

**Professional Competencies of Prospective Teachers:
Investigation of Teacher Education Programs of Distance
Education in Pakistan**

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Abstract

The aim of this study was to assess the professional competence of the prospective teachers being trained at teacher education programmes at distance education in Pakistan. The data was collected from the B.Ed. graduates of Allama Iqbal Open University, Islamabad. A sample of 50 B.Ed. graduates was taken using convenient sampling techniques. Furthermore the students of these B.Ed. graduates were included in the study during the teaching practice session of the B.Ed. graduates. The professional competencies of the teachers were evaluated through administration of self-developed questionnaire. The questionnaires were comprised of the statements regarding teachers professional competencies required for effective teaching. i.e. subject matter knowledge, instructional planning and strategies, Assessment, Learning environment, Effective communication & proficient use of information technology. Further the gender differences in teachers' professional competencies were also investigated. The collected data was analyzed by using simple descriptive and inferential statistical techniques such as means and t-test. The findings of the study showed that the professional competencies of prospective teachers at teacher education programmes in Pakistan do not meet the set standards of quality. The findings indicated that these competencies address the gaps in teacher training programs. The teacher education programmes should be more targeted at the development of teachers' professional competencies. Useful suggestions and recommendations were presented in the study.

Keywords: Teacher education, professional competencies, pre-service teachers, distance education

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Distance education is flexible. Traditionally educated individuals can also continue their education through this system whereby the student and learner are at a distance from one another. They share their activities through either correspondence, face-to face contact or through the use of various instructional media (UNESCO 2001)

Distance education is a planned learning that normally happens in a different place from teaching and consequently it requires special techniques of course design, special instructional techniques, special method of communication by electronic and other technology, as well as special organizational and administrative arrangements (Eckersley, 1996).

Many developing countries are confronted with crucial problems in the field of teacher education. Teacher education is a multidimensional activity and encompasses various aspects of a teacher's life and work. Its aim is not only to teach the teacher how to teach but to make an effort to develop their initiative, to reshape their professional attitudes and to develop skills to improve their professionalism (Eraut1994).

Bennet (2000) argues that In order to keep pace with technological changes in society, the teacher education programmes of all levels in a country must be planned in such a way the teachers produced by these programmes are broadly educated, scientific minded, uncompromising on quality, innovative, courageous but sympathetic towards students. Because of the magnitude of problems and scarcity of resources, in many countries it did not seem feasible educate only through exclusive reliance on the formal or traditional face-to-face system (Anderson and Ching1987). Various factors of this system like overcrowded classrooms, increasing population of students, and high dropout rates meant people were unable to enroll in the traditional or formal education system. On the other hand, distance education has become parallel to formal education. Moreover, distance education has facilitated people enrolling in education and diminished the barriers of time and place.

Distance education depends upon media for synchronous as well as asynchronous communication. Evans (2007) stated that focusing pedagogical levels the educators are encouraged to see that their practices are being facilitated through electronic communication globally. It is said that directly or indirectly communication media able to take their teaching to learners all over the world equally, they may use universal resources through these media to nurture or enhance their own teaching.

Education plays very significant role in the national economy. A successful educational system is necessary for a country and effective education system needs effective teacher training for its teacher.(Elster,2009). In Pakistan, Allama Iqbal Open University (AIOU) plays crucial role in teacher training through distance mode of education.(Aiou,2002) It is the largest Institution in Pakistan which offers teacher training at a distance, along with a lot of other disciplines.((2003). Allama Iqbal Open University was established in 1974 which is unique institution of education in Pakistan. The main responsibility of this institute was to provide in-service teacher training facility for the primary school teachers to promote literacy level in Pakistan (Zaki, 1975). Later on, this institute was developed to the Faculty of Education. At this time, this faculty is imparting teacher training both for pre-service and in service teacher, ranging from Primary Teacher Course (PTC) to higher levels .It provides opportunities to the teachers of our country who are isolated in communities and are very far from the professional development institutes. So, Allama Iqbal Open University (AIOU) is playing friendly and successful role for grooming professional teachers. The teacher training programs of AIOU are ranked at the National and International level.(AIOU.,2004)

Teacher Competencies

The teachers' competencies are the knowledge and skills required of a teacher in order to teach in the schools. (Cooper.1994) These competencies include high level of knowledge, values, skills, and personal dispositions, sensitivities, capabilities and the ability to put those combinations into practice in an appropriate way. (Burke, 1989). The teachers are prepared to teach focusing these competencies. (Australian Teaching Council 1996).

