teaching theory and practice is drawn on adopting a blend of a number of teaching methods. • The goal of communicative approach to language learning and teaching is the acquisition of communicative competence by second-language learners. • It adopts communicative syllabus and methodology to achieve the goal. The teaching practices of CLT refers to a methodology or a set of generally agreed upon principles applied in cultural context, level and age of learners, and proposed learning outcomes. 	10
4		<ul style="list-style-type: none"> • The basic aim of the course is designed to develop pedagogical skills in student to master the pedagogies related to teaching and assessment in the English language. • Student will integrate practical activities to develop four language skills with the pedagogies. • They will include a research-based project related to practical teaching/learning problems in English as a Second Language (ESL) classrooms and their potential solutions. 	11

Table 4.19 shows contents related to the special methods of teaching English discipline. The course guide is primarily designed to select, develop and adopt CLT teaching, integrated teaching, developing proficiency in four language skills, based on students' involvement in practical nature activities to learn functional English language. The English courses have adopted communicative syllabus and methodology to achieve learning outcomes of CLT. The special methods of teaching English are developing interactive pedagogical skills among students. Practical activities are integrated to develop four language skills with the pedagogies.

4.4 Content Analysis of Assessment

The NPSTs third selected standard ‘Assessment’ is being examined for ‘K & U’ in B. Ed (Hons) English course guides. The aspect ‘K & U’ has further three sub-aspects which are given coding scheme from 3.1.1 to 3.1.3 and covered in subsequent tables. The related content description is placed against relevant book, unit and page number.

Table 4.20:

Contents related to the types of assessments for evaluating how students learn, what they know and are able to do, and what kinds of experience will support their further growth and development

Book	Unit	Description of Contents	Page
1	1	<ul style="list-style-type: none"> • Use of active learning strategies to assess student such as dialogues in role play and writing, listening comprehension, friendly letter stating a request, developing a questionnaire or a set of questions for an interview. 	48
	3	<ul style="list-style-type: none"> • Assessing students in listening comprehension, giving and following instructions through dialogues, designing a working guide. • Comprehension and vocabulary exercises 	57
	4	<ul style="list-style-type: none"> • Listening comprehension and visual comprehension • Task-based summaries 	81
	5	<ul style="list-style-type: none"> • Writing assignments that require different types of writing • Grammar exercises 	
2		<ul style="list-style-type: none"> • The book contains assessment, evaluation and testing side by side as the teacher teaches. Formative testing is adopted to check students learning through multiple activities as the lesson progresses. 	
3		<ul style="list-style-type: none"> • The book contains assessment, evaluation and testing side by side as the teacher teaches. Formative testing is adopted to check students learning through multiple activities as the lesson progresses. 	
4		<ul style="list-style-type: none"> • Language assessors have use two types of approaches in assessment of language. These two approaches are called the discrete-point approach and the integrative approach. • Discrete-point testing divides language into a number of independent and isolated components: phonology, morphology, lexicon, syntax, and so on, each of which can be further divided into elements such as sounds, classes of sounds or phonemes, syllables, morphemes, words, idioms, phrase structures, punctuation, pronunciation, intonation, and stress. Each component is tested separately. Multiple-choice questions are often used in discrete-point testing. TOEFL (Test of English as a Foreign Language) and GEPT (General English Proficiency Test) are good examples of discrete-point testing. 	84-90

6	<ul style="list-style-type: none"> • The discrete-point approach tests language items separately, such as tenses or noun use. The assessor assesses components of the language (grammar, vocabulary, pronunciation, and spelling) and language skills (listening, reading, speaking, and writing) separately. The discrete-point test is a common test used by teachers in schools. After students have studied a grammar topic or new vocabulary and have practiced a great deal, the teacher usually gives a test based on the covered material. • The Integrative test assess several language skills and language components at a time. Integrative tests assess learners' knowledge of grammar, vocabulary, and spelling together, not as separate skills or items. This approach aims at assessing more than one language component at the same time (e.g. vocabulary, grammar, and gesture) and skill (e.g. listening and speaking). Integrative testing believes that knowledge of discrete items does not develop the ability to use language in real-life situations; and believe that the whole is better than the parts. • Student are introduced to the four approaches in language testing: <ul style="list-style-type: none"> • Essay-translation approach • Structuralist approach • Communicative approach • Integrative approach 	
6	<ul style="list-style-type: none"> • Assessment is a broad concept. A teacher conducting an assessment collects information about learning from several perspectives and uses more than one assessment tool. • Collecting assessment data through various methods and interpreting the data is important to help teachers tailor instructional needs of students. Without interpretation collected data is of no use. • Learning goals, learning objectives, learning targets, success criteria and formative assessment are important pillars of assessment components of the lesson. • Performance assessment requires students to demonstrate knowledge and skills, including the process by which they solve problems. • Teachers' intervention through assessment tools used are questions about prior knowledge, interviews, questionnaire, structured observation, anecdotal records, essays, feedback, formative/summative tests and portfolios. 	108
	<ul style="list-style-type: none"> • Assessment data must be interpreted to be useful. Scores are guides to interpretation, but they don't tell how a student's performance compared with that of other students who took the test. • Scores don't tell what a student knows and can do with the knowledge covered by the test and don't provide clue to important factors that might influence a student's performance on the test. • Before a test score can be interpreted, the teacher needs to that the interpretations of the score are reliable and valid. • Reliability and validity are logical concepts until they are measured for a particular test or assessment tool and become psychometric (as well as logical) concepts. • Validity and reliability are not properties of tests. Validity and reliability have meaning when used to characterize the interpretations and conclusions that are made from test scores. 	60

Table 4.20 depicts contents related to the various ways of assessments in terms of evaluating students' learning. It includes what students know and how they can apply

knowledge practically. It also pinpoints the teachers experience necessary for improved growth and development. Assessment is a cyclic process. It revolves around students understanding of knowledge followed by knowledge application and finally deliberate steps to be taken for further improvement. There are several types of assessment that include, criterion-referenced and norm-referenced instruments, traditional standardized and performance-based tests, observation systems and assessments of student work. The ELT course adopts an active learning strategy to carry out assessment of students through comprehension of verbal, written, listening aspects by several means like creative letter/story writing, questionnaire and interviews.

The B. Ed (Hons) course guide developers had placed assessment, evaluation and testing side by side in each unit. Students' assessment in the language skills and proficiency mainly depends on formative assessment during the teaching activity so as to check students learning assimilation. It is done by adopting multiple activities during the lesson as the teaching activity progresses. Language assessment is done through discrete-point and integrative approach. Discrete-point testing approach categorizes language into several components or segments. On the other hand, integrative test approach assesses multiple language skills and language components at one time. It primarily evaluates students' grammatical knowledge consisting of vocabulary and spelling in a holistic manner and not as separate skills.

Assessment is a general and broad concept incorporating several types of tests. During assessment a teacher gathers information related to learning from several sources and different perspectives and may use multiple assessment tools. Assessment data collection and its interpretation is vital for pedagogy analysis and provides an insight into students' needs. Some of the assessment components which are fundamental for achieving learning goals include learning objectives, learning targets, success criteria and

formative assessment. They prove beneficial in the effective lesson teaching. Assessment that checks students' educational performance pertains to demonstrating practically gained knowledge and skills and its application in real situation. It also requires to include process of solve the problems.

The data assessment is objectively interpreted to identify issues and the level of gaining knowledge and skills and its application. Reliability and validity are the key components of a test scores. However, these are not properties of test itself. Validity and reliability are used to characterize dependability on test scores to reach correct interpretations and conclusions. Assessments are always subject to error in one form or the other. Therefore, data is interpreted mostly in three frames of reference for accurate interpretation. It includes firstly, a norm-referenced frame, secondly, a criterion-referenced frame and lastly self-referenced frame.

Table 4.21:

Contents related to the results of assessment to evaluate and improve teaching and learning

Book	Unit	Description of Contents	Page
1	1-5	<ul style="list-style-type: none"> • The assessment tools and practices as given in book 6 are rigorously implemented and embedded in the activities of course guides. The assessment activities are aimed at achieving success in the learning objectives of the lesson. • Teachers assess student learning in classrooms by asking questions, by giving feedback on homework, conducting a quiz or test. Teachers assess students' learning frequently and in a more systematic manner. • Teachers assess performance of students through exhibitions, investigations, demonstrations, written or oral responses, journals, and portfolios. 	
2	1-5	<ul style="list-style-type: none"> • The assessment tools and practices as given in book 6 are rigorously implemented and embedded in the activities of course guides. The assessment activities are aimed at achieving success in the learning objectives of the lesson. • Teachers assess student learning in classrooms by asking questions, by giving feedback on homework, conducting a quiz or test. Teachers assess students' learning frequently and in a more systematic manner. Teachers assess performance of students through exhibitions, investigations, demonstrations, written or oral responses, journals, and portfolios. 	
3	1-6	<ul style="list-style-type: none"> • The assessment tools and practices as given in book 6 are rigorously implemented and embedded in the activities of course guides. The assessment activities are aimed at achieving success in the learning objectives of the lesson. • Teachers assess student learning in classrooms by asking questions, by giving feedback on homework, conducting a quiz or test. Teachers assess students' learning frequently and in a more systematic manner. Teachers assess performance of students through exhibitions, investigations, demonstrations, written or oral responses, journals, and portfolios. 	
4		<ul style="list-style-type: none"> • Students are taught assessment strategies for oral communication skills, reading, listening and writing are done through various activities. 	
5		<ul style="list-style-type: none"> • This course introduces students to the purpose of assessment component in the assessment practices in schools in Pakistan and particularly to the distinction between formative and summative assessment. • The course gives students practical definition of assessment as it is used by teachers in their classrooms and share their experiences, positive and negative. The students are familiarized with the assessment tools and procedures conducted in schools including a survey of assessment practices in schools in Pakistan. • It draws a distinction between formative and summative assessments, with particular emphasis on the different purposes of the two forms. • The teachers will distinguish between summative & formative assessments. Summative assessment is an assessment of learning and formative assessment being an assessment for learning. 	

6	1	<ul style="list-style-type: none"> • This course is organized around assessment activities involving incorporating assessment activities into lessons including assessment targets and criteria that represent success in achieving the targets & learning objectives of the lesson. 9-46 • Assessment unites teaching and learning activity, illustrates how assessment can improve learning and instruction and helping construct an achievement test for students. • Assessment is evidence about learning collected in the classroom and can be used to improve and judge student achievement. • Classroom assessment is the process of collecting and interpreting information about learning and teaching in a classroom for the purpose of making decisions that improve opportunities for learning. • Tests and assessment have a role in the evaluation of learning in school. Classroom assessment is a continuous process. • Teachers assess student learning in classrooms by asking questions, by giving feedback on homework, conducting a quiz or test. Teachers need to assess student learning in a systematic way and frequently. 60
	1	<ul style="list-style-type: none"> • Tests are means to determine students learn from attending school. Tests are given to determine an individual's competence to participate in 'what comes next' in the educational trajectory from young child to adult: the next unit in the curriculum, the next class, secondary school, university, a job with specific credentials, etc. 68 • Any assessment strategy designed to estimate a child's knowledge, understanding, ability, skill, and attitudes in a consistent fashion across individuals emphasizing methods other than standardized achievement tests, particularly those using multiple choice formats. Performance-based assessments typically include exhibitions, investigations, demonstrations, written or oral responses, and portfolios. 83 • Achievement tests measure acquired knowledge or skill level in a specific area. In other words, it assesses the amount of knowledge students have retained after classroom instruction. Achievement tests are most often standardized. 84 • Standardized tests are administered under standard conditions that are the same for all test takers. Characteristics of standardized tests include predetermined test directions, scoring standards, scoring interpretations, and test-taking conditions. These characteristics are standard and the same for all test takers. 98 • Sources that can be used to interpret scores are the assessment tool, especially tests; the learning environment in the classroom; the student's prior knowledge; and the instruction the teacher has provided. 274 • Use of Bloom's Taxonomy of educational objectives to create test questions. Benjamin Bloom identified six learning objectives, ranging from 'knowledge', which represented simpler mental processes, to 'evaluation', which represented the highest level of cognitive skills. Moving from knowledge toward evaluation requires students to use higher-order mental skills at each level.

Table 4.21 shows contents related to the assessment results to evaluate and enhance teaching and learning process for effective understanding of learners. The course guides contain several assessment tools and its practices in the form of certain activities.

The assessment tests aim to gauge success of the expected learning objectives set for learners in curriculum. In classroom teachers assess learning of students by asking frequent questions, asking feedback about comprehension, homework, assignments and quiz or spot tests. Teachers assess students' learning frequently by adopting a systematic approach. They employ methods like demonstrations, exhibitions, inquiry, written or oral answers, diary writing and portfolio assessment.

The B. Ed. (Hons) course acquaints teachers with the purpose of assessment and its various components. It familiarizes prospective teachers with the assessment practices carried out in schools in Pakistan. This course draws a clear distinction between formative and summative assessments keeping in view the purposes of the two forms. It enables them to know and distinguish between these two assessments procedures in schools including a survey of assessment practices in schools in Pakistan. Assessment activities incorporate assessment targets and criteria to check success ration in achieving the learning outcomes of the lesson. The course guides endeavor to unite teaching and learning activities with assessment process, It explains how assessment can help improve learning, teaching methodology and guide teachers to design achievement tests in lesson taught.

Assessment provides clear evidence and a true picture about learning dispensed in the classroom. It is the most authentic method to improve and evaluate students' achievement. Classroom assessment is an on-going process which continues with teaching side by side. Teachers must assess students' learning in a more organized and regular manner. Assessment strategies are designed to give approximation of students' knowledge, comprehension, ability, skills and behavior consistently. For this purpose, formats are chosen that stresses standardized achievement tests and multiple-choice questions format.

Achievement tests gauge a person's degree of competence or knowledge in a particular subject. In other words, it evaluates the quantity of information that pupils have retained after learning in a classroom. The majority of achievement tests are standardized. All test takers experience the same standard testing environment when taking standardized exams. Standards for scoring, scoring interpretations and test-taking settings are among the characteristics of standardized examinations. These qualities are universal and apply to all test-takers. The assessment instrument, particularly tests, the learning environment in the classroom, the student's prior knowledge, and the instruction the instructor has given can all be utilized as sources to interpret scores. Using Bloom's Taxonomy to organize educational goals can help writers of test questions. From "knowledge," which represented the simplest mental processes, to "assessment," which represented the highest level of cognitive abilities, Benjamin Bloom outlined six learning objectives. Students must employ higher-order cognitive abilities as they move from knowledge to evaluation at each level.

Table 4.22:

Contents related to the Measurement theory and assessment-related issues, such as validity, reliability, bias and scoring concerns

Book	Unit	Description of Contents	Page
1	1-5	<ul style="list-style-type: none"> • Students are taught measurement theory and frequently arising assessment related issues of validity and reliability concerns of scoring thereby reducing biasedness while constructing tests and procedures. 	
2	1-5	<ul style="list-style-type: none"> • Students are taught measurement theory and frequently arising assessment related issues of validity and reliability concerns of scoring thereby reducing biasedness while constructing tests and procedures. 	
3	1-6	<ul style="list-style-type: none"> • Students are taught measurement theory and frequently arising assessment related issues of validity and reliability concerns of scoring thereby reducing biasedness while constructing tests and procedures. 	
4	1-6	<ul style="list-style-type: none"> • Students are taught measurement theory and frequently arising assessment related issues of validity and reliability concerns of scoring thereby reducing biasedness while constructing tests and procedures. 	
5	1-7	<ul style="list-style-type: none"> • Students are taught measurement theory and frequently arising assessment related issues of validity and reliability concerns of scoring thereby reducing biasedness while constructing tests and procedures. 	
6	2	<ul style="list-style-type: none"> • Opinion of teacher may tend to become biased therefore, it is necessary to construct tests and procedures to reduce biasness and add validity, reliability to the scoring concerns. • Test scores do not lead directly to educational decisions. Instead, educational decisions are made, and actions are taken on the basis of interpretations of test scores. • Interpretations and conclusions made from test scores need to be valid and reliable. • Validity and reliability are not properties of tests but interpretations that derive from test scores. • Test scores can be interpreted using different frames of reference such as Norm-referenced frame of reference, Criterion-referenced frame of reference, Self-referenced frame of reference, other names for norm-referenced and criterion-referenced interpretations of students' scores on assessment tasks, Relative interpretations (comparable to norm-referenced interpretations), Absolute interpretations (comparable to criterion-referenced interpretations). 	16 48-60

Table 4.22 indicates assessment based on measurement theory and related issues, such as validity, reliability, bias and scoring concerns. Prospective teachers are familiarized and sensitized with measurement theory and issues of assessment related to validity and reliability concerns of test scores to minimize subjectivity and bias while

developing tests and procedures. Opinion of teacher may tend to become biased therefore, it is necessary to construct tests and procedures to reduce biasness and add validity, reliability to the scoring concerns. Test results influence educational selections. Instead, activities are conducted and judgments about schooling are made based on how test results are interpreted. Test results should only be used to support accurate and credible interpretations and conclusions. Validity and reliability are judgments based on test results rather than inherent qualities of tests. Different frames of reference can be used to interpret test results, including norm-referenced, criterion-referenced, self-referenced, and other names for interpretations of students' performance on assessment tasks that are comparable to norm-referenced and criterion-referenced interpretations, relative interpretations, and absolute interpretations (comparable to criterion-referenced interpretations).

Table 4.23:

Summary of content Analysis of Pedagogical Competencies in Course guide books of B,Ed (Hons) 4 Years Program

S. No.	NPSTs	Findings Summary of Content Analysis
1.	Subject Matter Knowledge	<p>The B. Ed (Hons) course guides for English Language are developed in line with the National Curriculum Framework (NCF) for English - 2006. Similarly, fundamental concepts and theories of English language were fully adopted in curriculum which included major historical as well as latest theories of language teaching. The findings not only showed integrating the ever evolving and expanding nature of ELT by incorporating newest trends in ELT based on latest research but also integrated latest concept of CLT approach based on outcome related competency in ELT. It included emerging concepts, theories and trend as a result of worldwide researches in ELT.</p> <p>The curriculum contained detailed knowledge of English subject and therefore focused on four language skills development. It included functional and communicative expression; oral and written communication skills; and teaching of grammar in embedded text and reinforced in exercises. The content analysis showed that the aspect of relationship of English subject with other subjects was not catered in the English course guides. Similarly, it also did not try to establish a link between reading and writing exclusively whereas it did cover the four language learning skills separately in detail.</p>
2.	Instructional Planning & Strategies	<p>The content was specifically found incorporating the aspects of aims, goals and objectives in instructional planning. Appropriate resources and materials are found available in abundance in curriculum and are supported by IT based instructional planning to promote students' attention and thinking. The teaching methodologies were found according to students' needs, age and previous knowledge. The content analysis found that the syllabus provided learning opportunities to prospective teachers to develop techniques to develop instructional method, materials and the environment to help them learn English language. The contents were also found to fully include international approaches and the use of various technologies, to promote thinking and understanding</p>

of English language.

The content revealed that out of school activities including homework assigned to students were scarce. This aspect was found partially addressed and students were occasionally assigned out of class assignments and homework. Similarly, the content analysis related to contents on the general methods of teaching and classroom management in ELT class were fully addressed. The aspect of contents related to adopting special methods in teaching English language were also completely addressed.

3. **Assessment**

The contents fully included various types of assessment methods for evaluating students learning about knowledge and skills and ability in performance; and the kind of experiences supporting students' growth and development. There is appropriate amount of content that shows the results of assessment are utilized to evaluate the teaching and learning process for further improvement. The findings on the aspect of measurement theory and assessment-related issues of validity, reliability, bias and scoring concerns show that these are fully incorporated in the syllabus.

SECTION-B: DESCRIPTIVE ANALYSIS

4.5: Objective 2. To assess the level of perceived pedagogical competencies of prospective teachers in the light of National Professional Standards i.e., Subject Matter Knowledge, Instructional Planning & Strategies and Assessment.

In order to assess the level of perceived pedagogical competencies of the prospective teachers, a self-reported scale was designed which comprised of three standards namely:

Subject Matter Knowledge

Instructional Planning & Strategies

Assessment.

All three sub-standards of each standard were included in the tool. The sample of the study comprised of a total 296 respondents as prospective teachers. Gender-wise distribution of respondents i.e., ($N= 296$) consisted of 188 females (64%) and 108 males (36%) prospective teachers from whom data was collected. A total of 296 prospective teachers responded to the self-reported scale. The analysis of the pedagogical competencies of prospective teachers is presented in the form of tables and interpretation of each table.

