

TEACHERS TRAINING THROUGH DISTANCE MODE IN ALLAMA IQBAL OPEN UNIVERSITY (AIOU) PAKISTAN: A case study

Dr. Nabi Bux JUMANI
Head, Department of Secondary Teacher Education
Allama Iqbal Open University Islamabad, PAKISTAN

Fazalur RAHMAN
Lecturer, Department of Elementary Teacher Education
Allama Iqbal Open University Islamabad, PAKISTAN

Dr. Saeedul Hasan CHISHTI
Assistant Professor, Department of Education
International Islamic University Islamabad, PAKISTAN

Dr. Samina MALIK
Assistant Professor, Department of Education
International Islamic University Islamabad, PAKISTAN

ABSTRACT

Allama Iqbal Open University (AIOU) is the first Open University in Asia and established in 1974 on the model of UKOU. AIOU uses different media for the delivery of instruction. It has a well established Institute of Educational Technology which has radio and TV production facilities and advance level of work in computer technology. AIOU offers diversified courses and programs ranging from literacy to PhD level in its four faculties. The Faculty of Education established in 1984 is the largest faculties of the university with 47% enrolment of the university and contributor of 53% to the total annual university exchequer.

At present 30 programs and 135 courses in its eight department/Institutes being run by the faculty. The Faculty offers variety of programs in education and training of teachers and educational professionals. These academic programs range from primary teachers training to M.S/M.Phil and Ph.D. levels in various areas of specializations by its following departments: Secondary Teacher Education, Distance Non Formal and Continuing Education, Educational Planning, Policy studies and leadership, Early Childhood Education and Elementary Education, Special Education and Science Education. The faculty has also chalked out B.Ed (Honors) 4 year degree programme in various specializations. The mode of delivery is absolutely a distance learning mode and various components are devised as teaching methodology which is based on; Study centers and information technology, Radio and TV programs, tutorials, assignments/formative evaluation, workshops/practical, face to face teaching, internship and final examination. The university employs non-formal method of correspondence, radio and television broadcasts, special textbooks and reading materials prepared on self-learning basis, part-time teachers (tutors) engaged nearest to the student's residences. And a system of study centers for applied training is spread throughout Pakistan.

There is an effective use of various mediums of communication in AIOU for dissemination of education, including especially designed printed text, radio and television broadcasts and lately inducted instructional CDs.

The radio and television programs produced in AIOU support and complement the distance-teaching-based courses of the University. Radio and television programs are transmitted on the national television and radio broadcasting networks. One hour daily television programs on PTV channels and half an hour radio programs through PBC transmission. Non-broadcast audio-visual material is also used for small group instruction and individual study. Hence this case study discusses the practices of delivery at AIOU.

INTRODUCTION

The traditional formal system of education has long been used for the training of teachers. By and by many factors led to the adoption of the distance mode of education for teacher education due to an increase in the need for a greater number of teachers. Perraton (1997) says that distance education has established its legitimacy in delivering teacher education at a distance, and Moore and Thompson (1997) provide numerous examples of the effectiveness of distance-delivered teacher education.

As we are cognizant of the fact that distance education is a relatively new paradigm. It is aimed at providing education to many different groups of populations, especially to some geographically distributed. Distance education is emerging as a feasible and vital force in educational delivery systems in recent years, especially in higher education. Much of the growth comes from a rapidly growing demand for educational opportunities directed toward and designed for some specific target groups (Garrison, 1986; 1987; Gaspar & Thompson, 1995). Just as Amundsen and Bernard (1989) pointed out, "... the definitive characteristic of distance education is the separation between 'teacher' and learner and among learners. As a result, interpersonal communication is not a natural characteristic of distance education" (p.7).

According to Gaspar and Thompson (1995), distance education integrates correspondence, instruction, use of periodicals and learning aids, mass media, audiovisual lessons, social interactions, computer-assisted instruction, and various technologically-advanced formats.

In the perspectives of Keegan (1986), distance education has six major features:

- the separation of teacher and learner,
- the role of educational organization,
- the place of technological medium,
- two-way communication,
- the separation of the learner and the learning groups, and
- industrialization.

