

## PEER REVIEW ON THE COMPETENCIES OF TEACHERS TRAINED THROUGH DISTANCE MODE IN PAKISTAN

Muhammad AKHLAQ  
Ministry Of Education Islamabad  
Doctoral Scholar, Department Of Education  
Preston University Islamabad, PAKISTAN

### ABSTRACT

This paper attempts to evaluate the competencies of teachers trained through distance mode in Pakistan. For this purpose 200 teachers were selected who had got B.Ed qualifications from Allama Iqbal Open University (AIOU) and working under Rawalpindi region of Federal Gov Educational Institutions (FGEI). The opinions on the competencies of these selected teachers were collected by their peers. A 26 items questionnaire of 5 point Likert scale was constructed for peer teachers of FGEI were considered the sample of the study. The study found that teachers trained through distance mode were good at modern techniques of evaluation and supervision, curricular activities, presenting the lesson, creating a conducive environment for learning, communication skills, and setting the priorities. The teachers were always coming to the class well prepared; they knew the discipline very well, involved the students in different learning activities, attended the meetings with the parents properly, completed the syllabus in time and explained the difficult topics clearly.

**Keywords:** Introduction of teacher education, teaching competencies, distance education in Pakistan, teacher training programmes of AIOU.

### INTRODUCTION

Education is an attempt on the part of the adult member of the human society to shape the development of the coming generations in accordance with its own ideals of life. It is an effort to secure individuality to the maximum development. Plato said that education, “develops in the body and in the soul (of the pupil), all the beauty and all the perfection of which he is capable of, Aristotle said that “ Education develops man’s man's man's faculty, especially his mind so that he may be able to enjoy the supreme truth, goodness and beauty in which perfect happiness essentially consists”.

Through education, the individual se develops so that he can make an original contribution to the human life according to g to his best capacity. Such developed individual not only controls his environment but also helps improve his environment (AIOU, 2002). Teacher education has been defined by Good (1973) “all the formal and informal activities and experiences that help to qualify a person to assume the responsibilities of a number of educational professional profession or to discharge his responsibilities more effectively”.

Norton (1985) described teacher education in different words that teacher education refers to the structures, instructions and process by means of which men and women are prepared for work in elementary and secondary schools. It refers to formal and informal instructions and training required for entry into a teaching profession” (Iqbal, M. Z., 2002).

## WHAT IS TEACHER EDUCATION?

Education is a process by which teachers molding the young, tender, flexible unadulterated minds of the students in order to develop them properly with necessary values, attitudes, and behaviors, ability to think independently, maturity of thought dynamism and high level of character. It is only the teacher, who will be able to do all this if he maintains a high level of character and competence and displays ability to communicate and convince, self discipline, self control and resourcefulness in his activities, so the task of the teacher is not only to develop necessary qualities and abilities in his students, but also equip himself fully with the required degree of character and competence, which alone will help him to shoulder the one responsibility of shaping the future citizens for national building. To meet these needs, a teacher should have such knowledge, skills and abilities, which are relevant to the life of a teacher to act as a teacher.

Teacher Education should seek to reshape the attitudes, remodels the habits and in such a way to reconstitute the personality of teacher. According to Aggarwal (1988) the teacher education should fulfill the following objectives:

- Development of teacher ability to take care of himself.
- Development of ability according to different level of student age groups.
- Development of good command of the subject contents.
- Development of skill.
- Development of capacity to observe, infer and generalize
- Development of an eye on maximizing the achievements from the sources, both material and human.
- Development of proper perception of the problems of universal enrollment, regular attendance, year to year promotion and holding capacity of the school until to the end of the stage of education.

The teacher education system in Pakistan has quantitatively expanded to keep a reasonable equilibrium in a demand and supply situation. In the country, the qualitative dimensions of teacher education programs have received only understanding. During the British period, an increased awareness of the need for the improvement in the education system was made through the development of teacher training institutions. The prevailing teaching methods were more mechanical, restricted learning from books. From 1947 at the time of independence to date the various teacher training programs are as:

- J.V. (Junior Vernacular) 8+ 1=for primary classes I-V
- S.V. (Certificate in Teaching /Certificates Teachers ) 12 + 1 =for classes I-VIII
- O.T. (Oriental Teacher) = For the Instructions of Oriental Languages.
- B.Ed (Bachelor in Teaching ) 14+ 1=for classes VI-X

The National Commission for Education focused on teacher education on the following objectives.