The first component of the questionnaire comprised of nine statements related to K & U were rated at five-point scale. The prospective teachers were asked to comment on the statements as per their knowledge related to standard of S M K.

. The table below presents frequency, percentage and mean of each statement.

Table 4.24:*Knowledge and Understanding of Prospective Teachers in Subject Matter Knowledge*

Statements	SA	A	UD	D	SD	N	Mean
	f & %	f & %	f & %	f & %	f & %		
I am aware of National Curriculum Framework for different subjects	163 55.1	31 10.5	52 17.6	32 10.8	18 6.1	296	3.98
I have understanding and knowledge of the basic concepts of the subject which I teach.	102 34.5	111 37.5	46 15.5	20 6.8	17 5.7	296	3.88
I possess sufficient subject matter knowledge.	143 48.3	44 14.9	84 28.4	22 7.4	03 01	296	4.02
I keep myself updated regarding developments in the field of teaching.	71 24.0	103 34.8	40 13.5	76 25.7	06 02	296	3.53
I am aware of the latest emerging trends, theories and concepts in the subject I teach.	98 33.1	81 27.4	41 13.9	08 2.7	68 23	296	3.45
I have depth in knowledge of the subject which I teach.	181 61.1	77 26.0	7 2.4	14 4.7	17 5.7	296	4.32
I establish relationship of my subject with other subjects.	75 25.3	174 58.8	22 7.4	19 6.4	06 2.0	296	3.99
I know that various subjects have unique practical utility.	160 54.1	90 30.4	20 6.8	23 7.8	03 1.0	296	4.29
I know that competence in reading, writing and arithmetic are essential for the study of any subject.	136 45.9	158 53.4	02 0.7	00 0.0	00 0.0	296	4.45

The analysis of table 4.24 depicts the mean score of all statements ranged from 3.45 to 4.45 thereby showing that prospective teachers agreed to all statements. The respondents rated mean score of four statements as above 4 in the scale of five points with 5 as strongly agreed which means that prospective teachers strongly agreed to possess adequate and in-depth knowledge of subject, practical utility of subjects and competence in reading, writing and arithmetic as equally essential in these subjects. Whereas, they rated the importance of knowledge for teaching of other subject as second most important aspect. The prospective teachers rated the statements on knowledge of emerging trends, theories and concepts in the subject they teach at mean score 3.45 and keeping themselves updated as 3.53. So, it is clear that prospective teachers are aware about importance of K & U, but they need more knowledge about latest trends and theoretical background of teaching methods. Overall mean score 3.99 indicates that prospective teachers agreed with the knowledge & understanding competency of subject matter.

The second component of the self-reported scale consisted of six statements related to dispositions of prospective teachers about the subject matter knowledge. The prospective teachers rated these statements on five-point scale and the table below summarizes the responses indicating frequency, percentage and mean score of each statement.

Table 4.25:*Dispositions level of Prospective Teachers in Subject Matter Knowledge*

Statements	SA		A		UD		D		SD		N	Mean
	f	& %	f	& %	f	& %	F	& %	f	& %		
I cater for students' needs, requirements and interests during teaching.	201	67.9	52	17.6	31	10.5	03	1.0	09	3.0	296	4.46
I display flexibility in instructional methods to help students learn.	87	29.4	175	59.1	08	2.7	23	7.8	03	1.0	296	4.08
I prefer teaching in real life situations to students.	180	60.8	101	34.1	02	0.7	00	0.0	13	4.4	296	4.47
I believe in adopting diversified instructional strategies keeping in view the diversity of the students.	169	57.1	121	40.9	02	0.7	04	1.4	00	0.0	296	4.45
I prefer to use the teaching methods that foster individual differences of learners.	142	48.0	143	48.3	11	3.7	00	0.0	00	0.0	296	4.44
I prefer to use alternate method for teaching as I believe that every student can learn.	92	31.1	178	60.1	03	1.0	18	6.1	05	1.7	296	4.13

The dispositions level in subject matter was denoted through actions taken by respondents. These were displayed in the form of beliefs and preferences in actions. These actions were given in NPSTs to indicate dispositions level of respondents. The same were converted into statements of self-reported scale.

Table 4.25 highlights that the overall mean score of statement ranged between 4.47 and 4.08. In the scale of five points with 5 as strongly agreed, mean score of all six statements is above 4 which shows strong agreement of prospective teachers' high dispositions level with the subject matter knowledge. Respondents expressed the views

that they preferred teaching in real life situation to students and also were of the view that they cater the needs and interests of students during teaching. They rated these two statements as high with mean score of 4.47 and 4.46 respectively. They rated, “I display flexibility in instructional methods to help students learn”, with mean score as low as 4.08 in this table. It predicts that prospective teachers rated themselves high in dispositions level about subject matter, but there is a need that teachers should be more flexible and friendly while implementing strategies for teaching. The overall mean score of all statements is 4.34 points showing prospective teachers’ higher dispositions in subject matter knowledge.

The third component of the self-reported scale consisted of three statements related to performance and skills in subject matter knowledge. The prospective teachers rated these statements on five-point scale, the table below summarizes the responses, indicating frequency, percentage and mean score of each statement.

Table 4.26:*Performance and Skill Level of Prospective Teachers in Subject Matter Knowledge*

Statements	SA f & %	A f & %	UD f & %	D f & %	SD f & %	N	Mean
I teach the contents to students in multiple perspectives.	124 41.9	117 39.5	44 14.9	03 1.0	08 2.7	296	4.17
I check prior knowledge of students by using appropriate means of inquiry.	105 35.5	185 62.5	03 1.0	00 0.0	03 1.0	296	4.31
I give examples from daily life to clarify an idea or concept to students.	115 38.9	160 54.1	19 6.4	00 0.0	02 0.7	296	4.30

Table 4.26 presents the mean score of items ranged from 4.17 to 4.31 thus highlighting the agreed position of prospective teachers with all statements. They were of the view that they checked prior knowledge of students by using appropriate means of inquiry as they rated this statement as high as 4.31. They also agreed that they gave examples from daily life to clarify an idea or concept to students. They rated teaching content in multiple perspective as low as (4.17). In the scale of five points with 5 as strongly agreed, the overall mean score of all three statements is 4.26, which depicts strong agreement of prospective teachers with the indicator of performance and skill. So, it solicits that, prospective teachers are confident about their performance and skill, but need actual classroom practice to enhance their performance and skill in language teaching.

Overall, it was observed that prospective teachers agreed with competence in K & U, dispositions and P & S in the standard of S M K.

The next standard addressed in the self-reporting self-reported scale was about IP & S, it was also measured under the headings of K & U, dispositions and P & S. The component wise analysis of the standard is presented below.

The fourth component of self-reported scale and first for IP & S comprised of 11 statements related to K & U of IP & S for teaching purpose. The prospective teachers rated these statements on five-point scale, the table below summarize the responses, indicating frequency, percentage and mean score of each statement.

Table 4.27:

Knowledge and Understanding level of Prospective Teachers about Instructional Planning and Strategies

Statements	SA f & %	A f & %	UD f & %	D f & %	SD f & %	N	Mea n
I am aware of aims, goals and objectives of teaching at elementary level.	93 31.4	98 33.1	51 17.2	28 9.5	26 8.8	296	3.69
I am aware of aims, goals, objectives and importance of my subject	107 36.1	100 33.8	21 7.1	29 9.8	39 13.2	296	3.70
I know how to integrate listening, speaking, reading and writing skills in my lessons while teaching.	127 42.9	80 27.0	58 19.6	11 3.7	20 6.8	296	3.96
I make use of all available resources and material to make students understand.	154 52.0	81 27.4	25 8.4	25 8.4	11 3.7	296	4.16
I understand how to arrange and integrate AV aids in my lesson plans.	110 37.2	145 49.0	27 9.1	14 4.7	00 00	296	4.19
I display flexibility in instructional methods to help students learn.	87 29.4	166 56.1	19 6.4	13 4.4	11 3.7	296	4.03
I have knowledge of the learning methods that can accelerate students learning.	119 40.2	99 33.4	42 14.2	02 0.7	34 11.5	296	3.90
I am aware of the learning environments which can accelerate students learning.	162 54.7	103 34.8	16 5.4	12 4.1	03 1.0	296	4.38
I have knowledge of giving home assignments and group projects that promote learning.	170 57.4	95 32.1	02 0.7	05 1.7	24 8.1	296	4.29
I have knowledge of the classroom management strategies that work in class.	120 40.5	120 40.5	19 6.4	02 0.7	35 11.8	296	3.97
I have knowledge of different teaching methods that work in different situations.	129 43.6	137 46.3	06 2.0	19 6.4	05 1.7	296	4.24

Table 4.27 indicates the mean score of items ranged between 4.38 and 3.69, depicting consensus to agree with the statements about K & U of IP & S. They were of the opinion that they are aware of the learning environments which can accelerate

students learning (4.38) and they have knowledge of giving home assignments and group projects that promote learning (4.29). It shows their confidence in the selection of instructional strategies and method. The table also highlights that teachers have knowledge of different teaching methods that work in different situations. They can also use AV aids for teaching different language skills and are able to use different available resources. The teachers rated knowledge about aims and objectives of teaching as low as 3.69. It highlighted the need for integration of knowledge of aims and objectives of curriculum as a whole, whereas they were aware about the aims and objectives of teaching. Overall mean score was calculated at 4.04 which indicates that prospective teachers agreed with the K & U competency related to NPSTs standard - IP & S.

The fifth component of the self-reported scale again forms part of second standard i.e., instructional planning and strategies which comprises of six statements related to dispositions of instructional planning and strategies for teaching purpose. The prospective teachers rated these statements on five-point scale. The table below summarizes the responses, indicating frequency, percentage and mean score of each statement.

Table 4.28:*Dispositions level of Prospective Teachers about Instructional Planning and Strategies*

Statements	SA f & %	A f & %	UD f & %	D f & %	SD f & %	N	Mean
I arrange activities in classroom that ensure the achievement of SLOs.	163 55.1	82 27.7	09 3.0	06 2.0	36 12.2	296	4.11
I prefer to engage students in exercises which develop their critical thinking.	186 62.8	105 35.5	03 1.0	00 0.0	02 0.7	296	4.60
I like to engage students in creative work in class.	218 73.6	64 21.6	09 3.0	05 1.7	00 0.0	296	4.67
I tend to promote collaborative and cooperative learning among students.	142 48.8	142 48.8	06 2.0	03 1.0	03 1.0	296	4.41
I like to create situations in group work that promote cooperation and inter dependence.	164 55.4	83 28.0	28 9.5	12 4.1	09 3.0	296	4.29
I prefer to arrange different activities in which students learn problem solving in their creative work.	135 45.6	126 42.6	03 1.0	18 6.1	14 4.7	296	4.18

The dispositions level in IP & S were denoted through actions taken by respondents. These were displayed in the form of beliefs and preferences in actions. These actions were given in NPSTs standard to indicate dispositions level of respondents. The same were converted into statements of self-reported scale.

Table 4.28 highlights that the mean score of items ranged between 4.67 and 4.11. It reflected that prospective teacher had agreed stance about their dispositions level regarding IP & S. They held the opinion (4.67) that they liked to engage students in creative work. They preferred to engage students in exercises which develop their critical thinking (4.60) and also tried to promote collaborative and cooperative work in the classroom (4.41). It also shows prospective teachers' inclination towards integration of these strategies in planning of lessons. They rated arrangement of activities as per need of SLOs as low as (4.11) compared to other five aspects of dispositions. It pointed towards

the need for inclusion of ‘SLOs’ alignment with activities may be focused during practice teaching. Overall mean score 4.37 depicts that prospective teachers have higher dispositions level for standard of IP & S.

Sixth component of self-reported scale and 3rd for IP & S consisted of ten statements related to performance and skills for teachers. The prospective teachers rated these statements on five-point scale, the table below summarizes the responses, indicating frequency, percentage and mean score of each statement.

Table 4.29:
Performance and Skill Level of Prospective Teachers about Instructional Planning and Strategies

Statements	SA f & %	A f & %	UD f & %	D f & %	SD f & %	N	Mean
I have skills to teach students according to their age group and learning styles.	81 27.4	183 61.8	29 9.8	00 00	03 1.0	296	4.15
I have pedagogical skills to foster individual differences in classroom.	142 27.4	152 51.4	00 00	00 00	02 0.7	296	4.46
I have skills to teach students according to their level and cultural context.	163 55.1	78 26.4	41 13.9	11 3.7	03 1.0	296	4.31
I have capability to select resources and contents for teaching a specific idea and concept in teaching.	120 40.5	155 52.4	21 7.1	00 00	00 00	296	4.33
I am skilled to design home assignments and out of class activities that promote learning.	104 38.4	96 35.4	66 24.4	03 1.1	02 0.7	296	4.10
I am skilled to develop learning experiences that foster students learning styles and motivate them for learning.	89 30.1	151 51.0	21 7.1	26 8.8	09 3.0	296	3.96
I adopt several instructional strategies in classroom for diversity of students.	92 31.1	144 48.6	35 11.8	09 3.0	16 5.4	296	3.97
I am skilled to achieve SLOs by utilizing different learning materials and technological resources.	156 52.7	98 33.1	26 8.8	16 5.4	00 00	296	4.33
I am skilled to give reflections on students learning subject to the strategies used for teaching in the class.	160 54.1	116 39.2	11 3.7	00 00	09 3.0	296	4.41
I am skilled to enable students to learn from all subject areas.	147 49.7	79 26.7	23 7.8	11 3.7	36 12.2	296	3.98

Table 4.29 explains that mean score of the statements about P & S of prospective teachers against ten statements ranges from 3.96 to 4.46. It reflects that they agreed with all the statements. They were further of the opinion that they have pedagogical skills to address the individual differences among the learners (4.46). In their own point of view, they were skilled to give reflections on students learning subject to the strategies used for teaching to the students (4.41) and are skilled to achieve SLOs by utilizing different learning materials and technological resources. It shows prospective teachers' higher self-perception towards P & S for teaching of language. Whereas, they rated the skill to develop learning experiences that foster students learning styles and motivate them for learning as low as 3.96 in the above table.

Overall mean score 4.20 indicates that prospective teachers have agreement to all statements and they consider themselves as competent in sub-standard of P & S related to IP & S.

The seventh component of self-reported scale and first for assessment consisted of four statements related to K & U of assessment for teaching. The prospective teachers rated these statements on five-point scale, the table below summarizes the responses, indicating frequency, percentage and mean score of each statement.

Table 4.30:*Knowledge and Understanding level of Prospective Teachers about Assessment*

Statements	SA f & %	A f & %	UD f & %	D f & %	SD f & %	N	Mean
I know different types of assessment techniques that are used in different situations	145 49.0	111 37.5	19 6.4	21 7.1	00 00	296	4.39
I have knowledge of the assessment techniques to be used for diagnosis and placement.	132 44.6	110 37.2	14 4.7	11 3.7	29 9.8	296	4.06
I have knowledge of how to use assessment results for improving teaching in the class.	133 44.9	91 30.7	31 10.5	32 10.8	09 3.0	296	4.27
I understand the use of validity and reliability in reducing bias and scoring concerns while assessing students in teaching.	165 55.7	68 23.0	48 16.2	03 1.0	12 4.1	296	4.24

The above table 4.30 elicits respondents' views that mean score (4.39) of the statement about different types of assessment techniques that are used in different situations is higher as compared to others. Whereas mean score (4.06) is low for the statement about the use of assessment for diagnostic and placement purposes. The prospective teachers were also confident about the use of assessment for improvement of teaching. They also possess knowledge to improve the reliability and validity of the assessment tools. Overall mean score 4.24 is indicative that prospective teachers have agreement about all statements and they consider themselves as competent in sub-standard of K & U related to Assessment.

Eighth component of self-reported scale and second for assessment consisted of four statements related to dispositions regarding use of assessment for teaching purposes. The prospective teachers rated these statements on five-point scale, the table below summarize the responses, indicating frequency, percentage and mean score of each statement.

Table 4.31:

Dispositions level of Prospective Teachers about Assessment

Statements	SA f & %	A f & %	UD f & %	D f & %	SD f & %	N	Mean
I prefer to use assessment results for students' learning.	154 52.0	134 45.3	08 2.7	00 00	00 00	296	4.28
I prefer to communicate assessment results to students and parents with a view to improve teaching and learning process.	135 45.6	124 41.9	25 8.4	12 4.1	00 00	296	4.03
I prefer to use assessment for remedial teaching.	169 57.1	91 30.7	07 2.4	21 7.1	08 2.7	296	4.04
I prefer to use continuous assessment with a view to provide remedial steps.	82 27.7	162 54.7	37 12.5	07 2.4	08 2.7	296	4.25

Table 4.31 elaborates that mean score of the statements about dispositions regarding use of assessment ranges from 4.03 to 4.28. The prospective teachers were of the view that they prefer to use continuous assessment for the purpose of students learning as they rated this high. Whereas mean score (4.03) was low for the statement that they communicate the results to parents and students to improve teaching learning process. Overall mean score 4.15 indicates that prospective teachers have agreement to all statements and they consider themselves as competent in sub-standard of dispositions related to standard - Assessment.

The ninth component of self-reported scale and third for assessment consisted of 12 statements related to P & S of prospective teachers in assessment for teaching purpose. The prospective teachers rated these statements on five-point scale, the table below summarizes the responses, indicating frequency, percentage and mean score of each statement.

Table 4.32:

Performance and Skill level of Prospective Teachers about Assessment

Statements	SA f & %	A f & %	UD f & %	D F & %	SD f & %	N	Mean
I am capable of developing and conducting tests for formative assessment in class.	154 52.0	134 45.3	08 2.7	00 00	00 00	296	4.49
I can prepare tests for formative assessment.	135 45.6	124 41.9	25 8.4	12 4.1	00 00	296	4.29
I have learnt to assess students in multiple ways.	169 57.1	91 30.7	07 2.4	21 7.1	08 2.7	296	4.32
I have learnt the motivational tips during B.Ed. (Hons) program that can be used in class.	82 27.7	162 54.7	37 12.5	07 2.4	08 2.7	296	4.02
B. Ed (Hons) program has enabled me to provide constructional feedback to the students on the basis of assessment.	154 52.0	124 41.9	06 2.0	05 1.7	07 2.4	296	4.40
I am skilled how to prepare students' progress report for the subject.	102 34.5	167 56.4	22 7.4	03 1.0	02 0.7	296	4.23
I am capable of using assessment data for reflecting students' progress in learning.	150 50.7	98 33.1	41 13.9	07 2.4	00 00	296	4.32
I am capable of using a variety of assessment techniques to identify learners' strength and weaknesses.	197 66.6	68 23.0	22 7.4	07 2.4	02 0.7	296	4.52
I am skilled to diagnose teaching and learning problem and through assessment take remedial steps.	67 22.6	184 62.2	15 5.1	16 5.4	14 4.7	296	3.93

I have learnt in B. Ed (Hons) how to engage students in objective self-assessment.	95 32.1	58 19.6	101 34.1	42 14.2	00 00	296	3.70
I am skilled to develop objective type tests for the assessment of students' learning skills.	88 29.7	65 22.0	48 16.2	86 29.1	09 3.0	296	3.46
I am skilled to engage students in self-assessment and self-improvement in the class.	92 31.1	32 10.8	26 8.8	06 2.0	140 47.3	296	2.76

Table 4.32 explains that mean scores of the statements about P & S in assessment standard of prospective teachers against twelve statements range from 2.76 to 4.52. It reflects that they agreed with most of the statements and disagreed with one statement. The prospective teachers were of the opinion that they were capable of using a variety of assessment techniques to identify learners' strength and weaknesses (4.52). Whereas, they rated their skill to engage students in self-assessment and self-improvement in the classes low (2.76). It indicated that they have knowledge but needed practice of self-assessment and self-improvement strategies in actual classes.

The overall mean score of all statements in above tables is 4.03 which indicates that prospective teachers have agreement with most of the statements, but it highlights the need for development of P & S competence among prospective teachers regarding use of assessment for teaching. In answer to first question and first objective of the study it was observed that perception level of perspective teachers was high and they rated themselves as competent in all three standards namely: S M K, IP & S; and Assessment.

4.6 Objective 3: To assess the level of developed pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers.

In order to assess the level of developed pedagogical competencies of prospective teachers, I observed them in actual classrooms while doing teaching practice. The major purpose was to identify the difference between perceived and developed pedagogical competencies of prospective teachers. There were many aspects related to knowledge that were not directly observable, only the observable components were identified out of the

self-reported scale with the help of experts and were rated as 1= Not Evident, 2= Slightly Evident, 3 = Somewhat Evident, 4= Fairly Evident, 5= Clearly Evident by the researcher.