According to the International Board of Standards for Training, Performance and Instruction (IBSTPI, 2007) the competencies are an integrated set of skills, knowledge and attitudes that enables the activities of a given occupation or function of the effective application of standards employment expected,. These competencies explain behavior not personality traits or beliefs, but they are often a reflection of attitudes.(Board of Teacher Registration.2002) The phenomenon of competence is not a new controversial subject, yet one that is unique to the teaching profession. The teaching become more scientific and measurable through performed work related to teaching competence, especially in Australia, the United States of America USA and the United kingdom UK (DePoy & Gilson, 2011).

An effective teacher should have above-mentioned competencies. These competencies are directly related to teacher education which a person gets before or after entering the teaching profession. (Danielson 2011)Teacher education is a process of attaining knowledge, skill and abilities which is relevant to the life of teacher to act as a teacher. It reshapes the attitudes, remodels the habits and reconstitutes the personality of teacher. (Gale, & Jackson, 1997) The teacher education can be viewed as pre-service, induction and in service. These three phases are considered as a part of continuous process to develop the teachers' competencies as under:

1. Development of teacher's ability to take care of himself.
2. Development of the ability according to different level of student age groups.
3. Development of good command of subject content.
4. Development of teaching skills.
5. Development of capacity to do, observe, infer and to generalize.
6. Development of searching skills for sources and study material.
7. Development of appreciation of difficulties experienced by the students, parents, with a sympathetic response.
8. Development of proper perception of the problems of universal enrolment, regular attendance, year to year promotion and holding of the scroll till the end of the stage of education (AIOU, 2002).

Rajput, & Walia, (2001) has highlighted the following competencies that are developed in the training teacher education as:

1. To enable teachers to act as agents of modernization and social change.
2. To sensitize teacher towards the promotion of social cohesion, international understanding and development of the human capital and rights of the child.
3. To transform student-teachers relationship into competent and committed professionals willing to perform the identified tasks.
4. To develop competencies and skills needed for becoming an effective teacher.
5. To sensitize teacher and teacher educators about emerging issue, such as environment, ecology, population, gender equality, legal literacy etc.
6. To empower teachers to cultivate rational thinking and scientific temperament among students.
7. To develop critical awareness about the social realities.
8. To develop managerial and organizational skills.

Shulman et al (1993) mentioned the following four competencies for any subject,

1. Knowledge of a particular subject,
2. Knowledge of common teaching ability,
3. Knowledge of students' backgrounds (such as students' learning ability, age) .
4. Knowledge of the teaching environment (including social, political and cultural aspects).

Statement of the Problem

The study aimed at examining the level of professional competencies of B.Ed. graduates of Non-formal Teacher Education Programmes in Pakistan. Further the study aimed at investigating gender differences in the professional competencies of B.Ed. graduates of Non-formal Teacher Education Programmes in Pakistan.

Objectives of the study

The objectives of the study were:

1. Examine the level of the professional competencies of B.Ed. graduates of Non-formal Teacher Education Programmes in Pakistan.
2. Investigate the gender differences in the professional competencies of B.Ed. graduates of Non-formal Teacher Education Programmes in Pakistan.

Consistent with the objectives of the study, following research questions were derived

1. What is the level of professional competencies of B.Ed. graduates of Non-formal Teacher Education Programmes in Pakistan?
2. What are the gender differences in the professional competencies of B.Ed. graduates of Non-formal Teacher Education Programmes in Pakistan?