- Have sound professional training in how to teach in the subjects.
- Have had sound professional training in how to teach the subjects.
- Have a deep sense of professional honor.
- Be working in an environment which honors him for the contributions he makes in the society.

The teachers trained through Distance Education are an innovative program for student teachers Pakistan. This distance teaching programme is offered by Allama Iqbal Open University Islamabad.

Teachers who enter the distance programme do not have leave their school teachers and are enrolled in each semester for PTC, CT, B.Ed, M.Ed, and M.Phil programmes. The objectives of these programmes are the following:

- Knowledge for the practical role of education in society.

- Knowledge of contributions of subjects taught in the primary/secondary/higher institutions to the development of children/students.
- Practical awareness of the process of curriculum development.
- Practical awareness of instructional methodologies for the delivery of subject matters.
- Appreciation of importance of good school-community relationship. (Manual of Teaching Practice B.Ed).

The above mentioned objectives can be done by developing the skills which help the teachers to think, feel, and act effectively.

### CRITERIA OF TEACHING COMPETENCIES

A central task therefore, for us as teachers will be the awareness of the skills needed and how to acquire them for being an effective teacher.

The effectiveness directs the competencies, the teacher competencies are the terms that relate to the tasks of the teacher. The quality of teaching is a critical factor in promoting effective learning in schools. Zaman, T. (2002) points out the following teaching competencies should a teacher have for imparting knowledge to students in class room:

- Display of attitudes that foster learning and genuine human relationship.
- Command of knowledge in the subject matters to be taught.
- Command of technical skills of teaching that facilitate student learning.

UNESCO (2000) reported on strengthening the role of teacher in changing world and Asia Pacific Perspective has come out with the following competencies:

1	Teacher what for?	Education objectives and goals.
2	Who to teach?	Getting to know the students and their environment.
3	Where to teach?	The school institution, the classroom and the teaching learning environments.
4	What to teach?	Curriculum content, knowledge, skills, values and attitudes.
5	How to teach?	Pedagogical competencies in general, and for each subject or area in particular.
6	With what to teach?	Means and material for teaching.
7	How to evaluate?	Competencies to evaluate to continuously both teaching and learning
8	How to improve teaching and learning?	Competencies to continuously improve practice (observations, self-reflections, systematization, exchange, collective work, etc.)

The above mentioned competencies are necessary to work as teacher. The effective teaching skills and teacher competencies a teacher must have are:

- The ability to establish and maintain good quality relationship is also to effective teaching.
- Teachers' own preferred ways of learning tend to affect the ways in which they teach.
- Knowing what kind of people thinking is essential for effective learning.
- Institutions need to make the best resources at the resources at their disposal to support teacher's personal and professional development.

## DISTANCE EDUCATION IN PAKISTAN

Allama Iqbal Open University was established in Islamabad in June 1974, with act No. XXXIX by the National Assembly of Pakistan.

Its name was changed to the Allama Iqbal Open University in 1977 by the name of national poet Allama Muhammad Iqbal. The National Educational Policy of 1972-80 in the following words.

*Open universities are being used in various countries to provide education and training to people who cannot leave their home and job for full time studies. An Open University will therefore be established to provide part time educational facilities through correspondence courses, tutorials, seminars, workshops, laboratories, televisions and radio broadcast and other mass communication media.*

There were two main reasons for its establishment. The first was the belief that an effective, high quality programme of education can be carried out to all parts of the country through media. The second is that there are a lot of people who need more education, which the existing system cannot provide to them. Allama Iqbal Open University has done a rich job, and its services are well recognized nationally and internationally. By applying the methodology of Distance Education, AIOU has become the largest institution of learning in Pakistan with its course enrollment touching almost a million people. It has provided new opportunities for millions of students, particularly females. Currently, it also has a countrywide network of regional centers 34 regional centers and 86 part time regional coordinating offices throughout the country for providing assistance to the regional centers and more than 900 study centers have been established for each semester and students are provided with tutorial support at study centers using classrooms in schools of a formal system. (V.C. Report, 2005).