Total 30 (18 females and 12 males) out of 296 prospective teachers who responded on self-reported scale were observed thrice in actual classroom setting. The analysis of the pedagogical competence of prospective teachers as observed by researcher is presented in subsequent tables.

The first component of observation schedule comprised of four indicators related to K & U which were rated at five-point scale. The table below presents frequency, percentage and mean of each statement.

Table 4.33:

Observable components of Knowledge and Understanding of Prospective Teachers in Subject Matter Knowledge

Statements	CE f & %	FE f & %	SmE f & %	SE f & %	NE f & %	Mean	Mean of Means
The teacher understands the basic concepts of the subject he/she teaches. (O1)	06 20.0	20 66.7	04 13.3	00 00	00 00	1.93	2.23
(O2)	00 00	16 53.3	14 46.7	00 00	00 00	2.47	
(O3)	00 00	21 70.0	09 30.0	00 00	00 00	2.30	
The teacher focused on new ideas& theories related to the subject. (O1)	06 20.0	20 66.7	04 13.3	00 00	00 00	1.93	2.19
(O2)	02 6.7	18 60.0	05 16.7	05 16.7	00 00	2.43	
(O3)	04 13.3	18 60.0	06 20.0	02 6.7	00 00	2.20	
The teacher adopted the latest approaches of teaching. (O1)	05 16.7	20 66.7	02 6.7	03 10.0	00 00	2.10	2.13
(O2)	02 6.7	22 73.3	05 16.7	01 3.3	00 00	2.17	
(O3)	04 13.3	18 60.0	08 26.7	00 00	00 00	2.13	

Possessed subject matter knowledge of the subject (O1)	03	21	03	03	00	2.20	
(O2)	00	25	05	00	00		
(O3)	00	83.3	16.7	00	00		
	04	18	07	01	00	2.17	2.18
	13.3	60.0	23.3	3.3	00	2.17	

The above analysis indicates the mean score of indicators observed were from 1.92 to 2.47, whereas mean of means for three observations ranges from 2.13 to 2.23 showing all the skills observed were exhibited as slightly evident to somewhat evident on 5 points Likert scale. Their understanding of S M K was rated high during observations whereas adopting the latest approaches of teaching was lowest among the observed skills. Overall prospective teachers' S M K reflected as slightly evident on Likert scale which indicated low performance while teaching in actual classroom.

The second component of observation checklist also comprised of four indicators related to dispositions and were rated at five-point scale. The table below presents frequency, percentage and mean score of each statement.

Table 4.34:
Observable components of Dispositions of Prospective Teachers in Subject Matter Knowledge

Statements	CE	FE	SmE	SE	NE	Mean	Mean of
	f & %	f & %	f & %	f & %	f & %		Means
Adopted diversified instructional strategies in teaching. (O1)	01	23	03	03	00	2.27	
(O2)	3.3	76.7	10.0	10.0	00	2.17	2.19
(O3)	00	25	05	00	00		
	00	83.3	16.7	00	00		
	03	21	05	01	00	2.13	
	10.0	70.0	16.7	3.3	00		
Related topic to daily life (O1)	00	20	07	03	00	2.43	
(O2)	00	66.7	23.3	10.0	00		
(O3)	00	21	07	02	00		
	00	70.0	23.3	6.7	00	2.37	2.34
	03	18	08	01	00		
	10.0	60.0	26.7	3.3	00	2.23	

Build students' confidence in enhancing their communication skills. (O1)	00	19	09	02	00	2.43	
(O2)	04	63.3	30.0	6.7	00		
(O3)	13.3	18	06	02	00		
	03	60.0	20.0	6.7	00	2.20	2.28
	03	21	03	03	00		
	10.0	70.0	10.0	10.0	00	2.20	
Engaged all learners using multiple ways (O1)	04	18	06	02	00	2.20	
(O2)	13.3	60.0	20.0	6.7	00		
(O3)	04	18	08	00	00		
	13.3	60.0	26.7	00	00		
	03	21	03	03	00	2.13	2.18
	10.0	70.0	10.0	10.0	00	2.20	

Table 4.34 shows the observations related to dispositions in S M K were aimed to achieve the objective of students' assimilation of learning of taught content of the subject. It displayed prospective teacher's attitude in teaching competency towards adopting apt methods that could impart true learning of knowledge of the subject. It included engaging all learners by using multiple ways, building students' confidence in enhancing communication skills related topic to daily life and adopted diversified instructional strategies in teaching.

The above table shows the mean scores of indicators observed ranging from 2.13 to 2.43, whereas mean of means for three observations ranges from 2.18 to 2.34 showing that all the skills observed were exhibited at slightly evident to somewhat evident on Likert scale. Their level of dispositions of subject matter was rated low in terms of engaging all learners by using multiple ways during observation whereas building students' confidence in enhancing communication skills are rated high among the observed dispositions skills.

It indicates that overall prospective teachers exhibited the skills which were slightly evident on Likert scale showing low performance while teaching in actual classroom setting.

The third component of observation schedule comprised of two indicators related to dispositions were rated at five-point scale. The table given below presents frequency, percentage and mean score of each statement.

Table 4.35:

Observable Components of Performance and Skill of Prospective Teachers in Subject Matter knowledge

Statements	CE f & %	FE f & %	SmE f & %	SE f & %	NE f & %	Mean	Mean of Means
Taught content in multiple perspective (O1)	04 13.3	18 60.0	08 26.7	00 00	00 00	2.13	
(O2)	04 13.3	18 60.0	07 23.3	01 3.3	00 00	2.17	2.27
(O3)	00 00	19 63.3	07 23.3	04 13.3	00 00	2.50	
Developed linkage between previous knowledge through questioning and brain storming (O1)	04 13.3	18 60.0	07 23.3	01 3.3	00 00	2.17	
(O2)	03 10	21 70.0	05 16.7	01 3.3	00 00		
(O3)	03 10	20 66.7	07 23.3	00 00	00 00	2.13	2.14

Table 4.35 shows that the mean score of indicators observed were 2.13 and 2.50, whereas mean of means for three observations ranges from 2.14 to 2.27 highlighting that both skills observed were exhibited at slightly evident to somewhat evident on Likert scale. Their level of developing linkage between previous knowledge through questioning and brain storming was rated low and they taught content in multiple perspective slightly higher.

Overall, it indicates that prospective teachers exhibited the skills which were slightly evident on Likert scale indicating low performance while teaching in actual classroom setting.

The fourth component of observation schedule was based on IP & S standard. It comprised of seven indicators related to K & U and were rated at five-point scale. The table below presents frequency, percentage and mean score of each statement.

Table 4.36:

Observable Components of Knowledge and Understanding of Prospective Teachers in Instructional Planning and Strategies

Statements	CE f & %	FE f & %	SmE f & %	SE f & %	NE f & %	Mean	Mean of Means
Elaborated aims, goals, objectives and importance of the subject. (O1)	03	21	05	01	00	2.13	2.18
	10.0	70.0	16.7	3.3	00		
	03	18	08	01	00	2.23	
(O2)	10.0	60.0	26.7	3.3	00	2.17	
(O3)	6.7	70.0	23.3	00	00	2.23	
Taught in a manner to develop students reading, writing & arithmetic skills. (O1)	03	18	08	01	00	2.23	2.25
	10.0	60.0	26.7	3.3	00		
	03	21	03	03	00	2.20	
(O2)	10.0	70.0	10.0	10.0	00	2.20	
(O3)	00	20	10	00	00	2.33	
Teaching aids are available in the classroom. (O1)	03	21	03	03	00	2.20	2.29
	10.0	70.0	10.0	10.0	00		
	03	21	03	03	00	2.20	
(O2)	10.0	70.0	10.0	10.0	00	2.20	
(O3)	00	16	14	00	00	2.47	
The teacher uses A.V Aids & other Instructional activities. (O1)	03	21	03	03	00	2.20	2.33
	10.0	70.0	10.0	10.0	00		
	00	19	07	04	00	2.50	
(O2)	00	63.3	23.3	13.3	00	2.30	
(O3)	00	21	09	00	00	2.50	
Focused on student's needs & interests while teaching. (O1)	00	19	07	04	00	2.50	2.28
	00	63.3	23.3	13.3	00		
	03	20	07	00	00	2.13	
(O2)	10.0	66.7	23.3	00	00	2.20	
(O3)	04	18	06	02	00	2.13	
Displayed flexibility in instructional methods. (O1)	03	20	07	00	00	2.13	2.14
	10.0	66.7	23.3	00	00		
	02	21	07	00	00	2.17	
(O2)	6.7	70.0	23.3	00	00	2.13	
(O3)	04	18	08	00	00	2.13	
Demonstrated effective	02	21	07	00	00	2.17	

classroom management skills. (O1)	6.7	70.0	23.3	00	00		
(O2)	00	20	10	00	00		
	00	66.7	33.3	00	00		
	04	18	07	01	00	2.33	
(O3)	13.3	60.0	23.3	3.3	00	2.17	2.22

The above table presents the mean score of indicators observed ranging from 2.13 to 2.50, whereas mean of means for three observations ranges from 2.14 to 2.33 showing that all skills observed were exhibited at slightly evident to somewhat evident. The prospective teachers' display of flexibility of IP & S were observed low. Whereas it was also observed that they focused on use of AV Aids and rated the statement better as compared to others.

Overall, it highlights that prospective teachers exhibited K & U of IP & S which were slightly evident on Likert scale displaying low performance while teaching in actual classroom setting.

The next observed component comprised of four indicators related to dispositions about IP & S and were rated at five-point scale. The table below presents frequency, percentage and mean score of each indicator.

Table 4.37:
Observable Components of Dispositions of Prospective Teachers in Instructional Planning and Strategies

Statements	CE f & %	FE f & %	SmE f & %	SE f & %	NE f & %	Mean	Mean of Means
Promoted critical thinking (O1)	00	20	10	00	00	2.33	
(O2)	00	16	14	00	00	2.47	2.31
	00	53.3	46.7	00	00		
(O3)	03	21	05	01	00	2.13	
	10.0	70.0	16.7	3.3	00		
Adopted problem solving methods (O1)	00	16	14	00	00	2.47	
(O2)	00	53.3	46.7	00	00		
	00	21	09	00	00		
(O3)	00	70.0	30.0	00	00	2.30	2.33
	03	18	08	01	00		

	10.0	60.0	26.7	3.3	00	2.23	
Adopted collaborative	00	21	09	00	00	2.30	
& cooperative	00	70.0	30.0	00	00		
learning through	04	18	06	02	00		
teamwork activities	13.3	60.0	20.0	6.7	00		
(O1)	03	21	03	03	00	2.20	2.23
(O2)	10.0	70.0	10.0	10.0	00	2.20	
(O3)							
Resolved classroom	00	22	08	00	00		
problems (O1)	00	73.3	26.7	00	00	2.27	
	04	18	08	00	00		
(O2)	13.3	60.0	26.7	00	00		
	03	21	03	03	00	2.13	2.20
(O3)	10.0	70.0	10.0	10.0	00	2.20	

Table 4.37 shows the observations in dispositions in IP & S is the selection of those methods and techniques which aim at promoting 21st century learning skills. Adopting these methods that could promote critical thinking & problem-solving methods; collaborative and cooperative learning through teamwork activities; and measures that resolved classroom problems.

Components of dispositions about IP & S was observed in actual classroom. There were four components and its mean scores ranged from 2.13 to 2.47, whereas mean of means for the three observations ranged from 2.20 to 2.33. It indicates that all skills observed were exhibited at slightly evident to somewhat evident. The prospective teachers' level of dispositions of IP & S were observed low. Resolving classroom problems was rated low whereas it was observed that prospective teachers were slightly better in promoting critical thinking.

The sixth observed component comprised of five indicators related to P & S about IP & S were rated at five-point scale. The table below presents frequency, percentage and mean of each indicator observed thrice.

Table 4.38:

Observable Components of Performance and Skill of Prospective Teachers in Instructional Planning and Strategies

Statements	CE f & %	FE f & %	SmE f & %	SE f & %	NE f & %	Mean	Mean of Means
Teaching process is well defined (O1)	03 10.0	17 56.7	10 33.3	00 00	00 00	2.23	
(O2)	04 13.3	18 60.0	07 23.3	01 3.3	00 00	2.17	2.30
(O3)	00 00	63.3 19	23.3 07	13.3 04	00 00	2.50	
Taught according to students' level & culture (O1)	02 6.7	20 66.7	08 26.7	00 00	00 00	2.20	
(O2)	03 10.0	21 70.0	05 16.7	01 3.3	00 00		
(O3)	03 10.0	20 66.7	07 23.3	00 00	00 00	2.13 2.13	2.17
Assigned activities & assignments for extended learning (O1)	02 6.7	21 70.0	07 23.3	00 00	00 00	2.17	
(O2)	03 10.0	18 60.0	08 26.7	01 3.3	00 00		
(O3)	02 6.7	21 70.0	07 23.3	00 00	00 00	2.23 2.17	2.19
Enhanced students' interest (O1)	00 00	20 66.7	10 33.3	00 00	00 00	2.33	
(O2)	03 00	21 20	03 10	03 00	00 00		
(O3)	00 00	66.7 66.7	33.3 33.3	00 00	00 00	2.20 2.33	2.29
Utilised available resources and material for teaching (O1)	00 00	16 53.3	14 46.7	00 00	00 00	2.47	
(O2)	03 10.0	21 70.0	03 10.0	03 10.0	00 00	2.20	2.38
(O3)	00 00	16 53.3	14 46.7	00 00	00 00	2.47	

The above table 4.38 presents rating of P & S of prospective teachers about IP & S observed in actual classroom, there were five components, mean scores of five components were between 2.13 and 2.50, whereas mean of the means of three observations ranged from 2.17 to 2.38 showing that all skills observed were exhibited at slightly evident to somewhat evident. The prospective teachers' level of P & S of IP & S were observed low as compared to self-rating.

The third standard observed was of assessment which was observed by using four indicators one for K & U, two for dispositions and one for P & S. Analysis of all four components is presented in the table below. It presents frequency, percentage and mean score of each indicator along with mean of three observations.

Table 4.39:

Observable Components of Knowledge & Understanding, Dispositions and Performance & Skill of Prospective Teachers about Assessment

Statements	CE f & %	FE f & %	SmE f & %	SE f & %	NE f & %	Mean	Mean of Means
Implemented formative classroom assessment. (O1)	02	22	05	01	00	2.17	
	6.7	73.3	16.7	3.3	00		
	03	20	07	00	00	2.13	2.07
(O2)	10.0	66.7	23.7	00	00		
(O3)	06	20	04	00	00	1.93	
Revised weak areas of students learning. (O1)	20.0	66.7	13.3	00	00		
	00	25	05	00	00	2.17	
	00	83.3	16.7	00	00		
(O2)	02	21	07	00	00		
(O3)	6.7	70.0	23.3	00	00	2.17	2.09
Revised constructive feedback from students. (O1)	06	20	04	00	00		
	20.0	66.7	13.3	00	00	1.93	
	00	25	05	01	00	2.17	
(O2)	00	83.3	16.7	00	00		
(O3)	00	20	10	00	00		
Prepared variety of tests & observation system for evaluating students learning. (O1)	00	66.7	33.3	00	00		
	05	20	02	03	00	2.33	2.20
	16.7	66.7	6.7	10.0	00	2.10	
(O2)	00	21	07	02	00	2.37	
	00	70.0	23.3	06.7	00		
	00	16	14	00	00		
(O3)	00	53.3	46.7	00	00	2.47	2.35
Prepared variety of tests & observation system for evaluating students learning. (O1)	03	21	03	03	00		
	10.0	70.0	10.0	10.0	00	2.20	
	00	21	07	02	00	2.37	
(O2)	00	70.0	23.3	06.7	00		
(O3)	00	16	14	00	00		
Prepared variety of tests & observation system for evaluating students learning. (O1)	00	53.3	46.7	00	00	2.47	2.35
	03	21	03	03	00		
	10.0	70.0	10.0	10.0	00	2.20	

Above table 4.39 presents ratings of prospective teachers about the standard of assessment when they were observed in the actual classroom during teaching practice. The mean score of K & U is 2.07 whereas dispositions is 2.20. The P & S of prospective teachers about assessment was rated as 2.35 which is high as compared to all other indicators related to assessment standard of. The skills observed were exhibited at slightly evident to somewhat evident.

Overall, it was observed that the level of developed competencies was slightly evident on Likert scale indicating low performance in almost all the three standards observed.

SECTION-C: INFERENTIAL ANALYSIS

4.7 Objective 4: To identify the differences between perceived and developed pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers.

The fourth objective of the study was to identify differences between perceived and developed pedagogical competencies of the prospective teachers. In order to address this objective, I bifurcated it into three sub null hypotheses according to the composition of each NPSTs. Analysis of sub null hypotheses meant to be the main hypotheses. For hypotheses testing paired sample t-test on the score of self-reported scale and skills observed in actual classroom were used. Statistical summary for three standards and sub standards is presented below.

H₀₁: There is no difference between perceived and developed pedagogical competencies of prospective teachers with regards to Subject Matter Knowledge.

In order to compare NPSTs first standard - S M K in the components- K & U; Dispositions; and P & S were compared by using paired sample t-test on perceived (Self Rated Score) and developed (Average of three Observations) competencies. Summary of statistics is given below in tables.

Table 4.40:

H_{01a}: There is no difference between perceived and developed pedagogical competencies of prospective teachers in knowledge and understanding with regards to Subject Matter Knowledge

Variables	N	Df	Means	SD	MD	t-value	Sig.
Perceived	30		10.60	2.93			
S M K&U		29			1.87	3.00	0.005
Developed	30		8.73	2.09			
S M K&U							

Level of Significance 0.05

The mean difference (1.87) is statistically significant at 0.05 level of significance, means that H_{01a} was rejected, indicating that there was difference between perceived and developed K & U. Mean value of developed competency (8.73) was low as compared to perceived competency (10.60) regarding K & U of S M K.

Table 4.41:

H_{01b}: There is no difference between perceived and developed pedagogical competencies of prospective teachers in dispositions with regards to Subject Matter Knowledge

Variables	N	Df	Means	SD	MD	t-value	Sig.
Perceived	30		25.6	3.08			
SM Dis		29			16.61	25.08	0.000
Developed	30		8.99	2.21			
SM Dis							

Level of Significance 0.05

The mean difference (16.61) is statistically significant at 0.05 level of significance with t-value = 25.08 that allowed to reject H_{01b} highlighting that there was difference between perceived and developed dispositions in S M K. Mean value of developed competency (8.89) is low as compared to perceived competency mean (25.6).

Table 4.42:

H_{01c}: There is no difference between perceived and developed pedagogical competencies of prospective teachers in Performance and skills with regards to Subject Matter Knowledge.

Variables	N	Df	Means	SD	MD	t-value	Sig.
Perceived	30		8.63	0.89			
SM P&S		29			4.22	18.76	0.000
Developed	30		4.41	1.08			
SM P&S							

Level of Significance 0.05

The mean difference (4.22) is statistically significant at 0.05 level of significance with t-value = 18.76, indicated that H_{01c} was rejected. It highlighting that there was difference between perceived and developed P & S in S M K. Mean value of developed competency (4.41) is much lower as compared to perceived competency mean (8.63).

Overall, all the three sub null hypotheses were rejected so, it indicated that “There is no difference between perceived and developed pedagogical competencies of prospective teachers with regards to S M K.” H₀₁ was rejected. The perceived competency of prospective teachers was significantly higher than the developed competency in S M K.

H₀₂: There is no difference between perceived and developed pedagogical competencies of prospective teachers with regards to Instructional Planning and Strategies.

In order to compare second standard - IP & S with its components, K & U, Dispositions and P & S were compared by using paired sample t-test on perceived (Self Rated Score) and Developed (Average of three Observations) competencies. Summary of statistics is given in table below.

Table 4.43:

H_{02a}: There is no difference between perceived and developed pedagogical competencies of prospective teachers in knowledge and understanding with regards to Instructional Planning and Strategies.

Variables	N	Df	Means	SD	MD	t-value	Sig.
Perceived	30		36.90	3.70			
IP&S K&U		29			21.2	20.38	0.000
Developed	30		15.70	3.60			
IP&S K&U							

Level of Significance 0.05

The mean difference (21.2) is statistically significant at 0.05 level of significance with t-value = 20.38 which allowed to reject H_{02a}. It informed that there was difference between perceived and developed P & S in IP & S. Mean value of developed competency (15.70) is much lower as compared to perceived competency mean (36.90).

Table 4.44:

H_{02b}: There is no difference between perceived and developed pedagogical competencies of prospective teachers in dispositions with regards to Instructional Planning and Strategies.