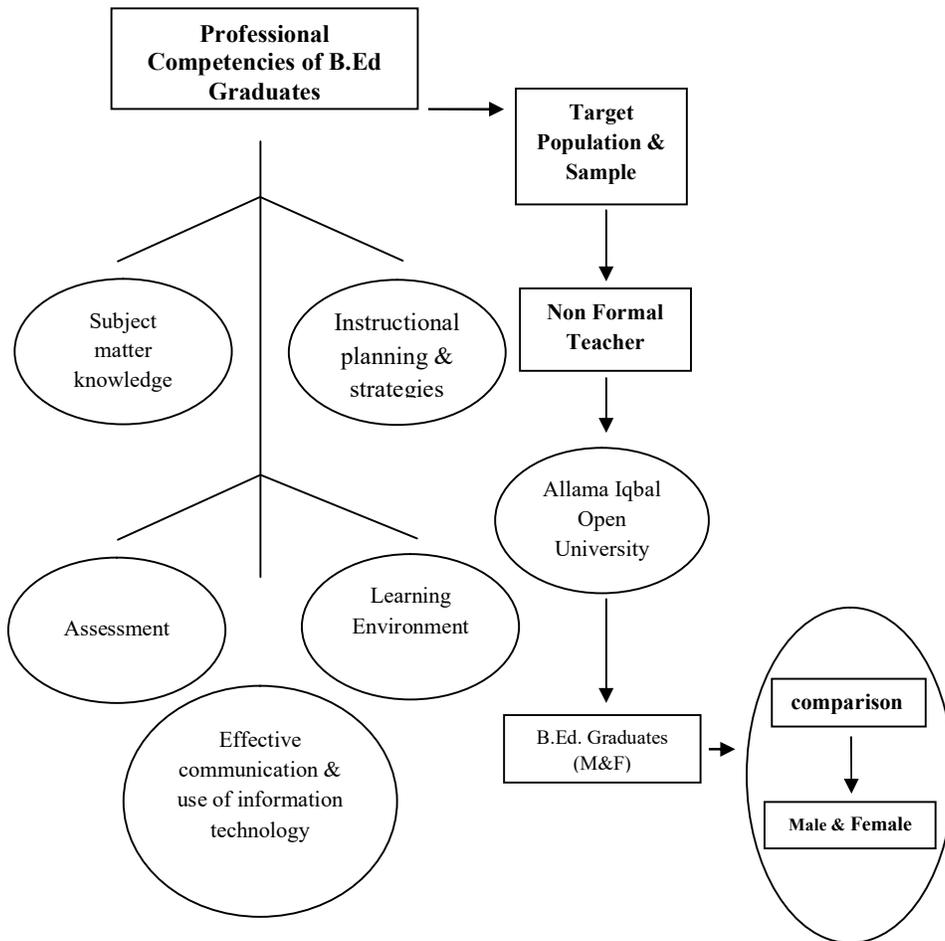
Hypothesis of the Study

Following null hypothesis were formulated and tested to fulfill the purpose of the study.

H₀: there is no significant difference between the professional competencies of Male and Female B.Ed. graduates of Non-formal Teacher Education Programmes in Pakistan.

Conceptual Framework of the study

Figure 1 presented the conceptual framework of the study.



Due to the global movement of professional standards in teacher education the Government of Pakistan (2009) Ministry of Education also implemented the National Professional Standards for teachers in Pakistan. The teacher education institutions were supposed to prepare teachers according to the following standards;

Teachers' Professional Competencies

Standard No. 1	A) Knowledge <ul style="list-style-type: none"> • Complete grip on subject knowledge • Focusing new ideas • Balance in theory & practice B) Disposition <ul style="list-style-type: none"> • Diversified instructional strategies • Promoting talent & building up confidence • Linking ideas to reality C) Performance & skills <ul style="list-style-type: none"> • Making knowledge easy & understandable • Exemplifying the daily life • Use of motivational strategies
Subject Matter Knowledge	
Standard No. 2	D) Knowledge <ul style="list-style-type: none"> • Clear image of aims, goals and objectives of subject • Focusing student's needs & interest • Effective classroom management E) Disposition <ul style="list-style-type: none"> • fostering critical thinking & problem solving • appreciating collaborative learning • resolving classroom problem F) Performance & skills <ul style="list-style-type: none"> • Proper lesson planning • Enhancing students' interest • Teaching according to students level & culture
Instructional Planning & Strategies	
Standard No. 3.	G) Knowledge <ul style="list-style-type: none"> • Concept of classroom assessment • Ensuring the reliable & valid measures • Multiple assessment techniques H) Disposition <ul style="list-style-type: none"> • fair objective assessment • constructive feedback • provision of learning opportunities I) Performance & skills <ul style="list-style-type: none"> • Analysis students performance • Student involvement • Objective assessment tools
ASSESSMENT	