The concept of distance education is not new. At one time, it was called correspondence school. The biggest change in recent years, though, is not what it is called but how it is delivered with videotapes and computers. Today for higher education, students do not have to go to college. College comes to them. Distance education is being recognized as the most viable system for responding to the multifarious educational training needs of the teeming billions of people around the world. Keegan, D. (1990) articulates the term of distance education or teaching at a distance by quoting from Moore as follows:

*The family instructional methods in which the teaching behaviours are executed apart from the learning behaviours, including those in a continuous situation would be performed in the learner's presence, so that communication between teacher and learner must be facilitating by print and electronic devices.*

Whereas another aspect is an institution based. In this regard, Schlosser (2002) defined distance education as an institution based formal education where the learning group is separated and where interactive telecommunication systems are used to connect learners, resources, and instructors. There are four main components to this definition. First is the concept that distance education is 'institutionally based'. This is what differentiates distance education from the self-study. The second component of the definition of distance education is 'the concept of separation of the teacher and the student'. Most often, separation is thought of in geographic terms in which teachers are in one location and students at another. Furthermore, implied by the definition is the separation of teachers and students in time. Asynchronous distance education means that instruction is offered and students access to it at separate times, or any time as it is convenient to them. Interactive telecommunications are the third component of the definition of distance education. Interaction can be synchronous or asynchronous at the same time, or at different times. Interaction is critical but not at the expense of content. Along with general education AIOU has played a commendable and praiseworthy role in the spread of teacher training programmes. During the present years, it has launched and initiated a host of

programmes of various natures to enhance and improve the quality of teacher training programmes. After the initiation of these programmes, visible and marked improvement can be discerned and experienced. This improvement and expansion has both been quality and quantity wise. It has imparted education in numerous disciplines, including 'teacher-training' AIOU offering program: PTC, CT, and Diploma in Education, B. Ed. MA Education, M. Ed and M. Phil programmes of 'teacher- training'. Keeping in view the existing capacity of 'teacher-training programme' of the university, the researcher has taken this study.

### TEACHER TRAINING PROGRAMMES OF AIOU

Teacher training programmes are offered through the faculty of education and the following programmes are being offered:

- Primary Teaching Certificate (P.T.C.)
- Certificate of Teaching (C.T.)
- Bachelor of Education (B.Ed. General)
- Bachelor of Education (B.Ed. Arabic)
- Arabic Teacher Training Course (A.T.T.C.)
- Diploma in Education (10+3 model) (VC Report 2006)

### SCHEME OF STUDY OF B.Ed PROGRAMME OF ALLAMA IQBAL OPEN UNIVERSITY

#### 1<sup>st</sup> Semester

This semester is compulsory for all science and humanities groups

S.No.	Name of Course	Code	Credit
1.	School Administration and Management.	513	H.C.
2.	Evaluation, Guidance and Research.	514	H.C.
3.	Educational Psychology and Curriculum.	518	H.C.
4.	Teaching of English.	651	H.C.

#### 2nd Semester

Humanities Group (Elective Courses) students will select any two courses

S.No.	Name of Course	Code	Credit
1.	Teaching of Pakistan Studies.	517	F.C.
2.	Teaching of English.	519	F.C.
3.	Teaching of Urdu.	658	F.C.
4.	Teaching of Islamabad.	654	F.C.
5.	Teaching of General Science.	647	F.C.

Science Group (Elective Courses) students will have to select any two courses

S.No.	Name of Course	Code	Credit
1.	Teaching of Biology.	520	F.C.
2.	Teaching of Chemistry.	653	F.C.
3.	Teaching of Physics.	656	F.C.
4.	Teaching of Mathematics.	661	F.C.
5.	Teaching of General Science.	657	F.C.

### 3rd Semester

This semester is also compulsory for both science and humanities groups

S.No.	Name of Course	Code	Credit
1.	Perspective of Education.	512	H.C.
2.	Islam Pakistan and Modern Worlds.	652	H.C.
3.	Work shop (Teaching Practice)	655	F.C.

The AIOU distance learning systems, the courses are taught through self-instructional materials, media component, tutorial meetings and workshop. The study materials include a study guide, allied with materials and media support. Tutorials provide useful guidance in the form of lectures, discussions, question-answer sessions and general clarification of any course-related issues.

### EVALUATION PROCEDURE

The students are supposed to submit two assignments for each half-credit and four for a full credit course. The tutors evaluate these assignments. Students need 40% marks to pass the assignments. At the end of each semester, the University, for each course, will hold the final examinations. Passing percentage for the final examinations are 40%. However, to qualify the course a student must obtain an aggregate of 40%. The ratio of weight age of marks of assignments and final examination is 30:70. (Prospectus of B.Ed, AIOU, 2008).