Variables	N	Df	Means	SD	MD	t-value	Sig.
Perceived	30		17.50	1.79			
IP&S Dis		29			8.42	18.09	0.000
Developed	30		9.08	1.84			
IP&S Dis							

Level of Significance 0.05

The mean difference (8.42) is statistically significant at 0.05 level of significance with t-value = 18.09, means that hypothesis H_{02b} rejected. It indicates that there was difference between perceived and developed dispositions level in IP & S. Mean value of

developed competency (9.08) is lower as compared to perceived competency mean (17.50).

Table 4.45: H_{02c}:

There is no difference between perceived and developed pedagogical competencies of prospective teachers in Performance and skills with regards to Instructional Planning and Strategies.

Variables	N	Df	Means	SD	MD	t-value	Sig.
Perceived	30		29.13	2.86			
IP&S P&S		29			15.41	18.45	0.000
Developed	30		13.72	2.88			
IP&S P&S							

Level of Significance 0.05

The hypothesis H_{02c} was rejected with mean difference (15.41) that is statistically significant at 0.05 level of significance with t-value = 18.45. It indicates that there was difference between perceived and developed P & S in IP & S. Mean value of developed competency (13.72) is much lower as compared to perceived competency mean (29.13).

Overall, all the three sub null hypotheses were rejected so, it indicated that hypothesis H₀₂“There is no difference between perceived and developed pedagogical competencies of prospective teachers with regards to IP & S.” was rejected. The perceived competency of prospective teachers was significantly higher than the developed competency in IP & S.

H₀₃: There is no difference between perceived and developed pedagogical competencies of prospective teachers with regards to Assessment.

The comparison of third standard Assessment was performed based on its three components – K & U; Dispositions and P & S using paired sample t-test on perceived

(Self Rated Score) and Developed (Average of three Observations) competencies.

Summary of statistics is given in below tables.

Table 4.46:

H_{03a}: There is no difference between perceived and developed pedagogical competencies of prospective teachers in knowledge and understanding with regards to Assessment.

Variables	N	Df	Means	SD	MD	t-value	Sig.
Perceived	30		4.10	0.85			
A K&U		29			2.02	14.06	0.000
Developed	30		2.08	0.53			
A K&U							

Level of Significance 0.05

The mean difference (2.02) is statistically significant at 0.05 level of significance with t-value = 14.06 allowed to reject null hypothesis H_{03a}, indicated that there was difference between perceived and developed K & U in Assessment. Mean value of developed competency (2.08) is lower as compared to perceived competency mean (4.10).

Table 4.47:

H_{03b}: There is no difference between perceived and developed pedagogical competencies of prospective teachers in dispositions with regards to Assessment

Variables	N	Df	Means	SD	MD	t-value	Sig.
Perceived	30		12.70	2.14			
A Dis		29			8.41	20.62	0.000
Developed	30		4.29	0.90			
A Dis							

Level of Significance 0.05

The mean difference (8.41) is statistically significant at 0.05 level of significance with t-value = 20.62, indicated rejection of null hypothesis H_{03b}, means that there was difference between perceived and developed dispositions level in Assessment. Mean

value of developed competency (4.29) is lower as compared to perceived competency mean (12.70).

Table 4.48:

H_{03c}: There is no difference between perceived and developed pedagogical competencies of prospective teachers in Performance and skills with regards to Assessment.

Variables	N	Df	Means	SD	MD	t-value	Sig.
Perceived	30		8.57	1.22			
A P&S		29			6.22	24.61	0.000
Developed	30		2.34	0.49			
A P&S							

Level of Significance 0.05

The mean difference (6.22) is statistically significant at 0.05 level of significance with t-value = 24.61 means that null hypothesis H_{03c} rejected. It highlighting that there was difference between perceived and developed P & S in Assessment. Mean value of developed competency (2.34) is lower as compared to perceived competency mean (8.57).

Overall, all the three sub null hypotheses were rejected so, it indicated that hypothesis H₀₃ “There is no difference between perceived and developed pedagogical competencies of prospective teachers in K & U with regards to Assessment.” was rejected. The perceived competency of prospective teachers was significantly higher than the developed competency in Assessment.

The mean score of developed competencies is much lower in all the sub-standards of professional development in three standards S M K; IP & S; and Assessment. It indicates that there is a gap between perception and competency of prospective teachers.

4.8 Objective No 5: To compare gender-based difference regarding perceived pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers.

The fifth objective of the study was to compare the perceived pedagogical competencies across gender, there were three standards - S M K; IP & S; and Assessment. The data from self-reported scale was collected and analyzed using independent sample t-test to investigate that whether there is a difference between perceived competencies of male and female prospective teachers. Statistical summary for three standards is presented in below tables.

The first standard - S M K was assessed by using different indicators of three components of each NPSTs i.e., K & U; Dispositions; and P & S). Data from self-reported scale were accumulated and independent t-test was run to check the significance of the difference between perceived pedagogical competencies in S M K. The summary of statistics is given in table below.

Table 4.49: H₀₄:

There is no difference between perceived pedagogical competencies of male and female prospective teachers in Subject Matter Knowledge

Categories	N	Df	Means	SD	t-value	Sig.
Female	188		74.83	4.54		
		294			0.063	0.95
Male	108		74.80	4.20		

Level of Significance 0.05

The above table indicates that p-value (0.95) is greater than 0.05, highlighting that although means are different but this difference is not significant. It means that null hypothesis H₀₄ “There is no difference between perceived pedagogical competencies of

male and female prospective teachers in S M K.” was accepted. It shows that there was no difference of perception in S M K across gender.

NPSTs of IP & S was measured by using different indicators of the components- K & U; Dispositions; and P & S. Data from questionnaires were accumulated and independent t-test was run to check the significance of the difference between perceived pedagogical competencies. The summary of statistics is given in table below: -

Table 4.50: H₀₅:

There is no difference between perceived pedagogical competencies of male and female prospective teachers in Instructional Planning and Strategies

Categories	N	Df	Means	SD	t-value	Sig.
Female	188		112.29	5.26		
		294			0.535	0.593
Male	108		112.63	5.13		

Level of Significance 0.05

The above table indicates that p-value (0.593) is greater than 0.05, highlighting that although means are different but this difference is not significant, therefore H₀₅accepted. It shows that there was no difference of perception in IP & S across gender.

Standard of assessment was also measured by using different indicators of sub-standards – K & U; Dispositions; and P & S. Data from self-reported scale were accumulated and independent t-test was run to check the significance of the difference between perceived pedagogical competencies. The summary of statistics is given in table below.

Table 4.51: H₀₆:

There is no difference between perceived pedagogical competencies of male and female prospective teachers in Assessment.

Categories	N	Df	Means	SD	t-value	Sig.
Female	188		81.98	3.86		
		294			0.170	0.865
Male	108		82.06	4.07		

Level of Significance 0.05

The above table indicates that p-value (0.865) is greater than 0.05, highlighting that although means are different but this difference is not significant to reject H₀₆. It shows that there was no difference of perception in assessment across gender.

Overall, it was found that gender is not source of variation in the perception of pedagogical competencies.

4.9 Objective No.6: To compare gender-based difference regarding developed pedagogical competencies of prospective teachers in the Light of National Professional Standards for Teachers.

The sixth objective of the study was to compare the developed competencies across gender, there were three standards - S M K, IP & S and Assessment. The data from observations were analyzed using independent sample t-test to investigate that whether there is a difference between developed competencies of male and female prospective teachers. Statistical summary for three standards is presented below.

The Subject matter NPSTs was observed using different indicators of three components i.e., K & U, Dispositions and P & S. Data from three observations were accumulated and independent t-test was run to check the significance of the difference

between developed competencies in subject matter. The summary of statistics is given in table below: -

Table 4.52: H₀₇:

There is no difference between developed pedagogical competencies of male and female prospective teachers in Subject Matter knowledge

Categories	N	Df	Means	SD	t-value	Sig.
Female	18	28	68.28	16.95	0.793	0.434
Male	12		63.28	14.07		

Level of Significance 0.05

The above table indicates that p-value (0.434) is greater than 0.05, highlighting that although means are different, but this difference is not significant to reject null hypothesis H₀₇. It shows that gender is not a source of variation in development of competency of subject matter.

The second NPSTs (IP & S) was observed using different indicators of three components i.e. K & U; Dispositions; and P & S. Data from three observations were accumulated and independent t-test was run to check the significance of the difference between developed competencies in IP & S standard of NPSTs. The summary of statistics is given in table below;

Table 4.53:

H₀₈: There is no difference between developed pedagogical competencies of male and female prospective teachers in Instructional Planning and Strategies

Categories	N	Df	Means	SD	t-value	Sig.
Female	18	28	116.94	25.60	0.384	0.704
Male	12		113.33	24.61		

Level of Significance 0.05

The above table indicates that p-value (0.704) is greater than 0.05, highlighting that although means are different but this difference is not significant. Therefore, null hypothesis H_{06b} was accepted. It shows that gender is not a source of variation in development of competency of IP & S.

The third NPSTs (Assessment) was also observed using indicators of the three components (K & U, Dispositions and P & S). Data from three observations were accumulated and independent t-test was run to check the significance of the difference between developed competencies in Assessment. The summary of statistics is given in table below.

Table 4.54:

H₀₉: There is no difference between developed pedagogical competencies of male and female prospective teachers in Assessment.

Categories	N	Df	Means	SD	t-value	Sig.
Female	18		26.83	6.21		
		28			0.836	0.41
Male	12		25.08	4.54		

Level of Significance 0.05

The above table indicates that p-value (0.41) is greater than 0.05, highlighting that although means are different but this difference is not significant to reject null hypothesis H_{09} . It shows that gender is not a source of variation in development of competency of Assessment.

4.10 Overall Results

The overall results found that developed pedagogical competencies are not affected by gender and it is not a source of variation.

Table 4.55:*Summary of Hypotheses Testing*

S.No	Hypotheses	Accepted/Rejected
1.	<i>H₀1</i> There is no difference between perceived and developed pedagogical competencies of prospective teachers with regards to Subject Matter Knowledge.	Rejected
2.	<i>H₀1a</i> There is no difference between perceived and developed pedagogical competencies of prospective teachers in knowledge and understanding with regards to Subject Matter Knowledge.	Rejected
3.	<i>H₀1b</i> There is no difference between perceived and developed pedagogical competencies of prospective teachers in dispositions with regards to Subject Matter Knowledge.	Rejected
4.	<i>H₀1c</i> There is no difference between perceived and developed pedagogical competencies of prospective teachers in Performance and skills with regards to Subject Matter Knowledge.	Rejected
5	<i>H₀2</i> There is no difference between perceived and developed pedagogical competencies of prospective teachers with regards to Instructional Planning and Strategies.	Rejected
6.	<i>H₀2a</i> There is no difference between perceived and developed pedagogical competencies of prospective teachers in knowledge & understanding with regards to Instructional Planning and Strategies.	Rejected
7.	<i>H₀2b</i> There is no difference between perceived and developed pedagogical competencies of prospective teachers in dispositions with regards to Instructional Planning and Strategies.	Rejected
8.	<i>H₀2c</i> There is no difference between perceived and developed pedagogical competencies of prospective teachers in Performance and skills with regards to Instructional Planning	Rejected

- and Strategies.
9. **H₀₃** There is no difference between perceived and developed pedagogical competencies of prospective teachers with regards to Assessment. Rejected
 10. **H_{03a}** There is no difference between perceived and developed pedagogical competencies of prospective teachers in knowledge and understanding with regards to Assessment. Rejected
 11. **H_{03b}** There is no difference between perceived and developed pedagogical competencies of prospective teachers in dispositions with regards to Assessment. Rejected
 12. **H_{03c}** There is no difference between perceived and developed pedagogical competencies of prospective teachers in Performance and skills with regards to Assessment. Rejected
 13. **H₀₄** There is no difference between perceived pedagogical competencies of male and female prospective teachers in Subject Matter Knowledge. Accepted
 14. **H₀₅** There is no difference between perceived pedagogical competencies of male and female prospective teachers in Instructional Planning and Strategies. Accepted
 15. **H₀₆** There is no difference between perceived pedagogical competencies of male and female prospective teachers in Assessment. Accepted
 16. **H₀₇** There is no difference between developed pedagogical competencies of male and female prospective teachers in Subject Matter Knowledge. Accepted
 17. **H₀₈** There is no difference between developed pedagogical competencies of male and female prospective teachers in Instructional Planning and Strategies. Accepted
 18. **H₀₉** There is no difference between developed pedagogical competencies of male and female prospective teachers in Assessment. Accepted
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4.11 Summary

In conclusion, this section of thesis elaborated the whole data analysis with its complete details in the form of qualitative content analysis, descriptive (Percentage, Frequency and Mean values) and inferential statistics (t-test,). Therefore, a comprehensive analysis regarding pedagogical competencies of prospective teachers was explained in the form of tables in this section on the basis of objectives, research questions and hypotheses.

Table 4.56 *Summary of Analysis (N=296/30)*

Objectives	Research Questions	Hypotheses	Analysis	Table No
<p>1.To explore the pedagogical competencies integrated in the course guide books of B. Ed (Hons) program with reference to National Professional Standards for Teachers i.e., subject matter knowledge, instructional planning & strategies and assessment.</p> <p>2.To assess the level of perceived pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers i.e., subject matter knowledge, instructional planning & strategies, and assessment.</p> <p>3.To assess the level of developed pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers i.e. subject matter knowledge, instructional planning & strategies, and assessment.</p>	<p>To what extent the pedagogical competencies are integrated in the course guide books of B. Ed (Hons) program with reference to National Professional Standards for Teachers?</p>	NA	Content Analysis	4.1 - 4.10 4.11 – 4.19 4.20 – 4.23
	<p>What is the level of perceived Pedagogical Competencies of prospective teachers in the light of National Professional Standards for Teachers?</p>	NA	Frequency, Percentage, Mean	4.24 – 4.32
	<p>What is the level of developed Pedagogical Competencies of prospective teachers in the light of National Professional Standards for teachers?</p>	NA	Frequency, Percentage, Mean	4.33 – 4.39

<p>4.To identify the differences between perceived and developed pedagogical competencies of prospective teachers in the light of national professional standards for teachers.</p>	NA	<p>H₀₁, H₀₂, H₀₃ : There is no difference between perceived and developed pedagogical competencies of prospective teachers with regards to Subject Matter Knowledge, Instructional Planning & Strategies & Assessment.</p>	<p>Paired Sample t-test</p>	<p>4.40 – 4.48</p>
<p>5.To compare gender-based difference regarding perceived pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers.</p>	NA	<p>H₀₄, H₀₅, H₀₆ : There is no difference between perceived pedagogical competencies of male and female prospective teachers in Subject Matter Knowledge, Instructional Planning and Strategies & Assessment.</p>	<p>Independent sample t-test</p>	<p>4.49 – 4.51</p>
<p>6.To compare gender-based difference regarding developed pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers.</p>	NA	<p>H₀₇, H₀₈, H₀₉ : There is no difference between developed pedagogical competencies of male and female prospective teachers in Subject Matter Knowledge, Instructional Planning and Strategies & Assessment.</p>	<p>Independent sample t-test</p>	<p>4.52 – 4.54</p>

CHAPTER 5

SUMMARY, FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The key emphasis of present study was to analyze the pedagogical competencies of prospective teachers of public sector universities of Province Punjab in the light of NPSTs. The primary objectives of this study were; to explore the pedagogical competencies integrated in the course guide books of B. Ed (Hons) program with reference to NPSTs; to assess the level of perceived pedagogical competencies of prospective teachers in the light of NPSTs; to assess the level of developed pedagogical competencies of prospective teachers in the light of NPSTs; to identify the differences between perceived and developed pedagogical competencies of prospective teachers in the light of NPSTs; to compare gender-based difference regarding perceived pedagogical competencies of prospective teachers and to compare gender-based difference regarding developed pedagogical competencies of prospective teachers. The study adopted an Exploratory Sequential mixed methods research design. The data was collected through content analysis of course guide books and self-developed tools. NPSTs (2009) were taken as a base to develop the tools. Two hundred & ninety-six (296) prospective teachers of B. Ed (Hons) program of public sector universities of Punjab were selected by using simple random sampling technique, to get the data through self-reported scale. Keeping in view the objectives of the study thirty prospective teachers were being observed through an observation sheet. Data were analyzed through content analysis, mean, percentages, and t-tests.

5.2 Findings

The data- gathering and analysis processes for this study revealed the findings given below:

5.2.1. Objective 1: To explore the pedagogical competencies integrated in the course guide books of B. Ed (Hons) program with reference to National Professional Standards for Teachers i.e., Subject Matter Knowledge, Instructional Planning & Strategies and Assessment.

1. NPSTs ‘Subject Matter Knowledge (SMK)’

The research study sought to align English language course guides of B. Ed (Hons) program with selected standards shortlisted from document of NPSTs (2009). The course guide books of B. Ed (Hons) program were developed to incorporate NPSTs for prospective teachers in Pakistan. Hence findings based on content analysis of the study are given below;

- i. The content analysis related to ‘Teachers Knowledge and Understanding’ of National Curriculum Framework found that B. Ed (Hons) English Language Teaching (ELT) course guides are developed in accordance with National Curriculum Framework (NCF) for English - 2006 (Book 1, 2, 3 & 4, p.iii). NCF is the epitome of English Language Teaching (ELT) course and provides the basic structure for B. Ed (Hons) curriculum. Likewise, the curriculum for B. Ed (Hons) has been devised taking guideline from NPSTs and NCF for English (2006). It aims at achieving ELT objectives through standards-based learning objectives which is basically competency-based approach to teaching of English language and striving to achieve quality in teaching learning process through trained and qualified teachers.

- ii. The content analysis found that fundamental concepts and theories related to English language teaching were included in B. Ed (Hons) curriculum. The English curriculum was supported by major ELT theories and concepts like Grammar Translation Method (GTM); Behaviorism and the Audio-lingual Method; the Natural Approach; the Interactionist Approach and Communicative Language Teaching (CLT). The course guides included traditional as well as latest ELT approaches in the curriculum to develop the four basic language skills of students. Besides, Bloom's Taxonomy was also included in devising ELT course guides. The traditional (GTM) was assessed and its strengths have been retained. GTM ignored speaking skill of students and laid emphasis on reading and writing skills (Richards and Rodgers, 2001). However, the course guides stressed more emphasis on latest trend in CLT approach as it boosts integrated approach. The findings revealed that the curriculum adopted major historical theories of language teaching as well as focusing on the latest theories.
- iii. The findings indicate that English language teaching has an ever evolving and expanding nature, Therefore, it adapts to newest trends in ELT owing to research. The course is vibrant and has incorporated the latest approach of CLT in ELT as it is integrated and blended in curriculum of B. Ed (Hons). The course guide books include interactive and communicative approach in the form of resource material, handouts and ELT activities that correspond CLT approach. The CLT requires an integrated approach to language learning of four basic skills of language which has been incorporated in the curriculum.

- iv. The findings of content analysis showed that new ideas are integrated with the new concepts in CLT approach which are based on outcome related competency of English language teaching. This new approach in ELT is aligned with student-centered learning approach and constructivist theory of learning which promotes teamwork spirit, conducive environment and spirit of collaborative learning among students. The new CLT approach makes students adaptive, flexible, critical thinkers, problem solvers, creative, innovative, confident and participative. The course guide fully integrates all these basic ingredients in ELT curriculum. It also develops the ability to understand the importance of achieving proficiency in basic skills of listening, reading, writing and speaking skills.
- v. The findings of content analysis of B. Ed (Hons) program reveal that emerging concepts, theories and trend in English language research worldwide has been included in ELT curriculum. It incorporates the newest approaches, theories, concepts and trends as a result of ongoing research outcomes. Primarily it includes the in vogue CLT methodology and approach which emerged as a result of various language learning concepts and innovative techniques of teaching language. It integrates all four language skills of language by focusing on an integrated, communicative, interactive and embedded learning based on latest research in ELT. It encourages students to use computer-based information technology in language learning. CLT focuses on students' habit formation in use of English language in routine activities of class. It also discourages use local languages or vernaculars in the class. The findings of Lai-Mei & Seyedeh (2017) confirm that active involvement of students' expression is

beneficial in making them learn English. The curriculum of English for B. Ed (Hons) is useful in the perspective of Pakistan where students are put to practical classroom teaching experience and orientate their ELT knowledge according to the latest research. The students experience problem when they find easy access to mother-tongue which hamper English language acquisition (Tuan & Mai, 2015).