Standard No. 4	<p>J) Knowledge</p> <ul style="list-style-type: none"> • Concept of classroom learning • Effective classroom management & purposeful learning • collaborative learning environment <p>K) Disposition</p> <ul style="list-style-type: none"> • Promoting peer relationship • Promoting democratic values • Constructive climate <p>L) Performance & skills</p> <ul style="list-style-type: none"> • Collaborative learning environment • Proper use of instructional time • Making classroom climate safe & sound
Learning Environment	
Standard No. 5	<p>M) Knowledge</p> <ul style="list-style-type: none"> • Focusing communication skills • Integrating ICT • Use of ICT as a instruction <p>N) Disposition</p> <ul style="list-style-type: none"> • Promoting students thoughts & ideas • Diversified ICTs • Appreciating students ideas <p>O) Performance & skills</p> <ul style="list-style-type: none"> • Use of local language • Use of compute for student assessment • Using ICT skills for preparing portfolios
Effective Communication & Proficient Use of Information Communication Technologies	

Figure 2. Blue print of the questionnaire

Source: Govt. of Pakistan (2009) National professional standards for teachers

This research study investigated the professional competencies of B.Ed. graduates of Non-formal Teacher Education Programmes in Pakistan and also Compared the professional competencies of male and B.Ed. graduates.

Methodology

Fifty B.Ed. Graduate of Allama Iqbal Open University of Pakistan were taken for the purpose of the study. The professional competencies of the teachers were evaluated through administration of self- developed questionnaire. The questionnaire were comprised of the statements regarding teachers professional competencies required for effective teaching i.e.- Knowledge of Content and Skills areas, Knowledge of Learners and the Learning Process, Instructional Planning, Use of Instructional Technologies, Learning Environment and Classroom Management, Use of Communication Strategies, Assessing/Diagnosing/Evaluating Strategies, Use of Motivation Strategies, Use of Problem Solving/Decision Making Strategies, Home-School-Community Relations, Use of Technology, Use of Multicultural Gender Fair Strategies, Human Relations Skills and Professional Characteristics/Personal Qualities. The data was collected from one formal i.e. University of education Lahore and one non-formal university i.e. Allama Iqbal Open University Islamabad. The collected data was analyzed by using simple descriptive and inferential statistical techniques such as means and t-test.

Delimitations of the Study

As it happens with all empirical researches, this study is not beyond its limitations. Due to lack of time and financial resources, Only B.Ed. programme of teacher education were included in the study.

Data Analysis and Interpretation of Data

Table 1

Overall mean score of B.Ed. graduates of AIOU teacher education programme in Pakistan on Professional competencies scale

Total No. Score	No of B.Ed.Graduates	Mean Level of professional competency of Statements
45	50	2.57Below average(towards disagreement)

Table 1 shows that there were 50 B.Ed. Graduates and there were 45 statements to answer and the range of score on Likert scale for each item was 1-5, it means that the respondents could score a minimum of score 1 and a maximum score 5 on each item. The mean score above 3 was considered as above average score

(towards agreement) and the mean score below 3 was considered as below average (towards disagreement). The table shows that the mean score of B.Ed. Graduates at Non-formal teacher education programme (AIOU) on professional competency scale was 2.57 that was below average.

Table 2

Professional competencies of B.Ed. graduates of Non-Formal teacher education programme in Pakistan focusing at subject matter knowledge (Standard 1)

Total No. Score	No of B.Ed Graduates	Mean Level of professional competency of Statements
09	50	2.58 Below average(towards disagreement)

Table 2 shows that there were 50 B.Ed. Graduates and there were 09 statements regarding subject matter knowledge. The mean score of B.Ed. Graduates at Non-formal teacher education programme (AIOU) on Subject matter knowledge scale was 2.58 that was below average.

Table 3

Professional competencies of B.Ed. graduates of Non-Formal teacher education programme in Pakistan focusing at Instructional planning and strategies (Standard 2)

Total No. Score	No of B.Ed Graduates	Mean Level of professional competency of Statements
09	50	2.57 Below average(towards disagreement)

Table 3 shows that there were 50 B.Ed. Graduates and there were 09 statements regarding Instructional planning and strategies. The mean score of B.Ed. Graduates at Non-formal teacher education programme (AIOU) on Instructional planning and strategies scale was 2.57 that was below average.