### Objectives of the Study

The present study designed to achieve the following objectives:

- To describe the B.Ed programme of AIOU.
- To identify the competencies of teachers trained through Allama Iqbal Open University Islamabad

### Design of the Study

The study was descriptive and survey method was applied in the research. The data about fifty selected secondary schools teachers trained through the distance mode of Allama Iqbal Open University was collected through questionnaire.

### Population and Sample

Population of the study consisted of all the secondary level teachers of FGEI. Two hundred teachers were selected as sample of study.

### Delimitations of the Study

The study was delimited to:

- Federal Government Educational Institutions (FGEI) Rawalpindi Region
- Two hundred teachers of secondary school level of federal government educational intuitions Rawalpindi Region.

### Development of Tool

The researcher made a detailed investigation about the different competencies of teachers of secondary school teachers who completed their professional qualifications or B.Ed from Allama Iqbal Open University Islamabad. Keeping in the view the objectives of the study along with various aspects of the topics, a questionnaire one for each secondary school teachers of the FGEI, was developed on the following five point- likert scale:

1. SA = Strongly Agree 5 Points
2. A = Agree 4 Points
3. UNC = Uncertain 3 Points
4. DA = Disagree 2 Points
5. SDA = Strongly Disagree 1 Point

### Statistical Analysis

To analyze the data, mean score and chi-square were found for the purpose of description, analysis and findings. On the basis of the main findings, the conclusions were drawn and recommendations were made.

1. Percentage of responses to each item was calculated.
2. Overall mean score of each table was also calculated.

Mean score was calculated by using the below mentioned formula:

$$\text{Mean Score} = \frac{f_{SA} \times 5 + f_A \times 4 + f_{UNC} \times 3 + f_{DA} \times 2 + f_{SDA} \times 1}{N}$$

Here:

- N = Total number of responses.  
 $f_{SA}$  = Frequency of Strongly Agreed responses.  
 $f_A$  = Frequency of Agreed responses.  
 $f_{UNC}$  = Frequency of Uncertain responses.  
 $f_{DA}$  = Frequency of Disagreed responses.  
 $f_{SDA}$  = Frequency of Strongly Disagreed responses.

### FINDINGS

Following findings were drawn from the data analysis.

Table 1  
 Opinion about the competencies relevant to subject knowledge

S.No	Statement	Responses	SA	A	UNC	DA	SDA	Mean Score
1.	They have full command on their subject.	N %	55 27.50	85 42.50	10 05	45 23.50	05 2.50	3.70
2.	They come to class well prepared.	N %	98 49	75 37.50	12 06	09 4.50	06 03	4.25
3.	They know how to manage the discipline of classroom.	N %	88 44	75 37.50	06 03	12 06	19 9.50	4.00
4.	They teach according to level.	N %	110 55	65 37.50	11 5.50	13 6.50	01 0.50	4.35

5.	They involve the students in different learning activities.	N	87	70	14	20	09	4.03
		%	43.50	35	07	10	4.50	

- 70% of the respondents agreed that teachers have full command on their subjects and the value of mean score is 3.70.
- 87% of the respondents agreed that teachers come to the class well prepared; the value of mean score is 4.25.
- 78% of the respondents agreed that distance mode trained teachers have known how to manage the discipline of classroom; the value of mean score is 4.00.
- 88% of the respondents agreed that the teacher teach according to level, the value of mean score is 4.35.
- 78% of the respondents agreed that the teachers involve the students in different learning activities; the value of mean score is 4.03.

Table 2  
 Opinions about the competencies relevant to daily routine works

S.No	Statement	Responses	SA	A	UNC	DA	SDA	Mean Score
	They know the modern techniques of evaluation and supervision.	N	99	45	10	35	11	3.93
		%	49.50	22.50	05	17.50	5.50	
	They help the students other than academics.	N	80	85	00	20	15	3.97
		%	40	42.50	00	10	7.50	
	They organized the co-curricular activities for effective learning.	N	72	82	16	10	20	3.88
		%	36	41	08	05	10	
	By asking questions they fully satisfied the students.	N	98	78	02	12	10	4.21
		%	49	39	01	06	05	
	They properly attend the meetings with parents of students.	N	88	75	08	20	09	4.06
		%	44	37.50	04	10	4.50	
	They properly check the work of students daily.	N	102	63	10	15	11	4.14
		%	51	31.50	05	7.50	5.50	



- 71% of the respondents agreed that the teachers know the modern techniques of evaluation and supervision, the value of mean score is 3.93.
- 82% of the respondents agreed that the teacher helped the students other than academic; the value of mean score is 3.97.
- 67% of the respondents agreed that the teacher organized the co-curricular activities for effective learning; the value of mean score is 3.97.
- 78% of the respondents agreed that the teachers satisfied the students on asking the questions, the value of mean score is 3.88.
- 81% of the respondents agreed that the teachers properly attend the meetings with parents of students; the value of mean score is 4.06.
- 82% of the respondents agreed that the teacher properly check the work of students daily, the value of mean score is 4.14.