- vi. The contents related to detailed knowledge of English subject was thematically analysed and it was found that this aspect was fully incorporated in B. Ed (Hons) English course guides. ELT related knowledge is presented in detail and at length. The course contents are developed in sequential and logical order. The ELT content adopts CLT approach in an integrated manner in both oral and written communication in teaching English language. Teaching of grammar is embedded text and reinforced in exercises and several other activities. Grammar is not taught isolation rather it is utilized in text lessons like piece of poetry, prose, drama, and narrations. The ELT course caters for students age, level and background knowledge. It is designed to move forward in order of simple to complex. Its primary focus is on developing students' functional and communicative English ability in expression. The four language skills are simultaneously dealt and English as a medium of instruction is used in classroom teaching. The course adopts diagnostic, summative and formative assessment techniques in language assessment and evaluation.
- vii. The content analysis in terms of relationship of English subject to other disciplines and its utility was not covered in the English course guides.

- viii. The content analysis pertaining to the relationship of reading and writing principles in English subject found that B. Ed (Hons) syllabus contained contents which focused on improving students reading and writing skills besides listening and speaking skills. The aim of ELT course is to master four language skills comprehensively. To achieve this objective, the course has developed lessons containing exercises and practices related to attaining four language skills in all units. However, the course lacks establishing a relation between reading and writing although the four language learning skills are addressed separately in detail.

Ur (2000), termed speaking as the single most important language skill which is very vital for making communication meaningful and effective. Speaking is a productive skill and its learning indicates substantial impact on attainment of other language skills. Vocabulary development and learning correct grammar are two aspects related to speaking skills having direct bearing on written expression of learners. Therefore, the course guide books, guide students in helping them express their feelings, sentiments, thinking through narrating stories, making requests, discussions and useful functions of language. Speaking is also abundantly used in variety of ways outside the classroom environment as well.

1. NPSTs ‘Instructional Planning & Strategies (IP&S)’

The content analysis associated with the second NPSTs maintains nine points. The NPSTs document was cross examined for presence or absence in English course guide books of B. Ed (Hons) program.

- i. The content analysis of B. Ed (Hons) English ELT course were found to specify in detail aims, goals and objectives of the course and each lesson. The course outcomes are specified right in the outset of the course guide

books. The course expected outcomes aimed at achieving the aims and objectives of CLT by focusing on social interaction, correct use of grammar, pronunciation and use of active vocabulary in a variety of text description. Every unit of each course has its peculiar learning outcomes. These learning outcomes have adopted student-centered pedagogy of language learning.

- ii. The B. Ed (Hons) English course was found to fully address the acquisition of reading and writing skills of students. The ELT curriculum lays particular emphasis on the linkage and dependence of reading and writing skills. Reading and writing skills are developed by adopting integrated and interactive approach in ELT course guides. Since reading and writing reinforce each other therefore it develops the abilities of students in an interactive environment of conducting various activities. Fostering improvement in reading and writing skills necessitates exercises, text comprehension, grammar and communicative language skills.
- iii. The course contents on availability of appropriate resources and materials including the use of instructional technology for instructional planning were viewed to promote students' attention and thinking. Relevant ELT material for this purpose is selected from multiple sources including books, journals, websites sources, etc. The use of technology in imparting instructional technology including the use of internet websites has been fully utilized in developing and selection of the course material. The lesson text, practices, activities and exercises are made interesting, motivating, appealing and engaging to help students to generate critical thinking and inculcate problem solving skills. Dull grammatical topics are made

interesting through innovative instructional methodology involving technology. The curriculum contains such material, text, exercises, activities and resources for students' learning that cultivate critical thinking. It encourages students to utilise internet sources for all these activities. The course guides cite several website sources for extended learning of students.

- iv. The findings related to IP & S based on students' needs, development progress and prior knowledge were found fully incorporated. The course progression was gradually from simple to complex to develop students' competence in language learning skills. The instructional strategies were so presented that made students proficient and confident to express and communicate with accurate use of grammar. The course guides are developed on constructivist learning approach which gives importance to students' prior learning. Prospective teachers are trained in ELT pedagogical competency to develop skills necessary for a professional teacher. Students are taught to master integrating practical activities in the development of language skills with matching pedagogies.
- v. The content analysis regarding the techniques for developing instructional method, materials and the environment to help students learn English language revealed that the syllabus provides various learning opportunities to prospective teachers to develop ELT related pedagogies and techniques for student learning. This aspect requires teachers to keep an interactive method with students in verbal and written expression which has been fully addressed. The contents are developed in a logical sequence moving from simple to difficult. Students are instilled with confidence, exposure

and motivation to interact socially and provided an environment favorable to develop interpersonal communication skills. The courses guide books incorporate effective pedagogy and techniques for students' learning. Similarly, the curriculum is so designed which endorses to encourage, motivate and engage students to develop reading habit.

Multiple learning techniques are part of the syllabus which includes punctuation, structure of sentences, change of narration, correct grammatical sentences, writing report, dialogues, and creative story writing. The course has employed techniques to encourage students actively participate in activities like asking questions, share stories, making and practicing presentations delivering techniques. The hallmarks of these activities are based in supportive, collaborative and cooperative learning environment. The course involves and critically evaluates the major ELT approaches, the Grammar Translation Method (GTM), the Audio-lingual method, the Natural and the Interactionist method. It also teaches prospective teachers to use any ELT theory or a combination of them according to classroom requirements. The newest CLT method of ELT has been extensively used in the course. CLT method is task oriented and based on a number of activities held in interactive pairs and groups to promote communication skills. The course fully addresses instructional methods and techniques along with integrated and contextualized material in language learning.

- vi. The contents were found to include international approaches and the use of various technologies, to promote thinking and understanding in the English language course guides designed for B. Ed (Hons). It consists of two parts i.e., international approaches and use of technologies in ELT; and its effect upon students thinking and understanding. The course adopts internationally recognized CLT methodology which encourages the use of

ICT in ELT. The ELT course major area is preparing students for social communication, accurate use of grammatical structure, pronunciation learning and increasing active vocabulary in descriptive, narrative, and instructional texts. The syllabus aims at Classroom Language Routines (CLRs) practices and drills as a beneficial language learning tool in functional communication. Emphasis is laid on comprehension, communication skills, and use of correct vocabulary and grammatical usage. As it adopts student centered approach so teachers act as facilitators. The course found research based and practical approach in teaching ELT. Adaptation of CLT methodology develops fluency and accuracy in the use of L2. This course has included a blend of teacher-centered method of direct instructions and learner-centered method which is indirect instruction or inquiry-based learning methodology. Effective teachers are aware of various methods of teaching and select a single method or a combination of several methods to achieve objectives of a particular lesson.

The course implements promoting ICT use in order to promote thinking and understanding. The course guides promote extensive use of CDs, cassettes, computer, internet websites, recordings and use of other technologies to promote thinking and understanding. An extensive material on exercises, activities and work sheets are retrieved from internet sites. Students are encouraged to receive assistance from references, internet websites and e-books. Extended learning in the form of homework is assigned to instill habit of internet browsing for completing assignment and further study. In this connection BBC World Service (2011), Learning English and other internet-based sources are cited in the course guides. Besides CLT turns more productive due to its

comprehensive nature through an integrated approach to ELT by combining literature, grammar and four language skills, utilizing ICT in incorporating student centered, constructivist and activities-based teaching to develop critical thinking.

vii. The content showing aspect of the effect of out of school activities including homework in English course guides was found partially addressed. It was found that students were occasionally assigned out of class assignments and homework. This aspect has been partly addressed in the ELT course guides however the tasks and assignments are given keeping in view students' interests and are preferably internet based. Students' assignments are chosen to be innovative, creative and related to previous or upcoming lesson. These are checked subsequently according to a schedule by the instructor, graded and students are shown assignments to see their mistakes as part of bringing improvement in learning. The homework and assignments are kept in the form of portfolios. Students can revisit and refer back to their tasks as part of reflective process involved in teaching/learning. Assigning homework is part of the integrative learning in CLT context however the course guides contain limited extended learning. No homework is mentioned in Book-1.

viii. The content analysis relates to contents on the general methods of teaching and classroom management in ELT class were found to adopt CLT approach as the general method of teaching. Presently it is in practiced, favored and preferred all over the world. It prefers integrated approach of embedded learning of ELT to develop proficiency in four language skills; listening, speaking, reading, and writing. The demand of CLT necessitates activities based on pair and group work and active learning strategies, such

as role play, debates, presentations, and brainstorming. The course inspires teachers and students to use English as medium of instruction instead of using vernaculars. In case they face difficulty in communicating teachers are advised to use alternative strategies to overcome these difficulties. It helps students to become independent users of English language. The current course offers insights into the intricacies of teaching English through contextualized experiences, microteaching sessions, and more significantly by exposing teachers to research in ELT. The course also highlights issues and problems of ELT in pedagogy and class management in Pakistan.

- ix. It shows contents related to the special methods of teaching English discipline. The course guide is primarily designed to select, develop and adopt CLT teaching, integrated teaching, developing proficiency in four language skills, based on students' involvement in practical nature activities to learn functional English language. The English courses have adopted communicative syllabus and methodology to achieve learning outcomes of CLT. The special methods of teaching English is developing interactive pedagogical skills among students. Practical activities are integrated to develop four language skills with the pedagogies.

2. Assessment

NPSTs 'Assessment' in 'K & U' denotes analysis of B. Ed (Hons) course guide books.

- i. The contents related to the types of assessments were found included in course guides that evaluated students learning about knowledge, skills and ability in performance to support students' growth and development. The

assessment and evaluation of students covered different assessment types like criterion-referenced and norm-referenced instruments, traditional standardized and performance-based tests, observation systems and assessments of student work. The ELT course included activity-based assessment of students with the help of role play dialogues, writing, listening comprehension, letter writing, questionnaire and interviews. Assessment is utilized to further learning goals, learning objectives, learning targets, success criteria and formative assessment are important pillars of assessment components of the lesson. Coming over to the specifics of ELT assessment the guide books incorporate mostly formative assessment where students are tested as the teacher teaches. The ELT assessment is conducted through discrete-point method and integrative method.

- ii. The finding showed inclusion of content related to the results of assessment to evaluate and improve teaching and learning. The assessment tools and practices are appropriately given in the course guides. This course introduces prospective teachers to the purpose of assessment, prevailing assessment practices in schools, the tools used, procedures adopted and drawing a distinction between formative and summative assessment and the purpose of the two types of assessments. The assessment activities are aimed at achieving success in the learning objectives of the lesson. Teachers assess students' learning in classrooms by asking questions, by giving feedback on homework, conducting quizzes and tests. Teachers regularly assess students' learning at every step in an orderly manner. Teachers assess performance of students by assigning

presentations, inquiring, performing demonstrations, getting verbal and written responses and portfolios. The course guides content includes achievement tests which determine the level of acquired knowledge in a specific subject and assesses knowledge retained by students after the classes are delivered and activities held.

- iii. The content analysis findings on the aspect of measurement theory and assessment-related issues in ELT show that students are taught measurement theory and assessment related issues of validity and reliability concerns of scoring to reduce biasedness while constructing tests and procedures. Opinion of teacher may tend to become biased therefore, it is necessary to construct tests and procedures to reduce biasness and add validity, reliability to the scoring concerns. Since test scores help in educational decisions therefore actions are taken on the basis of interpretations of test scores. Interpretations and conclusions of test scores require to be valid and reliable. Test scores interpretation is done using frames of reference such as Norm-referenced frame of reference, Criterion-referenced frame of reference, Self-referenced frame of reference, other names for norm-referenced and criterion-referenced interpretations of students' scores on assessment tasks, Relative interpretations (comparable to norm-referenced interpretations), Absolute interpretations (comparable to criterion-referenced interpretations).

5.2.2

Objective 2: To assess the level of perceived pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers i.e., Subject Matter Knowledge, Instructional Planning & Strategies and Assessment.

- i. It was found that prospective teachers agreed with all statements. They agreed that competence in reading, writing and arithmetic skills is essential for any of the subject and rated this statement as high, whereas they rated the importance of knowledge for teaching of other subject as second most important aspect.
- ii. It was also found that prospective teachers' knowledge of emerging trends, theories and concepts in the subject need to be addressed in during teaching learning process. The prospective teachers were aware about importance of K & U, but they need more knowledge about latest trends and theoretical background of teaching methods (Table 4.24).
- iii. Table 4.25 highlighted that prospective teachers' preferred teaching in real life situation and they cater the needs and interests of students during teaching. Prospective teachers' high dispositions level with the S M K was also found.
- iv. It was found that prospective teachers' check prior knowledge of students by using appropriate means of inquiry and bring examples from daily life for concept clarity of students. Also, there were evidences that prospective teachers were confident about use of different skills in classroom (Table 4.26).
- v. Overall high levels of K & U, dispositions and P & S were found with regards to S M K.

- vi. Regarding K & U of IP & S, it was found that prospective teachers were aware of learning environments which can accelerate students learning and were able to promote learning through homework assignment and project work. They were also confident in selection of strategies, method and use of different AV aids. But their knowledge of aims and objectives was low (Table 4.27).
- vii. According to finding of the study the dispositions level of prospective teachers was high regarding IP & S for teaching purpose (Table 4.28).
- viii. P & S of prospective teachers for IP & S was found high and they considered themselves as competent. In their opinion they were skilled to give reflections on students learning subject to the strategies used for teaching in the class (Table 4.29).
- ix. This study found that K & U level of prospective teachers about assessment was high. Prospective teachers have knowledge about assessment techniques to be used for diagnosis and placement purposes. Also, they were of the opinion that the knowledge to improve the reliability and validity of the assessment tools is necessary (Table 4.30).
- x. It was found that the perception for use of continuous assessment for the purpose of students learning was high. Besides that, teachers also prefer to share the results of assessments with students and parents to improve teaching and learning process and provide solutions where needed (Table 4.31).
- xi. It was found that prospective teachers were in agreement that they are capable of using a variety of assessment techniques to identify learners' strength and weaknesses. But they still need practice in some areas of P &

S level about assessment such as engaging students in self-assessment (Table 4.32).

- xii. Overall, it was found that perception level of perspective teachers was high and they rated themselves as competent in all three standards namely:

Subject Matter Knowledge

Instructional Planning & Strategies

Assessment.

5.2.3

Objective 3: To assess the level of developed pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers i.e., Subject Matter Knowledge, Instructional Planning & Strategies and Assessment.

- i. The analysis highlighted that the understanding of S M K was rated high among prospective teachers but the adoption of latest approaches of teaching was lowest among the observed skills (Table 4.33).
- ii. It was found that the prospective teachers were not successful in engaging all the learners but they were capable of building students' confidence in communication skills (Table 4.34).
- iii. It was observed that prospective teachers were able to teach the content in more than one way to make students understanding easier but they rated the skill of developing link with previous knowledge through questioning and brain storming low (Table 4.35).
- iv. Prospective teachers were focused to use AV aids better than the other components but their instructional plans were not enough flexible. But they exhibited good understanding of knowledge and instructional planning (Table 4.36).

- v. This study observed that the level of dispositions of IP & S was observed low along with their capability to resolve classroom issues. The strength of prospective teachers was in promoting critical analysis in the learners (Table 4.37).
- vi. It was found that the P & S of prospective teachers about IP & S was low (Table 4.38).
- vii. Regarding assessment, it was found that the rate of P & S of prospective teachers about assessment was high as compared to the rate of dispositions about assessment. And the mean score of K & U was lowest among all (Table 4.39).
- viii. Overall, it was found that level of developed competencies was slightly evident in almost all the three standards observed.

5.2.4

Objective 4: To identify the differences between perceived and developed pedagogical competencies of prospective teachers in the light of National Professional standards for Teachers.

- i. The study showed that developed competency in K & U of prospective teachers about S M K is low as compared to the perceived competency in K & U of prospective teachers about S M K. Difference was found in competencies in K & U of prospective teachers (Table 4.40), and null hypothesis was rejected.
- ii. It was also found that developed competency in dispositions of prospective teachers about S M K is low as compared to the perceived competency dispositions of prospective teachers about S M K. There was a difference

between the competence dispositions of prospective teachers about S M K (Table 4.41).

- iii. The developed competency in P & S of prospective teachers about S M K is higher than the perceived competency in P & S of prospective teachers. The null hypothesis was rejected, that indicated difference in competencies in P & S of prospective teachers about S M K (Table 4.42).
- iv. Overall, all the three sub null hypotheses were rejected so, it indicated that “There is no difference between perceived and developed pedagogical competencies of prospective teachers with regards to Subject Matter Knowledge.” H01 was rejected.
- v. The perceived competency of prospective teachers was significantly higher than the developed competency in S M K.
- vi. The study showed that the mean value of developed competency was much lower as compared to mean value perceived competency in K & U of prospective teachers about IP & S (Table 4.43).
- vii. It was found in the study that there was a difference in perceived and developed competencies in dispositions of prospective teachers about IP & S. The mean value of developed competency was found lower than the perceived competency (Table 4.44) and null hypothesis was rejected.
- viii. The following study shows that the developed competency has lower value as compared to the perceived competency competencies in P & S of prospective teachers about IP & S. It means there is a difference between perceived and developed competencies in P & S of prospective teachers about IP & S (Table 4.45).

- ix. Overall, all the three sub null hypotheses were rejected so, it indicated that hypothesis Ho2 ‘There is no difference between perceived and developed pedagogical competencies of prospective teachers with regards to Instructional Planning and Strategies’ was rejected.
- x. The study showed that the null hypothesis was rejected and there was a difference between perceived and developed competencies in K & U of prospective teachers about assessment. The value of perceived competency was higher. (Table 4.46).
- xi. It was seen in the study that the null hypothesis was rejected which means there was a difference between perceived and developed dispositions level in Assessment. The developed competency was lower as compared to the perceived competency in dispositions of prospective teachers about assessment (Table 4.47).
- xii. The study found that the developed competency was lower as compared to the perceived competency in P & S of prospective teachers about assessment. Null hypothesis was rejected which means there was a difference between perceived and developed P & S in assessment. (Table 4.48).
- xiii. Overall, all the three sub null hypotheses were rejected so, it indicated that hypothesis Ho3 “There is no difference between perceived and developed pedagogical competencies of prospective teachers in knowledge and understanding with regards to Assessment.” was rejected. The perceived competency of prospective teachers was significantly higher than the developed competency in Assessment.

- xiv. The mean score of developed competencies is much lower in all three standards and sub-standards of professional development of prospective teachers.
- xv. The major finding of the study is that there was widened gap between perceived and developed competencies of prospective teachers.

5.2.5

Objective 5: To compare gender-based difference regarding perceived pedagogical competencies of prospective teachers in the Light of National Professional Standards for Teachers.

- i. It was found that there was no difference in perceived competencies which means null hypothesis was not rejected (Table 4.49).
- ii. It was found that prospective teachers have same level of perceived competencies in IP & S across gender (Table 4.50).
- iii. The study shows that the difference in perceived competencies was not significant to reject null hypothesis so it should be said that there was no difference in perceived competencies in assessment across gender (Table 4.51).
- iv. The study found that overall gender is not source of variation in the perception of pedagogical competencies.

5.2.6

Objective 6: To compare gender-based difference regarding developed pedagogical competencies of prospective teachers in the Light of National Professional Standards for Teachers.

- i. It was found that although means were different, but this difference is not significant to reject null hypothesis of developed competencies in S M K across gender (Table 4.52).

- ii. The study showed that there was no difference in developed competencies in IP & S across gender and null hypothesis was not rejected (Table 4.53).
- iii. The study showed that there was no difference in developed competencies in assessment across gender and null hypothesis was accepted (Table 4.54).
- iv. Overall, it was found that developed pedagogical competencies are not affected by gender and it is not source of variation.