Table 4

Professional competencies of B.Ed. graduates of Non-Formal teacher education programme in Pakistan focusing at Assessment (Standard 3)

Total No. Score	No. of B.Ed Graduates	Mean Level of professional competency of Statements
09	50	2.57 Below average(towards disagreement)

Table 4 shows that there were 50 B.Ed Graduates and there were 09 statements regarding Assessment. The mean score of B.Ed. Graduates at Non-formal teacher education programme (AIOU) on Assessment scale was 2.57 that was below average.

Table 5

Professional competencies of B.Ed. graduates of Non-Formal teacher education programme in Pakistan focusing at learning environment (Standard 4)

Total No. Score	No. of B.Ed. Graduates	Mean Level of professional competency of Statements
09	50	2.56 Below average (towards disagreement)

Table 5 shows that there were 50 B.Ed Graduates and there were 09 statements regarding Learning environment. The mean score of B.Ed. Graduates at Non-formal teacher education programme (AIOU) on Learning environment scale was 2.56 that was below average.

Table 6

Professional competencies of B.Ed. graduates of Non-Formal teacher education programme in Pakistan focusing at Effective communication & information technology (Standard 5)

Total No. Score	No. of B.Ed. Graduates	Mean Level of professional competency of Statements
09	50	2.56 Below average (towards disagreement)

Table 6 shows that there were 50 B.Ed Graduates and there were 09 statements regarding Effective communication & information technology. The mean score of B.Ed. Graduates at Non-formal teacher education programme (AIOU) on Effective communication & information technology scale was 2.56 that was below average.

Hypothesis Testing

Ho: 1 there is no significant difference between the professional competencies of male and female B.Ed. graduates at Non Formal teacher education programmes in Pakistan.

Table 7

Gender	N	Mean score(X)	St. Dev	Df=(n1+n2)-2	t-value
Male	27	2.57	19.00	48	0.0019
Female	23	2.56	18.14		

Table 7 shows that the mean score of male B.Ed. graduates on professional competency scale is 2.57 and mean score of female B.Ed. graduates on professional competency scale is 2.56. Table also shows that t-value 0.0019 is less than critical t-value 2.0126 at 5% level of significance. So the null hypothesis is accepted. It means that there is a not a statistically significant difference between the professional competencies of male and female B.Ed. graduates of AIOU. Both male and female B.Ed. graduates of AIOU possess low level of professional competencies.

Major Findings of the study

Following were the major findings of the study:

1. The mean score of B.Ed. Graduates at Non-formal teacher education programme (AIOU) on professional competency scale was 2.57 that was below average.
2. The mean score of B.Ed. Graduates at Non-formal teacher education programme (AIOU) on Subject matter knowledge scale was 2.58 that was below average.
3. The mean score of B.Ed. Graduates at Non-formal teacher education programme (AIOU) on Instructional planning and strategies scale was 2.57 that was below average.
4. The mean score of B.Ed. Graduates at Non-formal teacher education programme (AIOU) on Assessment scale was 2.57 that was below average.
5. The mean score of B.Ed. Graduates at Non-formal teacher education programme (AIOU) on learning environment scale was 2.56 that was below average.
6. The mean score of B.Ed. Graduates at Non-formal teacher education programme (AIOU) on Effective communication & information technology scale was 2.56 that was below average.
7. There is a not a statistically significant difference between the professional competencies of male and female B.Ed. graduates of AIOU. Both male and female B.Ed. graduates of AIOU possess low level of professional competencies.

Conclusion & Recommendations

The study highlights the gap in the professional competencies of B.Ed. graduates at non formal teacher education. The results and findings of the study indicate that there is need to improve the teacher training of non-formal programmes. The teacher trained through non formal programme is not professionally competent enough to meet the quality standards of teaching learning process. There should be more focus on the professional development of teachers through non-formal teacher education programme. Almost all areas of professional competencies of B.Ed. graduates at non- formal teacher education programme are weak and needs improvement, specially the professional competency areas of subject matter knowledge, instructional planning and strategies, assessment, learning environment and proficient use of information communication technology needs important.

Through findings of this study it is assumed that there is no balance between theory and practice of non-formal teacher education programme, which should be balanced. The non-formal teacher education programme should provide maximum opportunities to the students for their professional development.

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