Table 3  
 Opinions about the competencies relevant to teaching

S.No	Statement	Responses	SA	A	UNC	DA	SDA	Mean Score
	They act as a leader for students.	N	90	71	14	16	09	4.08
		%	45	30.50	07	08	4.50	
	They teach with variety of teaching methods to increase the learning.	N	98	75	06	10	11	4.19
		%	49	42.50	03	05	5.50	
	They complete the syllabus in time.	N	103	64	04	13	16	4.12
		%	51.50	32	02	6.50	08	
	They maintain contact with parents for improvement of students.	N	101	71	06	15	07	4.22
		%	50.50	35.50	03	7.50	3.50	
	They teach the subjects with interests.	N	78	86	08	14	14	4.00
		%	39	43	04	07	07	
	The teachers explain difficult topics very clearly.	N	78	88	07	21	06	4.05
		%	39	44	3.50	10.50	03	

- 85% of the respondents agreed that the teacher act as a leader for students, the value of mean score is 4.08.
- 91% of the respondents agreed that the teacher teach the students with variety of teaching methods to increase the learning, the value of mean score is 4.19.

- 85% of the respondents agreed that the teacher complete the syllabus in time, the value of mean score is 4.12.
- 85% of the respondents agreed that the teacher maintain contact with parents for improvement of students, the value of mean score is 4.22.
- 82% of the respondents agreed that the teacher teach the students with interests, the value of mean score is 4.00.
- 83 % of the respondents agreed that the teacher explain the difficult topics very clearly, the value of mean score is 4.05.

Table 4  
 Opinions about the competencies relevant to classroom activities

S.No	Statement	Responses	SA	A	UNC	DA	SDA	Mean Score
	They assess the student's performance regularly.	N	84	72	12	24	08	4.00
		%	42	36	06	12	04	
	They present him as a model for positive behavior.	N	78	87	06	12	17	3.98
		%	39	43.50	03	06	8.50	
	They use different AV aids during lesson.	N	99	56	10	18	17	4.01
		%	49.50	28	05	09	8.50	
	They stress on practical work.	N	100	72	02	04	22	4.12
		%	50	36	01	02	11	
	They present the subject matters in a coherent way.	N	80	72	10	14	24	3.85
		%	40	36	05	07	12	
	They create for effective conducive learning environment.	N	88	70	06	14	22	3.94
		%	44	35	03	07	11	
	They effectively use oral and written communication.	N	96	57	09	14	24	3.93
		%	48	28.50	4.50	07	12	
	They work harmoniously with colleagues and seniors.	N	103	72	04	12	09	4.24
		%	51.50	36	02	06	4.50	
	They set the priorities and act accordingly.	N	76	78	14	15	17	3.90
		%	38	34	07	7.5	8.50	

- 82% of the respondents agreed that the teacher presents present him as a model for positive behaviour, the value of mean score is 3.98.

- 78 % of the respondents agreed that they use different AV aids during lesson, the value of mean score is 4.01.
- 78% of the respondents agreed that the teacher assess the students' performance regularly, the value of mean score is 4.00.
- 86 % of the respondents agreed that the teacher stress on practical work, the value of mean score is 4.12.
- 76% of the respondents agreed that the teacher present the subject matters in a coherent way, the value of mean score is 3.85.
- 79% of the respondents agreed that the teachers present the subject matters in a coherent way; the value of mean score is 3.94.
- 77% of the respondents agreed the teachers create for effective conducive learning environment; the value of mean score is 3.93.
- 87% of the respondents agreed the teachers work harmoniously with colleagues and seniors, the value of mean score is 4.50.
- 67% of the respondents agreed the teachers sets the priorities and act accordingly, the value of mean score is 3.90.