5.3 Discussion

SECTION-A Content Analysis

5.3.1 Subject Matter Knowledge (SMK)

This portion of discussion deals with content analysis of the research study related to English language course contents alignment with selected NPSTs in the B. Ed (Hons) course guide books. The NPSTs 'S M K' was examined in eight sub-aspects and produced here for discussion in the light of fore mentioned interpretation. The content analysis explored inclusion or exclusion of these aspects in the English course curriculum of B. Ed (Hons) program.

i. Discussion on Knowledge and Understanding of National Curriculum Framework

The content analysis related to teachers' K & U of National Curriculum Framework in ELT course guides for B. Ed (Hons) program are duly addressed. The courses are designed and developed in the light of National Curriculum Framework (NCF) for English - 2006 (Book 1, 2, 3 & 4, p.iii). The B. Ed (Hons) curriculum derives its strength from the NCF document. The ELT course curriculum is developed, designed and transpired on the lines of National Curriculum Framework for English (2006). The

NCF parameters and guidelines are met in ELT curriculum for B. Ed (Hons) program. The ELT courses aims, goals and objectives are achieved in accordance with the desired competency, standards, benchmarks and SLOs as prescribed in NCF-2006.

ii. Basic Concepts and Theories of Acquiring Knowledge

The syllabus contents of course guide trace back various ELT approaches are adopted and formulated keeping in view the major theories and concepts practiced worldwide from earlier to the newest theories namely, Grammar Translation Method (GTM); Behaviourism and the Audio-lingual Method; the Natural Approach; the Interactionist Approach and Communicative Language Teaching (CLT). The curriculum has identified some major ELT approaches, theories and methods in teaching of English in developing the four basic language skills. Besides, Bloom's Taxonomy has been incorporated which identifies educational goals and objectives for the ELT course. The traditional Grammar-Translation method in ELT altogether ignored speaking skill of students and instead laid undue emphasis on reading and writing skills whereas the latest CLT concept of ELT lays major emphasis on communication skills aspect (Richards and Rodgers, 2001).

iii. Expanding and Evolving Nature of ELT

The ELT curriculum incorporates its expanding nature and evolving status of English language owing to rapid research in this field. The course has inducted the latest approach of communicative Language Teaching (CLT) in ELT. The ELT curriculum is developed in a way that corresponds to selected resource material, exercises, activities of CLT and Interactive approach. It demands an integrated language learning approach for teaching of language skills, grammar and literary skills.

iv. Need for Keeping Abreast with New Ideas and Understanding

The course guides contain the latest concept of CLT methodology, integrated learning, activities based and competency/outcome-based language teaching. This approach in ELT

is based on student-centered and constructivist theory of learning which desires an environment of mutual cooperation, collaboration and teamwork among students. The CLT approach inculcates among students the faculty of critical thinking, logical reasoning, creativity, innovation, learning by involvement through activities and concept clarity. The course guide book fully integrates all these basic ingredients in ELT curriculum.

v. Emerging Concepts, Theories as a Result of Latest Trends and Research

The emerging trends are comprehensively accommodated in several emerging concepts, theories and trends of ELT. It primarily includes CLT concepts and theories thereby integrating concepts and adopts numerous innovative methods of language learning teaching. These concepts and theories based on latest research in ELT integrate the language learning skills by adopting communicative, interactive and embedded learning. The ELT course guides encourage students to widely use ICT in browsing material in order to further explore the topics. The approach adopted in the course guides develops among students the habit of practicing English language in routine classroom activities and at the same times enable students to communicate in local languages in English language class particularly. Lai-Mei & Seyedeh (2017) research findings stress teachers to give opportunities to students to speak out English. It also requires developing speaking modules that would enable students' to actively express themselves. The design of this ELT course is beneficial for the perspective teachers in Pakistan who desire to implement these concepts in classroom.

Tuan & Mai (2015) noted a problem and a tendency among speakers sharing same mother-tongue. They tend to speak as often as their mother tongue unconsciously when they are together and they use it in the speaking class since it is easy for them. The reason why learners use mother-tongue so often in classes is that when teachers inquire learners

to discuss a topic and where learners feel short of knowledge, they are tempted to use their language and it is natural as well. If teachers do not compel students to talk in English, they will automatically use their first language while explaining something to their class fellows.

vi. Detailed Knowledge of English Subject

The content analysis showed the curriculum moving in an elaborate and a continuous progression by adopting CLT approach in teaching language. The CLT approach carries simultaneously both verbal and written expressions of teaching English language together. Similarly, grammar is not taught to students in isolation, in fragments and out of context, rather it is embedded in contextual text. It also endeavors to integrate aspects of language learning skills in teaching literature, poetry, prose, drama, stories, etc. The course is designed as such that it progresses from simple to complex grammatical order and its major focus is on functional communicative aspect of English language among students. The course contains a comprehensive and detailed material on language skills development and it prefers to use English language as a medium of instruction. It includes elaborate assessment and evaluation measures including diagnostic, summative and formative assessment tools for language skill being taught.

vii. Relationship of English Subject to Other Disciplines and its Utility

The course curriculum was examined for relationship of English subject to other disciplines and its utility. However, this aspect was not dealt in any form in course guide books.

viii. Relationship of Reading and Writing Principles in English Subject

The course contents contain detailed and comprehensive material so as to attain proficiency in reading, writing, listening and speaking skills. The ELT program major objective is to enable students to master the four language skills comprehensively. The

course has therefore been designed to contain exercises and practices related to the four language skills in different units. However, the course guides have not been able to draw a relation between reading and writing though the four language learning skills are specifically addressed. Reading and writing skills are dealt with in detail by adopting CLT approach in ELT.

5.3.2 Instructional Planning & Strategies

The content analysis examines alignment of NPSTs 'IP & S' with English Language course contents of B. Ed (Hons) course guide books. The analysis of the second NPSTs in the aspect of 'K & U' contains further nine sub aspects. The discussion on NPSTs themes for presence or absence in English course guide books of B. Ed (Hons) program are as follows;

i. Aims, Goals and Objectives and its Importance in Instructional Planning

The ELT course is basically following Blooms taxonomy competency standards and SLOs which invariably includes aims, goals and objectives as pivotal point of the overall course and each unit. Keeping in view the taxonomy of education and Students Learning Outcomes (SLOs) the B. Ed (Hons) program announces the aims, goals and objectives of each course and unit separately. The objectives are the intended outcomes. The ELT course objectives target achieving social interaction of students, accuracy in grammar, pronunciation and use of active vocabulary in spoken aspect as well as written creative, descriptive, and narrative. The methodology employed to achieve students learning outcomes require learning through constructivist, student centered and activity-based teaching of English language.

ii. Principles of Acquisitions of Reading and Writing Skills

The ELT curriculum is developed in a manner to focus the fundamentals of reading and writing skills by adopting an integrated, communicative and interactive approach for language learning. Reading results in writing and both reinforce each other since reading is an input skill whereas writing is the output skill. This course enhances students written expression by exposing them to extensive and intensive reading. The environment so created for the written language skill is mostly interactive and activities-based emphasizing on practices. These practices involve a variety of exercises, comprehension text, grammar and communicative language skills in the ELT course guides. Hadis, Awang & Manvender (2015) viewed the effectiveness of integrating reading and writing skills in English language learning and recommended to use reading as an effective method to improve writing among students. The same view was also shared by Chapelle, Enright, & Jamieson (2011) who found relevance between reading and writing skills.

iii. Availability of Materials and Use of Instructional Technology in Promoting Students' Attention and Thinking

The content analysis showed that the ELT material was identified and selected from several sources namely books, research articles from journals and mostly from internet sources. The use of technology in instructions is widely promoted and utilized in developing the course material. This renders the selected lessons and exercises according to students' needs. The material so retrieved generates students' interest and motivation. The contents are appealing and logical thus retain students focus and generate new ideas. Even typical grammatical topics which otherwise are boring for students are presented in an interesting manner. Besides the course books, material, text and exercises improve students' learning and help develop critical thinking and problem-solving ability. The

course guides encourage students to use internet sources up to optimum level for language learning activities. The course guides have mentioned a number of websites and internet sources for students extended learning.

iv. Instructional Planning Based on Students' Needs, Development Progress and Prior Knowledge

The course has duly adopted psychological needs of students according to level and grade in selecting material planning instructions. Since the ELT course is developed on constructivist lines therefore prior knowledge of students is linked with new knowledge. The course is developed in progression and it moves gradually from simple to complex level. The employed instructional strategies based on communicative approach enable students to express themselves proficiently using correct grammatical sentences. The content of course guides are developed on the foundation of courses taught in previous semesters. The ELT course endeavors to train prospective teachers in English language pedagogical competency to grow into a professional teacher. They are trained to be able to integrated practical activities in teaching language skills with suitable teaching methodologies.

v. Techniques for Developing Instructional Method, Materials and the Environment to Help Students Learn English Language

The ELT courses cognizant to the fact provide teachers opportunities to develop pedagogical methods and techniques specific for students' effective learning. It requires teachers to develop an environment and conditions suitable for language learning. The teachers need to focus on students' communicative aspect preferably adopting a fear free environment where students can express themselves confidently through interactive method. The expressions need to start from simple and moving on to difficult version both in verbal as well written communication. The expression is expected to maintain a

sequential order and logical thoughts. It requires teachers to inculcate among students' confidence and motivation to interact socially and develop interpersonal skills in English language. The courses are designed to facilitate prospective teachers to learn suitable teaching methods and techniques for students' effective assimilation. The English teaching courses also include several methods to encourage students to develop reading habit at their own.

The content analysis could be observed for different learning techniques including punctuation learning, sentence structure, change of narration, grammar, essays, comprehension practice, dialogues and creative story writing. Students are given the confidence to participate in activities, pose questions, share their views and opinions, prepare presentations and its delivery techniques. These activities can be best conducted provided the conditions in classroom are supportive, collaborative and cooperative. Prospective teachers are allowed to use any of ELT methodology or a blend of different methods that suit serving the teaching purpose. The latest CLT method is in vogue the world over and has been widely used in the ELT course. The CLT methodology of teaching English includes set of activities conducted in interactive pairs and group work. The course was found to present material and instructional methods in an integrated and practical way.

vi. International Approaches and the Use of Various Technologies to Promote Thinking and Understanding in the English Language

The course guides for B. Ed (Hons) fully realize the importance of latest ELT approaches adopted worldwide. The course has adopted internationally practiced CLT approach which advocates the use of ICT in English language learning. Since CLT gives prime importance to communication hence the course focuses on practicing Classroom Language Routines (CLRs). It is an essential language technique for teaching functional

language. CLT lays emphasis on comprehension, communication skills, correct usage of vocabulary and grammar. The teaching of language in classroom is student-centered and teacher acts as facilitator. It also encourages research and practical approach to teaching ELT. Research conducted on students who studied through CLT approach to English language were found fluent, expressive and communicative in spoken expression. This course adopts learner-centered indirect instruction mode and inquiry-based learning method.

The courses are designed to promote among students the concept of thinking and understanding as the primary aim of language learning besides teaching rules & regulations of language. The use of technology in the course guides promotes extensive use of CD, cassette, computer, internet, recordings and use of other technologies to promote thinking and understanding. The exercises, work sheets and material are taken from internet sources. Students are informed to search various recommended references on internet for assistance. Homework for students as a feature of extended learning is assigned to instill the habit of browsing internet for this purpose. BBC World Service (2011), Learning English and other related websites are cited in the course guides. CLT is a comprehensive and integrated ELT approach using technology in incorporating student-centered, constructivist and activities-based teaching to develop critical thinking.

vii. Effect of Out of School Activities Including Homework

The content analysed for effect of out of school activities in the form of homework in English course guides reveals that students have been frugally given out of class assignments and homework task. This aspect has been addressed partially in the course guides of ELT. The assigned homework tasks and assignments are however internet-based. Students' task and assignments are preferably innovative, creative and

linked to previous or upcoming lesson. The homework so completed are checked and graded and students are informed to correct mistakes so as to improve themselves. The students are advised to maintain homework script in their portfolio. Students can revisit these homework assignments at a later stage and reflectively see the process. Assigning homework is a vital part of the integrative learning process however the course guides have relied less extended learning. Book-1 of the course guides contain no homework.

viii. General Methods of Teaching and Classroom Management in ELT Class

This teaching approach in the field of ELT currently considered a preferred practice displaying remarkable results the world over. CLT as a general and broad method of ELT has certain characteristics like it prefers integrated learning approach, adopting embedded text for grammar and comprehension learning and developing proficiency in four language skills; listening, speaking, reading, and writing. The CLT methodology requires activities of pair and group work and active learning strategies, such as role play, debates, presentations, and brainstorming. The course guide books desires from teachers and students to use English as the medium of instructions and shun local languages. It also necessitates teachers to devise alternative contingency plans to overcome difficulties with a different approach. These general methods of teaching groom students to become independent users of English. The course offers detailed insight into the complexities of teaching English, experiences and microteaching in ELT. The course also brings to light issues and problems of ELT pedagogy and class management in Pakistan. However, the classroom management in particular is not dealt in detail.

ix. Special Methods of Teaching English Discipline

CLT is considered as the special method of teaching that integrates teaching, develop proficiency in all language skills, involving students in activities of practical

nature and learn functional communication skills. The whole English course revolves around communicative aspect of ELT to achieve learning outcomes of CLT. This special method of teaching English is based on developing interactive pedagogical skills among prospective teachers which also involves practical activities integrated to develop language skills along with pedagogies.

5.3.3 Assessment

The content analysis of NPSTs in ‘Assessment’ was examined in ‘K & U’ aspect for B. Ed (Hons) course guide books. It had further three sub aspects which depicts content related to the types of assessments for evaluating how students learn, what they know and are able to do, and what kinds of experience will support their further growth and development. The criteria for assessment are developed from the objectives formulation which is the expected learning outcomes. It concerns with students’ assessment of learning knowledge, its application and steps taken to fill the gaps for further improvement. The course guide deals with different assessment types such as criterion-referenced and norm-referenced tests, traditional standardized and performance-based tests, observation systems and assessments of student work. The ELT course guides carry out assessment of students with the help of role play dialogues, writing, listening comprehension, letter writing, questionnaire and interviews.

i. Types of Assessments to Evaluate Students Learning

The course guides explain the concept of assessment as it collects information related to learning from different perspectives by using various assessment tools. Instructional requirements demand collecting assessment data and its subsequent interpretation. It describes how students learn? What is the level of existing K & U? How students’ growth and development can be helpful by means of assessment. Assessment is therefore utilized to determine the level of achievement of learning goals and objectives.

Furthermore, assessment is a tool to check the attainment level of learning targets, criteria achievement success and formative assessment. These are important pillars of assessment components in ELT. The ELT course stresses on meaningful interpretation of the assessment data to achieve useful results. Validity and reliability of the test scores need to be determined before interpreting the data. They have utility when used for interpretations and conclusions that are made from the results of test scores. There are three frames of reference for interpreting assessment data i.e., norm-referenced frame, criterion-referenced frame, and ELF-referenced frame.

The guide books assessed for content analysis exhibit assessment restricted to formative assessment mostly thereby indicating students are tested during the progression of class teaching. The ELT adopts students' assessment in the four language skills through formative testing to learners' assimilation level. It employs a number of assessment tools useful for judging the learning of students. The ELT assessment is conducted through discrete-point method and integrative method of assessment. The discrete-point testing method divides large language components into a number of smaller, independent and isolated parts for easy assessment. Whereas, integrative test assessment method combines various language components. Integrative test is used in assessing learners' grammar knowledge, vocabulary and spelling. It takes all these parts combined together and are not considered in isolation. Whereas, performance assessment is quite different wherein students are required to demonstrate acquired knowledge and skills and utilize the same for solving problems.

ii. Results of Assessment for Evaluating and Improving Teaching and Learning

This course orientates prospective teachers with the purpose of assessment, existing assessment procedures, tools used in assessment, practices and procedures adopted and distinguishing between formative and summative assessment and the two

types of assessments used for specific purpose. The assessment activities are aimed to evaluate achievement of learning objectives success. Teachers assess students' learning by inquiry method, feedback on assignment and homework, conducting quizzes and tests, etc. The teachers' assessment of students' learning takes place frequently and in an orderly manner. Students' performance is assessed by presentations, inquiring, demonstrations, oral and written responses and portfolios.

The course guide elaborately discusses how assessment activities can be devised for lessons and achieving assessment targets and learning objectives of ELT lesson. Learning and assessment go hand in hand. It explains the importance of assessment in improving learning and teaching process. Assessment also determines to construct achievement test for students. Assessment proves the efficacy of teaching/learning process and displays in behavioural terms the achievement level. The course guides terms classroom assessment as a continuous process. Teachers need to assess students' language learning frequently and in a systematic manner.

The course guides are designed and developed in a manner to effectively measure assessment of students 'knowledge and application of skills acquired after teaching. This also may relate to specific areas in retaining their knowledge after teaching. Standard achievement tests are kept maintain reliability and validity of scores acceptable. The tests are administered in standardized conditions which remain the same for all students. These tests have pre-determined directions to cover intended outcomes, scoring standards, scoring interpretations and test conditions. The test scores interpretation are based on assessment tools like tests, environment and conditions for learning in classroom, students' prior knowledge and the instructions the teacher has delivered. Educational objectives are formulated in line with Bloom's Taxonomy to create questions for the test

using action verbs. Learning objectives start from knowledge and end up at evaluation. It involves achievement of highest level of cognitive skills of learners.

iii. Measurement Theory and Assessment- Related Issues, Such as Validity, Reliability, Bias and Scoring Concerns

The contents related to the measurement theory and assessment- related issues, such as validity, reliability, bias and scoring concerns in ELT. Students learn measurement theory and validity & reliability to reduce bias and subjectivity while constructing tests. Test performance determines educational decisions based on how test results are interpreted. Test results should only be used to support accurate and credible interpretations and conclusions. Validity and reliability are judgments based on test results rather than inherent qualities of tests. Different frames of reference, including norm-referenced, criterion-referenced, and self-referenced frames of reference, can be used to interpret test results.

SECTION - B

5.4 Discussion of The Study Based on The Quantitative Part

The findings related to second objective of the study were based on self-reported scale. The self-reported scale has inherent limitation of possible bias (De Leeuw, Hox & Dillman, 2008). Certain undesirable concerns are associated to self-reported data where a possibility arises that respondents may provide invalid and misleading responses thereby affecting research findings (Robin & Scott, 2015). Respondents may score themselves high on several occasion contrary to reality. Thus, issues of validity and reliability of the questionnaires arises (De Leeuw, Hox, & Dillman, 2008).

Keeping this in view I avoided occurrences of bias and invalid responses by including those items in the self-reported scale which were conveying lucid and clear meaning. The self-reported scale contained only close ended questions which restricted

participants to certain answer choices. The items of self-reported scale were derived from NPSTs which allowed little liberty in item constructs. Moreover, I tried to put items in easy, simple and clear language for easy comprehension. I also tried to avoid double-barreled questions that could confuse participants. Having said so there were still chances that respondents tend to exhibit bias and rated themselves high in grading. This issue was assessed on taking classroom observations of some of the teachers. The perceived level of pedagogical competence is graded high by prospective teachers appears to confirm the results of studies conducted in the field of pedagogy and prospective teachers' competence (Wardoyo, 2015). K & U, dispositions and P & S were perceived high and are inconsistent with the studies of Erickson, Hyndman & Wirtz, (2005) and Voseles & Moss (2007). They believed that dispositions are crucial components of effective teacher training program and that teaching was elevated in the eyes of others when teacher educators had strong positive attitudes. The findings are almost similar with the study conducted by Nougaret, Scruggs and Mastropieri (2005) in which teachers completed self-ratings scale. Licensed teachers scored statistically much higher on all measures; however, the two teacher groups did not judge their own teaching skills differently, indicating that both groups of teachers gave themselves high marks. Another study conducted by Iqbal, Khalid & Hussain (2015) was inconsistent with the results against the five national professional standards (2009) i.e., subject matter knowledge, instructional planning and strategies, assessment, learning environment, effective communication & proficient use of information technology. It highlighted that program does not meet the quality standards of teaching- learning process but this study was about prospective teachers enrolled in distance mode of learning where they are having less face-to-face interaction so may have less motivation level.

The third major finding of the study was based on taking observations of participants. The developed pedagogical competence level of the prospective teachers was observed slightly evident. Indicating prospective teachers developed pedagogical competence level was low during observations. The respondents were found lacking in pedagogical skills during classroom observations. This finding is also aligned with studies conducted in this field as many researchers have reported that prospective teachers' pedagogical competency is weak in dispositions and P & S aspects (Shoaib, Akhtar, & Hashmi, 2016; Sarwar & Hussain, 2010). Whereas Voseles & Moss (2007) observed a few participants prospective teachers having developed dispositions towards teaching. Since, dispositions plays an important role in the development of skills. While addressing the same issue of low level of developed pedagogical competence Jumani, *et al* (2010) are of the view to enhance duration of teaching practice that might be helpful in development of competencies as per perception of prospective teachers.

The fourth finding of study was that, there is gap between perceived and developed pedagogical competence level of prospective teachers. The developed pedagogical competence was much lower than perceived competence level. This finding is also aligned with other related studies as there is natural difference between theory and practice (Nougaret, Scruggs, and Mastropieri, 2005) but current study highlighted that this difference is much wide. There might be many reasons for it, like less duration of teaching practice as reported by Jumani, *et al* (2010). According to Iqbal, Khalid & Hussain (2015) quality of teaching may be the other reason. Dispositions of prospective teachers play more significant role in development of skills and competence, there may be low dispositions that has widened this gap. As Wardoyo (2015) also reported that practical training/practice teaching has more significant effect on performance and skill of

prospective teachers. Therefore, inclusion/increase in practical work may help to bridge the gap between perceived and developed competence level.

The fifth and sixth findings of the study were about difference in perceived and developed competencies of prospective teachers across gender. No difference was found in both perceived and developed competencies across gender. This might be due to the reason that both male and female prospective teachers are having more opportunities and interactivity due to social media and digital technology. Therefore, gender is no more source of difference between perceived as well as developed competencies of prospective teachers.

5.5 Conclusions

On the basis of findings following conclusions were drawn:

- i. The course contents of B. Ed (Hons) course guides are developed in accordance with National Curriculum Framework (NCF) for English – 2006. The aims and objectives of NCF are duly incorporated in designing and developing basic structure of ELT course. It had a role in implementing and achieving objectives-based education. It aims at standards-based and competency-based approach to maintain quality in teaching of English language.
- ii. The basic concepts and theories of acquiring knowledge are included to a larger extent in the B. Ed (Hons) English language curriculum. The curriculum included major ELT theories like GTM, Behaviourism and the Audio-lingual Method; the Natural Approach; the Interactionist Approach and CLT. The ELT course guides have adopted major historical theories of language teaching and focused on the latest trends. The course guides included ELT concepts based on cognitive aspects of Bloom's Taxonomy of SLO's.
- iii. The ELT course reflects English Language as a vibrant subject. It shows ELT evolving since 19th century and finally transforming and taking shape of formidable research-oriented approach. The nature of ELT is ever evolving and expanding in the perspective of newest trends and latest approach. It incorporates the latest communicative based approach in ELT curriculum as an integral part of B. Ed (Hons) program. This approach is beneficial particularly in the context of EFL and L2.

- iv. The ELT course contents are flexible to take new ideas and understanding of learning concepts emerging from advancement in education. The ELT course has integrated latest ideas in B. Ed (Hons) syllabus. Incorporating and involving researched based new ideas is the corner stone of ELT course. The basic structure of the course revolves around the newest concept of Communicative teaching approach which in turn is based on outcome-based education. It fully combines competency and standards related methodology of ELT. This aspect of NPSTs is fully addressed in B. Ed (Hons) syllabus Furthermore, these new ideas are aligned with student-centered learning approach that promote constructivist learning.
- v. The B.Ed. (Hons) program course contents are designed to remain alive to the emerging concepts, theories and trends in English language research worldwide and are made part of ELT curriculum. The course is vibrant and incorporates the newest approaches, theories, concepts, and trends based on latest research outcomes. The course fully adopts the newest CLT methodology in vogue. This ELT approach has emerged as a consequence of various language learning concepts and innovative techniques of teaching language. It integrates all four language skills of language and adopts a communicative and interactive approach as a requirement of latest concepts in ELT. The emerging concepts encourage students to fully utilize computer and information-based technology in language learning.
- vi. The ELT course has taken a detailed and a comprehensive view of English language knowledge. This aspect is fully addressed in B. Ed (Hons) English course guides. The knowledge on ELT is dealt with in detail and at great length. The course contents provide an in-depth insight into the four

language skills separately as well combined together in an integrated manner. The detailed English language knowledge is systematically organized and developed in a sequential and logical order. The course integrates verbal and written communication skills in teaching English language. The ELT course caters for students' age, level and background knowledge. It is designed to move forward in order of simple to complex. Its primary focus is on developing students' functional and communicative English ability in expression.

- vii. The ELT course did not cover establishing a clear relationship of English subject with other disciplines and neither its utility was comprehended.
- viii. The course guide books lack to establish a relation between reading and writing principles despite the fact that the four language learning skills are separately dealt with in detail. The syllabus comprehensively mentions contents which are improving students reading and writing skills along with listening and speaking skills. It is in line with the major objective of ELT course to master four language skills. To this end exercises, practices and group activities related to attaining four language skills are included.
- ix. The B. Ed (Hons) English ELT courses designed and developed on SLOs of Bloom Taxonomy. The contents are objective based and specify aims, goals and objectives of the courses and each unit in detail. The course expected learning outcomes are formulated and mentioned in the start of each course guidebook. This aspect is fully addressed in course guidebooks.
- x. The B. Ed (Hons) English course fully endorses the principles of acquisition of reading and writing skills of students. It lays stress on the

reading and writing skills separately. The course is so designed to give greater importance to the four language skills however, reading and writing skills are equally given importance. Writing skill is dependent reading skill. The principles of both skills are mutually beneficial, and both reinforce each other. Therefore, reading and writing skills necessitates exercises, text comprehension, grammar and communicative language skills.

- xi. The availability of resources and materials are abundantly available in course guides covering all aspects of ELT in greater detail. The course includes use of instructional technology to promote students' attention and thinking. ELT materials are selected from relevant sources like books, journals, essays, etc. Similarly, internet sources including various websites sources, research material are mentioned that provide material through instructional technology. The computer and internet-based material and resources are available on search engines in easy and free access. It includes text, practices, activities, and exercises in an interesting, motivating, appealing and engaging manner to help students develop critical thinking and inculcate problem solving skills.
- xii. The IP & S based on students' needs, development progress and prior knowledge are fully incorporated in the course contents. The course fully incorporates language learning process fulfilling the requirements of students' age and level. The course guides are developed and designed on constructivist learning approach which gives importance to students' prior learning.

- xiii. The contents of ELT display techniques for developing instructional method, materials and the environment to help students learn English language to provide learning opportunities to students to develop specialized ELT pedagogies. The ELT methods include are communicative and interactive focusing on students' verbal and written expression. The courses guide employs effective pedagogy and techniques for students' learning. The course fully addresses instructional methods and techniques along with integrated and contextualized material in language learning.
- xiv. The B. Ed (Hons) course contents include international approaches and the use of various technologies, to promote thinking and understanding in the English language course guides. The course adopts internationally recognized CLT methodology which encourages the use of ICT in ELT. The ELT course promotes students' social communication, accurate use of grammatical structure, pronunciation learning and increasing active vocabulary in descriptive, narrative, and embedded instructional texts. The syllabus adopts CLR's methods in learning communicative language skills of students. This course adopts comprehension, communication skills, and use of correct vocabulary and grammar.
- xv. The content related the out of school activities including homework in English course guides partially addressed in course guides of B. Ed (Hons) course. Students are occasionally assigned out of class assignments and homework at the end of lessons. This aspect has been partly addressed in the ELT course guides however the tasks and assignments so given keeping in view students' interests and are preferably internet based.

- xvi. The content on general methods of teaching and classroom management in ELT includes CLT approach as the general method of teaching. CLT is practiced, favored and preferred all over the world hence it is overwhelmingly included in B. Ed (Hons) course. It integrated embedded learning in ELT to develop proficiency in language skills; listening, speaking, reading, and writing. It includes activities in active learning strategies. The course encourages teachers and students to use English as medium of instructions instead of using local languages. The present course includes contextualized experiences, microteaching sessions, and most importantly exposure to ELT research for teachers. The course highlights issues and problems of ELT in pedagogy and class management in Pakistan.
- xvii. The contents on special methods of teaching English discipline are designed to select, develop and adopt CLT teaching, integrated teaching, and develop proficiency in four language skills. It is based on students' involvement in practical nature activities to learn functional English language. The English courses adopt communicative syllabus to achieve learning outcomes of CLT. The special methods of teaching English develop interactive pedagogical skills among students.
- xviii. Students are assessed and evaluated using a variety of assessment methods, including observational systems, evaluations of student work, criterion-referenced and norm-referenced instruments, classic standardized and performance-based tests. The ELT course introduces activity-based assessment of students with the help of role play dialogues, writing, listening comprehension, letter writing, questionnaire and interviews. The

course books define assessment as a broader concept that collects information about learning from several perspectives by using several assessment tools. Assessment is utilized to learning goals, learning objectives, learning targets, success criteria and formative assessment are important pillars of assessment components of the lesson. The course guides lay emphasis on effectively interpreting the assessment data for useful purposes. Validity and reliability of the test scores need to be determined before interpreting the data.

- xix. The course contents include ‘the results of assessment to evaluate and improve teaching and learning’ and introduces prospective teachers for the purpose of assessment, prevailing assessment practices in schools, the tools used, procedures adopted and drawing a distinction between formative and summative assessment and the purpose of the two types of assessments. The assessment activities are aimed at achieving success in the learning objectives of the lesson. The course guide describes how assessment activities can be integrated in lessons including and achieving assessment targets and learning objectives of ELT lesson. The course guides provide information on accomplishment assessments that assess a student's level of K & U in a given subject. It evaluates the extent to which what was taught in the classroom has stuck with the students.
- xx. The contents fully incorporate ‘the measurement theory and assessment-related issues, like validity, reliability, bias and scoring concerns’ in ELT courses. Students are given lessons on measurement theory and assessment related issues of validity and reliability concerns of scoring to reduce biasness while constructing tests and procedures. Opinion of teacher may

tend to become biased therefore, it is necessary to construct tests and procedures to reduce biasness and add validity, reliability to the scoring concerns. A frame of reference based on criteria, that places references with others for interpretations of students' performance for assessment activities are called norm-referenced assessment whereas on the other hand criterion-referenced include absolute interpretations.

- xxi. The overall conclusion of content analysis depicted incorporation of majority of themes and sub themes however a few sub themes were excluded in the course guides which made a slight part.
- xxii. It was concluded that prospective teachers' perception regarding S M K was high in all the three sub-standards.
- xxiii. The study concluded that in IP & S, prospective teachers were aware of learning environments which can accelerate students learning and were able to promote learning through homework assignment and project work. They were also confident in selection of strategies and method and use of different AV aids. But their knowledge of aims and objectives was low. Overall, high level was reported by prospective teachers in all the three sub-standards.
- xxiv. It was concluded that prospective teachers' self-reported competence regarding assessment was also high in all the three sub-standards.
- xxv. The study concludes that perception level of perspective teachers was high and they rated themselves as competent in all three standards namely:
Subject matter knowledge,
Instructional Planning & Strategies
Assessment.

xxvi. The study concluded that developed competency level of prospective teachers was slightly evident i.e., lower in all three sub-standards.

xxvii. The study identified the differences between perceived and developed pedagogical competencies of prospective teachers in the light of selected NPSTs. Although some strengths were observed but mostly the prospective teachers' skills were not aligned with their perception level. Therefore, it was concluded that there is a gap between perceived and developed competency levels in all three standards. The gap between perception and competency of prospective teachers was found significant and level of developed competency was low as compared to perceived competency.

xxviii. It was concluded that gender was not a source of variation in the perception of pedagogical competencies of prospective teachers.

xxix. The was concluded that gender was not a source of variation in the developed pedagogical competencies levels of prospective teachers.

The following overall conclusion was derived from the research study:

xxx. Overall, the study concludes that perception of prospective teachers about pedagogical competence is high, but developed pedagogical competence is low in comparison. Gender was not the source of variation.

5.6 Recommendations

Findings and conclusions of this study led the researcher to make the following recommendations.

- i. The study recommends that ELT course guide books developers for B. Ed (Hons) program may include contents of subject matter knowledge related to the theme, ‘The relationship of English subject to other disciplines and its utility’. This aspect is vital and needs to be comprehensively deliberated upon in ELT course guides.
- ii. The study suggests that ELT course guide books developers for B. Ed (Hons) program may incorporate contents related to the NPSTs sub-aspect ‘To develop a relationship of reading and writing principles in English subject’. The course requires to establish explicit relation between reading and writing skills.
- iii. Stakeholders responsible for ELT course guide books development may take steps to include contents related to the NPSTs sub-aspect ‘Effect of out of school activities such as homework’. This aspect needs to be addressed in the course guides of ELT.
- iv. The study concludes that perception level of the prospective teachers’ pedagogical competence was high in all three selected NPSTs. Therefore, it is recommended that teaching institutions may include some practical activities such as classroom observation, lesson planning workshops along with teaching sessions as part of teachers’ professional development programs. In this way prospective teachers will have sufficient exposure to perform activities in classroom environment to improve their practice.

- v. Developed pedagogical competence level was reported as slightly evident, which is low as compared to perception being the desired level. So, there is a need that teaching institutions may provide opportunities to prospective teachers' during training to practice teaching skills to develop microteaching skills as part of teachers' professional development program. Video recording of personal lessons while presenting or delivering on a topic could be of more help in this regard.
- vi. A visible gap between perceived and developed competency levels exists among prospective teachers, this might be due to knowledge based in theory and raised motivation level however in practice they were observed in a lower shade. Therefore, it is recommended that strategies may be adopted curricular developers to bridge this gap by integrating implementation plan for prospective teachers in curriculum.
- vii. It is recommended that future researchers have to carefully select the gender variable as due to changing educational environments and other interaction gender might not affect the pedagogical competencies of prospective teachers. Individualised support and professional development for all educators regardless of gender may prove beneficial.
- viii. Future researchers may consider other standards as this research addressed three standards only. Teacher development is holistic process, but it was not possible for the researcher to consider all standards, therefore further research on other standards may be conducted.

5.7 Limitations of the Study

The present research study provides valuable and deeper insights into pedagogical competencies achieved through adopting standards in prospective teachers training. However, it is pertinent to acknowledge here certain limitations of the study. Firstly, the sample size of the study was relatively small which posed restriction in limiting the generalization of the study over a broader population. Secondly, reliance over self-reported survey data may lead at times to respondents' bias. There is a likelihood that respondents may tend to grade themselves high on several counts during responses. In future research it is suggested that research may be conducted with a larger and more diverse samples along with interviews and quantitative methods. It could enable a more comprehensive understanding of teachers' pedagogical competency.

Table 5.1 Study alignment with objectives, findings, conclusions and recommendations

S.No	Objectives	Findings	Conclusions	Recommendations
1	To explore the pedagogical competencies integrated in the course guide books of B.Ed.(Hons) program with reference to National Professional Standards for Teachers i.e., subject matter knowledge, instructional planning & strategies and assessment.	<p>i. The course contents in subject matter knowledge were found fully in accordance with NPSTs except for lacking establishing a relationship of English subject with other disciplines and its utility was not covered and partially adhering to assigning out of school activities or homework to students.</p> <p>ii. The Instructional Planning and Strategies was fully incorporated in curriculum however missing to include a relation between reading and writing despite the fact that the four language learning skills are addressed in detail.</p> <p>iii. The Assessment was found being fully addressed in curriculum.</p>	<p>i. The ELT course contents comprehensively covers all aspects of subject matter and knowledge however it had not established a clear relationship of English subject with other subjects and its usefulness was not addressed. It also partially addresses the aspect of assigning out of school activities like homework to students.</p> <p>ii. The course guides cover Instructional Planning and Strategies but lacks to establish a clear relation between reading and writing principles whereas the four language learning skills have been included in detail separately.</p> <p>iii. The Assessment is fully incorporated and all aspects covered in detail in course guides.</p>	<p>i. The study recommends that ELT course guide books developers for B. Ed (Hons) program may include contents of subject matter knowledge related to the theme, ‘The relationship of English subject to other disciplines and its utility’. This aspect is vital and needs to be comprehensively deliberated upon in ELT course guides.</p> <p>ii. The study suggests that ELT curriculum developers for B. Ed (Hons) program may incorporate contents related to the NPSTs sub aspect ‘To develop a relationship of reading and writing principles in English subject’. The course requires to establish explicit relation between reading and writing skills.</p> <p>iii. NPSTs sub aspect ‘Effect of out of school activities including homework’ needs to be addressed in the course guides</p>

				for ELT. Stakeholders responsible for ELT curriculum development may include contents related to this aspect.
2	To assess the level of perceived pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers i.e., subject matter knowledge, instructional planning & strategies, and assessment.	Overall, it was found that perception level of perspective teachers was high and they rated themselves as competent in all three standards namely: Subject matter knowledge, Instructional Planning and Strategies and Assessment.	Study concludes that perception level of perspective teachers was high and they rated themselves as competent in all three standards namely: Subject matter knowledge, Instructional Planning & Strategies and Assessment.	As the study concludes that perception level of the prospective teachers' pedagogical competence was high, this might be due to knowledge based on theory and raised motivation level however in practice they were observed in a lower shade. Therefore, it is recommended that teaching institutions may include some practical activities such as classroom observation, lesson planning workshops along with teaching sessions as part of teachers' professional development programs. In this way prospective teachers will have sufficient exposure to perform activities in classroom environment.
3	To assess the level of developed pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers i.e., subject matter knowledge, instructional planning & strategies, and assessment.	Overall, it was found that level of developed competencies was slightly evident in almost all the three standards observed.	The study concluded that developed competency level of prospective teachers was slightly evident in all three standards and sub standards (Knowledge & Understanding, Dispositions and Performance & Skills).	Developed pedagogical competence level was reported as slightly evident, which is low as compared to perception being the desired level. So, there is a need that teaching institutions may provide opportunities to prospective teachers' during training to practice teaching skills to

				develop microteaching skills as part of teachers' professional development program. Video recording of personal lessons while presenting or delivering on a topic could be of more help in this regard.
4.	To identify the differences between perceived and developed pedagogical competencies of prospective teachers in the light of national professional standards for teachers .	The study found that developed competencies is much lower in all three standards and sub-standards of Subject Matter, Instructional Planning & Strategies and Assessment.	The gap between perceived and developed competency of prospective teachers was found significant and level of developed competency was low as compared to perceived competency.	A visible gap between perceived and developed competency levels exists among prospective teachers. Therefore, it is recommended that strategies may be adopted curricular developers to bridge this gap by integrating implementation plan for prospective teachers in curriculum.
5	To compare gender-based difference regarding perceived pedagogical competencies of prospective teachers in the light of National Professional Standards for Teachers.	The study found that overall gender is not source of variation in the perception of pedagogical competencies.	Study concluded that gender-based difference was not the source of variation in the perception of prospective teachers about pedagogical competencies.	It is recommended that future researchers have to carefully select the gender variable as due to changing educational environments and other interaction gender might not affect the pedagogical competencies of prospective teachers. Individualised support and professional development for all educators regardless of gender may prove beneficial.
6.	To compare gender-based difference	It was found that developed pedagogical	Study concluded that gender was not source of variation in	Future researchers may consider other standards

	<p>regarding developed pedagogical competencies of prospective teachers in the light of National Professional Standards for teachers.</p>	<p>competencies are not affected by gender and it is not source of variation.</p>	<p>the developed pedagogical competencies levels of prospective teachers.</p>	<p>as this research addressed three standards only. Teacher development is holistic process, but it was not possible for the researcher to consider all standards, therefore further research on other standards may be conducted.</p>
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APPENDICES

Appendix – A

LIST OF EXPERTS FOR VALIDATION OF TOOLS

1. Dr Arshad Mehmood Qamar
2. Dr Muhammad Tanveer Afzal
3. Dr M. Iqbal Majoka
4. Dr Rahmat Ullah Bhatti
5. Dr Sidra Rizwan
6. Dr Aftab Ahmed
7. Dr Munazza Ambreen

CERTIFICATE OF VALIDITY

**ANALYSIS OF PEDAGOGICAL COMPETENCIES OF PROSPECTIVE TEACHERS IN
THE LIGHT OF NATIONAL PROFESSIONAL STANDARDS FOR TEACHERS**

By Ms. Schrish Mushtaq

PhD Scholar, Department of Educational Sciences, National University of Modern
Languages, H-9, Islamabad, Pakistan

This is to certify that the Self-reported Scale and Observation Sheet developed by the researcher towards her research has been assessed by me and I found it to have been developed adequately to assess the research "*Analysis of Pedagogical Competencies of Prospective Teachers in the Light of National Professional Standards for Teachers.*" It is considered that the research instruments, developed for research titled above, are according to the objectives and hypotheses of research, assures validity according to the purpose of the research and can be used for data collection by the researcher with fair amount of confidence.

Name:  _____

Designation: *Lecturer* _____

Institute: *AIGU* _____

Signature:  _____

Dr. Arshad Mahmood Qamar
Lecturer (BS-18)
Science Education Department
Allama Iqbal Open University, Islamabad


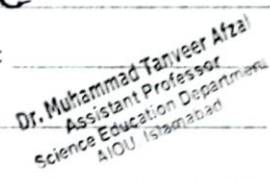
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ANALYSIS OF PEDAGOGICAL COMPETENCIES OF PROSPECTIVE TEACHERS IN THE LIGHT OF NATIONAL PROFESSIONAL STANDARDS FOR TEACHERS

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Name: 
Designation: _____
Institute: 
Signature: _____

CERTIFICATE OF VALIDITY

ANALYSIS OF PEDAGOGICAL COMPETENCIES OF PROSPECTIVE TEACHERS IN THE LIGHT OF NATIONAL PROFESSIONAL STANDARDS FOR TEACHERS

By Ms. Sshrish Mushtaq

PhD Scholar, Department of Educational Sciences, National University of Modern
Languages, H-9, Islamabad, Pakistan

This is to certify that the **Self-reported Scale** and **Observation Sheet** developed by the researcher on research topic "*Analysis of Pedagogical Competencies of Prospective Teachers in the Light of National Professional Standards for Teachers*" have been assessed by me. The developed research tools meet the demands of the topic and objectives of the study. These are valid and can be used for data collection by the researcher with fair amount of confidence.