Table 5  
 Suggestions from peer teachers regarding for distance trained teacher

S.No.	Suggestions	No. of students	%age
1.	They should have effective communication skills.	80	40
2.	They must concentrate on practical work and practical learning.	100	50
3.	They should use AV aids during teaching to make the teaching effective and interactive.	102	51
4.	The duration of practical components of B.Ed should be increased.	80	40
5.	Induction training should be arranged by AIOU for B.Ed students before they enter to the job of teaching.	92	46

It is evident from Table: 5 that 40 % teachers suggested that teachers trained through distance mode should have effective communication skills, 50% suggested they must concentrate on practical work and practical learning, 51% suggested that the duration of practical components of B.Ed should be increased, and 4% suggested that induction training should be arranged by AIOU for B.Ed students before they enter to the job of teaching.

## CONCLUSION

- Majority of the teachers agreed that the teachers trained in Pakistan through distance mode have the full command on the subjects, come to their classes well prepared, manage the classroom discipline effectively, taught the students according to their level and involve the students in different learning activities.
- Majority of the teachers agreed that the teachers know the modern techniques of evaluation and supervision, helped the students other than academic, organized the co-curricular activities for effective learning, satisfied the students on asking the questions. The teachers properly attend the meetings with the parents of students, and check the work of students daily.

- Majority of the students was of the view that the teacher acted as a leader for students, taught the students with a variety of teaching methods to increase the learning, completed the syllabus in time, maintained contact with parents for improvement of students, taught the students with interests, and explained the difficult topics very clearly.
- Teachers were of the opinion that present him as a model for positive behaviour, use different AV aids during the lesson, assess the students' performance regularly, stress on practical work, present the subject matters in a coherent way, created for effective conducive environment learning, work harmoniously with colleagues and seniors, and set the priorities and act accordingly.

### RECOMMENDATIONS

In the light of the analyzed data and based on findings, following recommendations are made.

- The duration of practical component may be increased so teacher training may increase so that the teacher trained through the distance mode present the lesson in the class in the best way.
- AIOU should invest more on media / Audio Video aids to facilitate students in the face –to- face components of teacher training programmes.
- Special incentives may be given to teachers who are trained through the distance mode of Allama Iqbal Open University.
- Modern Audio/Video aids should be provided to all the instructions, so that the teacher presents the lessons in the best way.

### BIODATA AND CONTACT ADDRESSES OF AUTHOR



Muhammad AKHLAQ is born in Sahiwal. He is having master degree in Mathematics and M.Phil degree in Education. He is working as Science Teacher in Federal Government Educational Institutions (Cant/Garrison) Directorate GHQ Rawalpindi. He is also Doctoral Scholar at Department of Education, Preston University Islamabad with special interest in distance and non formal education.

Muhammad AKHLAQ  
Ministry Of Education Islamabad  
Doctoral Scholar, Department Of Education  
Preston University Islamabad, PAKISTAN  
Phone: +92 3337000743,  
E mail: [mmkhlaq2009@gmail.com](mailto:mmkhlaq2009@gmail.com)

### REFERENCES

Allama Iqbal Open University (2002). *Teacher Education in Pakistan*, Code 829, Islamabad: AIOU.

Allama Iqbal Open University (2005).V.C. Report 2005, Islamabad: AIOU.

Allama Iqbal Open University (2005).V.C. Report 2006, Islamabad: AIOU.

Allama Iqbal Open University (2003). *Manual of Teaching Practice*, Islamabad: AIOU.

Aggrawal, (1988). *Development and Planning of Modern Education*, Vikas Publishing, New Dehli.

Government of Pakistan (1947) *National Education Commission*, Islamabad: Pakistan.

Government of Pakistan (2008) *Economic Survey of Pakistan*, Islamabad: Pakistan

Government of Pakistan (1972). *National Education Policy 1972-80*, Islamabad: Pakistan

Iqbal, M.Z. (2002). *Pakistan Journal of Education*, Islamabad: AIOU

Keegan, D. (1990). *The Foundations of Distance Education*, London: Carom Helm.

Rashid, M. (1990). *Distance Education-Concept and Methods Code 642*, Islamabad: AIOU.

Schlosser, L.A. (2002). *Distance Education: Definition and Glossary of Terms: Definitions and terminology committee Association for Educational Technology*: Bloomington: IN.

UNESCO,(2000). *Teacher Education through Distance Learning*, London: United Kingdom

Zaman, T. (2002). *Teacher Education in Pakistan, Study Guide*, Islamabad: AIOU.