Name: _____

Designation: Dr. Rahmat Ullah Bhatti
Assistant Professor
Early Childhood Education and Elementary Teacher Education Department
Institute: Allama Iqbal Open University Islamabad

Signature: 

CERTIFICATE OF VALIDITY

ANALYSIS OF PEDAGOGICAL COMPETENCIES OF PROSPECTIVE TEACHERS IN

THE LIGHT OF NATIONAL PROFESSIONAL STANDARDS FOR TEACHERS

By Ms. Sshrish Mushtaq

PhD Scholar, Department of Educational Sciences, National University of Modern

Languages, H-9, Islamabad, Pakistan

This is to certify that the **Self-reported Scale** and **Observation Sheet** developed by the researcher on research topic "*Analysis of Pedagogical Competencies of Prospective Teachers in the Light of National Professional Standards for Teachers*" have been assessed by me. The developed research tools meet the demands of the topic and objectives of the study. These are valid and can be used for data collection by the researcher with fair amount of confidence.


Dr. Muhammad Iqbal
Professor
Department of Education
Hazara University Mansehra


CERTIFICATE OF VALIDITY

ANALYSIS OF PEDAGOGICAL COMPETENCIES OF PROSPECTIVE TEACHERS IN THE LIGHT OF NATIONAL PROFESSIONAL STANDARDS FOR TEACHERS

By Ms. Schrish Mushtaq

PhD Scholar, Department of Educational Sciences, National University of Modern
Languages, H-9, Islamabad, Pakistan

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Name: DR. AFTAB AHMED
Designation: LECTURER
Institute: A-I.O.U
Signature: 


CERTIFICATE OF VALIDITY

ANALYSIS OF PEDAGOGICAL COMPETENCIES OF PROSPECTIVE TEACHERS IN THE LIGHT OF NATIONAL PROFESSIONAL STANDARDS FOR TEACHERS

By Ms. Schrish Mushtaq

PhD Scholar, Department of Educational Sciences, National University of Modern
Languages, H-9, Islamabad, Pakistan

This is to certify that the Self-reported Scale and Observation Sheet developed by the researcher towards her research has been assessed by me and I found it to have been developed adequately to assess the research "*Analysis of Pedagogical Competencies of Prospective Teachers in the Light of National Professional Standards for Teachers.*" It is considered that the research instruments, developed for research titled above, are according to the objectives and hypotheses of research, assures validity according to the purpose of the research and can be used for data collection by the researcher with fair amount of confidence.

Name: Dr. Sidra Rizwan
Designation: Assistant Professor
Institute: AIOU
Signature: 

DR. SIDRA RIZWAN
Assistant Professor
Secondary Teacher Education Department
Allama Iqbal Open University, Islamabad

CERTIFICATE OF VALIDITY

ANALYSIS OF PEDAGOGICAL COMPETENCIES OF PROSPECTIVE TEACHERS IN
THE LIGHT OF NATIONAL PROFESSIONAL STANDARDS FOR TEACHERS

By Ms. Sehrish Mushtaq

PhD Scholar, Department of Educational Sciences, National University of Modern
Languages, H-9, Islamabad, Pakistan

This is to certify that the Self-reported Scale and Observation Sheet developed by the researcher towards her research has been assessed by me and I found it to have been developed adequately to assess the research "*Analysis of Pedagogical Competencies of Prospective Teachers in the Light of National Professional Standards for Teachers.*" It is considered that the research instruments, developed for research titled above, are according to the objectives and hypotheses of research, assures validity according to the purpose of the research and can be used for data collection by the researcher with fair amount of confidence.

Name: Dr. Monazza Ambreen

Designation: Assistant Professor

Institute: Allama Iqbal Open Uni


Signature: 

Table.1: List of Universities

S. No	Name of University
1.	University of Education Lahore
2.	University of the Punjab Lahore
3.	University of Gujrat
4.	PMAS-Arid Agriculture University Rawalpindi
5.	The Islamia University of Bahawalpur

SELF- REPORTED SCALE for PROSPECTIVE TEACHERS of
(B. Ed HONS)

Dear Students!

I am a Ph.D. scholar at Department of Educational Sciences, National University of Modern Languages Islamabad and conducting a study titled “*Analysis of Pedagogical Competencies of Prospective Teachers in the Light of National Professional Standards for Teachers.*” You are hereby requested to fill out this self- reported scale. Data collected through this scale will be strictly kept confidential and will be used only for research purpose. Please return the completed scale by hand or dispatch on the mailing address given below. Your cooperation will be highly appreciated.

Thanks & Regards

Sehrish Mushtaq,
Ph. D Scholar,
NUML, Islamabad

SELF- REPORTED SCALE FOR PROSPECTIVE TEACHERS

Demographic Information

Roll No:

Program:

University:

Gender:

Instructions:

Please read each category (with codes 1 to 5) for given scale of agreement and insert a code (1, 2, 3, 4, or 5) against each statement of the questionnaire.

Scale of Agreement:

5	4	3	2	1
Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

Sr	Statements	Insert Code
1	I am aware of National Curriculum Framework for different subjects	
2	I have understanding and knowledge of the basic concepts of the subject which I teach.	
3	I possess sufficient subject matter knowledge.	
4	I keep myself updated regarding developments in the field of teaching.	
5	I am aware of the latest emerging trends, theories and concepts in the subject I teach.	
6	I have depth in knowledge of the subject which I teach.	
7	I establish relationship of my subject with other subjects.	
8	I know that various subjects have unique practical utility.	
9	I know that competence in reading, writing and arithmetic are essential for the study of any subject.	
10	I cater for students' needs, requirements and interests during teaching.	
11	I display flexibility in instructional methods to help students learn.	
12	I prefer teaching in real life situations to students.	
13	I believe in adopting diversified instructional strategies keeping in view the diversity of the students.	
14	I prefer to use the teaching methods that foster individual differences of learners.	
15	I prefer to use alternate method for teaching as I believe that every student can learn.	
16	I teach the contents to students in multiple perspectives	
17	I check prior knowledge of students by using appropriate means of inquiry.	
18	I give examples from daily life to clarify an idea or concept to students.	
19	I am aware of aims, goals and objectives of teaching at elementary level.	

20	I am aware of aims, goals, objectives and importance of my subject	
21	I know how to integrate listening, speaking, reading and writing skills in my lessons while teaching.	
22	I make use of all available resources and material to make students understand.	
23	I understand how to arrange and integrate AV aids in my lesson plans .	
24	I display flexibility in instructional methods to help students learn.	
25	I have knowledge of the learning methods that can accelerate students learning.	
26	I am aware of the learning environments which can accelerate students learning.	
27	I have knowledge of giving home assignments and group projects that promote learning.	
28	I have knowledge of the classroom management strategies that work in class.	
29	I have knowledge of different teaching methods that work in different situations.	
30	I arrange activities in classroom that ensure the achievement of SLOs.	
31	I prefer to engage students in exercises which develop their critical thinking.	
32	I like to engage students in creative work in class.	
33	I tend to promote collaborative and cooperative learning among students.	
34	I like to create situations in group work that promote cooperation and interdependence.	
35	I prefer to arrange different activities in which students learn problem solving in their creative work.	
36	I have skills to teach students according to their age group and learning styles.	
37	I have pedagogical skills to foster individual differences in classroom.	
38	I have skills to teach students according to their level and cultural context.	
39	I have capability to select resources and contents for teaching a specific idea and concept in teaching.	
40	I am skilled to design home assignments and out of class activities that promote learning.	
41	I am skilled to develop learning experiences that foster students learning styles and motivate them for learning.	
42	I adopt several instructional strategies in classroom for diversity of students.	
43	I am skilled to achieve SLOs by utilizing different learning materials and technological resources.	
44	I am skilled to give reflections on students learning subject to the strategies used for teaching in the class	
45	I am skilled to enable students to learn from all subject areas	

46	I know different types of assessment techniques that are used in different situations	
47	I have knowledge of the assessment techniques to be used for diagnosis and placement.	
48	I have knowledge of how to use assessment results for improving teaching in the class.	
49	I understand the use of validity and reliability in reducing bias and scoring concerns while assessing students in teaching.	
50	I prefer to use assessment results for students' learning.	
51	I prefer to communicate assessment results to students and parents with a view to improve teaching and learning process	
52	I prefer to use assessment for remedial teaching.	
53	I prefer to use continuous assessment with a view to provide remedial steps.	
54	I am capable of developing and conducting tests for formative assessment in class.	
55	I can prepare tests for formative assessment.	
56	I have learnt to assess students in multiple ways.	
57	I have learnt the motivational tips during B.Ed. (Hons) program that can be used in class.	
58	B.Ed. (Hons) program has enabled me to provide constructional feedback to the students on the basis of assessment.	
59	I am skilled how to prepare students' progress report for the subject.	
60	I am capable of using assessment data for reflecting students' progress in learning	
61	I am capable of using a variety of assessment techniques to identify learners' strength and Weaknesses.	
62	I am skilled to diagnose teaching and learning problem and through assessment take remedial steps.	
63	I have learnt in B. Ed (Hons) how to engage students in objective self-assessment.	
64	I am skilled to develop objective type tests for the assessment of students' learning skills.	
65	I am skilled to engage students in self-assessment and self-improvement in the class.	

OBSERVATION SHEET FOR PROSPECTIVE TEACHERS**Demographic Information**

Roll No:

Program:

University:

Gender:

Place the appropriate code against each item based on time of its happening and give proper code in the last column.

Scale Code: 1 = Not Evident, 2 = Slightly Evident, 3 = Somewhat Evident, 4= Fairly Evident, 5 = Clearly Evident

Sr	Item	Code
1	The teacher understands the basic concepts of the subject he/she teaches.	
2	The teacher focused on new ideas& theories related to the subject.	
3	The teacher adopted the latest approaches of teaching.	
4	Possessed subject matter knowledge of the subject	
5	Adopted diversified instructional strategies in teaching	
6	Related topic to daily life	
7	Build students' confidence in enhancing their communication skills.	
8	Engaged all learners using multiple ways	
9	Taught content in multiple perspective	
10	Developed linkage between previous knowledge through questioning and brain storming	
11	Elaborated aims, goals, objectives and importance of the subject	
12	Taught in a manner to develop students reading, writing & arithmetic skill	
13	Teaching aids are available in the classroom	
14	The teacher uses A.V Aids & other Instructional activities	
15	Focused on student's needs & interests while teaching	
16	Displayed flexibility in instructional methods	

Sr	Item	Code
17	Demonstrated effective classroom management skills	
18	Promoted critical thinking	
19	Adopted problem solving methods	
20	Adopted collaborative & cooperative learning through teamwork Activities	
21	Resolved classroom problems	
22	Teaching process is well defined	
23	Taught according to students' level & culture	
24	Assigned activities & assignments for extended learning	
25	Enhanced Students interest	
26	Utilised available resources & material for teaching	
27	Implemented formative classroom assessment	
28	Revised weak areas of students learning	
29	Revised constructive feedback from students	
30	Prepared variety of tests & observation system for evaluating students learning	

EXPLORATORY FACTOR ANALYSIS

	Initial	Extraction
St1	1.000	.500
St2	1.000	.504
St3	1.000	.526
St4	1.000	.460
St5	1.000	.346
St6	1.000	.477
St7	1.000	.751
St8	1.000	.600
St9	1.000	.409
St10	1.000	.568
St11	1.000	.528
St12	1.000	.505
St13	1.000	.447
St14	1.000	.480
St15	1.000	.610
St16	1.000	.434
St17	1.000	.348
St18	1.000	.507
St19	1.000	.568
St20	1.000	.647
St21	1.000	.477
St22	1.000	.504
St23	1.000	.671
St24	1.000	.418
ST25	1.000	.515
St26	1.000	.565
St27	1.000	.435
ST28	1.000	.560
St29	1.000	.545
ST30	1.000	.678
St31	1.000	.623
ST32	1.000	.560
ST33	1.000	.689
ST34	1.000	.465
ST35	1.000	.257
ST36	1.000	.473

ST37	1.000	.536
ST38	1.000	.621
ST39	1.000	.474
ST40	1.000	.716
ST41	1.000	.512
ST42	1.000	.391
ST43	1.000	.686
ST44	1.000	.686
ST45	1.000	.503
ST46	1.000	.544
ST47	1.000	.469
ST48	1.000	.263
ST49	1.000	.373
ST50	1.000	.533
ST51	1.000	.479
ST52	1.000	.609
ST53	1.000	.536
ST54	1.000	.422
ST55	1.000	.504
ST56	1.000	.389
ST57	1.000	.157
ST58	1.000	.633
ST59	1.000	.568
ST60	1.000	.640
St61	1.000	.643
ST62	1.000	.283
ST63	1.000	.441
ST64	1.000	.655
St65	1.000	.559
ST66	1.000	.601
ST67	1.000	.598
ST68	1.000	.372
ST69	1.000	.368
ST70	1.000	.667
ST71	1.000	.329
ST72	1.000	.533

Extraction Method: Principal Component Analysis.

COMPONENT MATRIX^A

	Component								
	1	2	3	4	5	6	7	8	9
St1	-.114	.063	.172	.200	.386	-.019	.512	-.008	.040
St2	.320	-.276	-.064	.155	-.163	.025	-.223	.425	.203
St3	-.042	.505	-.159	.221	.242	.132	.239	.168	-.186
ST4	.325	.493	.203	.111	.014	-.159	-.137	-.066	.099
St5	-.029	-.013	.393	.231	.080	-.136	-.007	.228	-.247
St6	-.387	.279	-.173	.401	.091	.136	.233	-.118	-.097
St7	.279	-.065	-.257	.422	.249	-.085	-.434	.353	-.209
St8	-.043	-.015	-.017	-.122	.493	.079	.571	-.153	.058
St9	-.141	-.263	-.216	.468	-.052	.031	.071	.029	.210
St10	.049	.239	-.081	.302	.389	.425	.174	-.148	-.161
St11	.471	-.150	-.063	-.387	.120	.110	-.113	.244	-.180
St12	.321	.164	.084	-.085	-.497	-.101	.244	.195	.077
St13	-.085	.296	-.194	-.053	-.191	.213	-.208	-.255	.348
St14	-.141	-.196	.367	-.087	.149	-.040	-.129	.065	.484
St15	-.068	.164	-.095	.081	.108	-.075	.203	.251	.613
St16	-.333	.154	.032	.039	.037	.137	-.200	-.103	.402
St17	.088	-.276	-.050	.170	-.064	.234	.214	.033	.356
St18	.208	-.054	-.060	.294	-.485	-.200	.108	.284	-.060
St19	.081	.025	.032	-.027	-.077	.268	.299	-.553	-.251
St20	.059	.013	-.246	-.318	.053	.104	.642	-.065	.279
St21	.198	-.257	.305	.177	-.095	-.021	-.202	.116	.429
St22	.317	-.151	.164	-.128	-.138	-.237	.258	.538	.167
St23	-.101	.561	.198	.005	.128	-.071	.155	.059	.533
St24	.001	-.201	.040	-.020	.277	-.160	-.249	-.148	.403
ST25	.043	.231	.337	-.152	.362	-.156	.144	.320	-.212
St26	-.273	-.156	-.127	.039	-.408	.491	.214	.027	.085
St27	.018	-.315	-.163	-.173	.307	-.158	-.305	.218	.137
ST28	.316	-.328	.218	.094	.081	.445	-.044	.205	-.386
St29	.103	-.285	.297	.443	.189	-.054	.359	-.030	-.018
ST30	.492	.283	-.357	-.004	-.128	.251	-.239	-.134	.273
St31	.469	-.221	.371	-.151	-.022	.020	.322	-.295	.049
ST32	.381	-.116	-.249	.370	.134	.236	-.190	.269	.143
ST33	.225	.443	-.272	-.096	.393	-.092	.174	-.168	.370
ST34	-.005	.365	-.303	-.267	.228	.042	.064	-.333	-.015
ST35	-.264	-.022	-.040	.384	-.238	.182	-.150	-.244	.080
ST36	-.164	.105	.119	.518	.129	.078	-.214	-.160	-.242
ST37	.541	.241	-.094	-.261	-.190	-.025	.063	-.235	-.109
ST38	.556	-.226	.317	-.372	-.028	-.049	.107	-.075	-.040
ST39	.405	-.091	.218	.200	.036	-.327	-.265	.088	-.168

ST40	.528	.090	.010	-.220	-.170	-.113	.149	-.280	-.488
ST41	.449	.446	.165	.205	.115	-.148	-.063	-.055	.002
ST42	.467	.325	.110	-.146	.154	.078	.042	.037	-.027
ST43	.428	.642	.068	.142	.169	.036	-.073	-.020	.174
ST44	.428	.642	.068	.142	.169	.036	-.073	-.020	.174
ST45	.301	.378	-.016	.251	.239	-.233	.185	-.195	.150
ST46	-.080	.390	-.156	.231	-.195	-.382	-.307	-.015	-.173
ST47	.237	.539	.037	.035	.140	.047	-.120	.077	.278
ST48	.252	-.052	.139	.153	.092	.387	.168	-.249	-.142
ST49	.304	.238	.198	-.106	.310	.411	-.059	-.002	.065
ST50	.150	.441	-.415	.169	-.096	-.256	-.250	-.100	-.164
ST51	.093	.268	.465	-.396	-.050	.119	-.060	.034	-.060
ST52	.020	.256	.467	.027	-.115	-.156	.447	-.250	.158
ST53	-.202	.134	-.060	.398	-.452	.213	.112	.027	.028
ST54	-.168	-.060	.388	.461	.167	-.099	-.246	.120	-.242
ST55	-.414	-.038	.122	.383	-.244	-.115	.195	.075	-.233
ST56	.241	.113	.039	.409	-.113	.171	-.201	-.022	-.258
ST57	-.060	-.150	-.165	.324	-.052	-.147	.046	-.064	-.151
ST58	.391	-.062	-.101	-.156	.528	.343	.192	.022	.090
ST59	.153	-.386	.103	.173	.460	.292	.152	-.185	-.019
ST60	.265	-.357	-.153	.297	.374	-.022	.145	.374	-.180
St61	.242	.128	-.203	-.228	.069	.227	.081	.366	.527
ST62	.131	.091	-.074	-.108	.127	.117	.141	.021	.446
ST63	.079	.290	.250	.072	-.100	.271	-.165	.055	.305
ST64	-.166	.191	-.182	.010	.294	-.102	.167	.031	.629
St65	-.190	-.012	-.016	-.318	.019	.460	-.410	-.077	-.032
ST66	.152	.020	-.026	-.176	.118	.677	.189	-.069	-.181
ST67	-.318	-.138	.313	-.361	.111	.475	-.113	.004	.107
ST68	.351	.441	.164	.103	.104	.072	.011	.022	-.021
ST69	-.245	.233	.007	-.274	.079	.369	.134	-.103	.088
ST70	.177	-.051	-.278	-.123	-.153	.552	-.282	.216	.294
ST71	.140	.113	-.059	-.163	.151	-.225	-.348	.151	.223
ST72	.298	-.097	-.060	.125	-.289	-.083	.181	.541	-.003

Extraction Method: Principal Component Analysis.^a

a. 9 components extracted.

CERTIFICATE OF PROOF- READING PHD THESIS

This is to certify that Ms. Sehrish Mushtaq, Registration Number 671-PhD/Edu/S17, is currently enrolled as a doctoral student in the Education program at the National University of Modern Languages, Islamabad. Under the guidance of Dr. Shazia Zamir, she has successfully completed her research project entitled "Analysis of Pedagogical Competencies of Prospective Teachers in the Light of National Professional Standards for Teachers."

Ms. Sehrish Mushtaq entrusted her thesis to me for proofreading services. I have meticulously examined the entire document, rectifying all grammatical errors. Furthermore, I have ensured that the text maintains coherence and linguistic precision, aligning with the requisite standards for academic writing.

This certificate serves to affirm that the thesis has undergone comprehensive proofreading and is now prepared for further assessment in accordance with the university's policies and procedures.



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