In sum, traditional distance education establishes a system that provides learning opportunities to various groups of learners who have no access to the traditional, high education institutions. According to Bates (1986), there are two basically different approaches to distance education. One is based on structured, pre-programmed learning materials and the other is based on the computers' communications functions. These two approaches have completely distinct philosophies of education. Bates (1986) says the former the "black box" approach. This approach views the computer as a black box to substitute for the traditional face-to-face teacher. Therefore, it is the computer or black box that teaches the students and the most frequent example is computer-assisted learning (CAL) software. The later view is called networks approach. This approach views the computer as a channel of communication between learners and teachers. The frequent example is computer-mediated communication (CMC) systems.

Therefore, it is the teacher who teaches the students, online but at a distance and asynchronously. These two approaches are not mutually exclusive and can be combined to become a powerful medium for distance education. Lauzon and Moore (1989) termed the integration of these two approaches as the fourth generation distance system that has no barriers of time and place.

Distance education in contrast to traditional classroom or campus-based education is characterised by a clear separation in space and time of the majority of teaching and learning activities.

Keegan (2002, p.20) defines distance education as "Teaching and learning in which learning normally occurs in a different place from teaching". He discusses how teaching is to a large degree mediated through various technologies (print, audio, video, broadcasting, computers, etc.). The quality of teaching materials, level and variety support for independent study depends on the nature and resources of the institution or organization responsible for a given programme and the available communication infrastructure.

By distance education it is meant education through radio, television or internet whereas open learning means that anyone can enroll and start and finish when they like. "It is an organized educational activity based on the use of teaching materials, in which constraints on study are minimized in terms of either of access, or time and place, pace, method of study, or any combination of these"(Perraton, at al., 2001). Hence the terms open and distance learning cover educational approaches of this kind that reaches teachers in their schools, provide learning sources for them or enable them to qualify without attending college in person or by opening up new opportunities for keeping up to date no matter where or when they want to study (Perraton, at al., 2002). The further advancement in the field of science and technology in the latter part of the 20th century is affecting every aspect of human life. We are now living in the information/communication age. The source of power in the information/ communication age is knowledge (Drucker, 1994; Toffler, 1990).

Drucker (1994), who coined the term, "knowledge society", says that in such a society more knowledge, and especially advanced knowledge will be acquired well past the age of formal schooling, through processes that do not focus on traditional school.

However, distance education can be a part of an open learning system which offers open access to courses, or it can be part of strict and formal degree programme. It is concerned with the educational process in which a significant proportion of learning and teaching happens while learner's tutors are removed from each other in space and time. The learner can study at home, workplace or university campus, in learning centers or through a combination of such arrangements. The language is confusing.

Distance education is often also flexible. Formally, educated individuals can also continue their education through this system in which the student and learner are at a distance from one another. They share their activities through correspondence, face-to face contact and through the use of various instructional media at National Level. It is considered as an important mode for the training of teachers. Perraton (2000) discusses the achievements of distance education's role in training teachers. Distance education has gone some way to establishing a significant and legitimate way of training teachers.

The evidence, on its success, is probably no worse than the comparable evidence on conventional teacher education, and, in some cases, it can have economic advantages. And yet it remains on the sidelines. (p.36) In Pakistan distance education system of learning, as the learner and teacher are at a distance from one another, learning materials are usually sent to students by postal services or via internet.

This material should be written in simple and understandable language. Necessary diagrams, self-assessment questions and activities are added in the course for the guidance of students. It is considered best that students understand the material without any external assistance. Each course may be half credit or full credit. A full credit course has 18 units and half credit course has nine units. Normally a unit discusses a topic in detail. One unit covers the time duration of one week with two hours daily working. Radio and TV programmes are broadcast for additional support to distance learners.

Distance education has been defined as “an educational process in which a significant proportion of the teaching is conducted by someone removed in space and/or time from the learner” (Perraton, et al., 2001). It can be a part of an open learning system which offers open access to courses, or it can be part of a structured formal degree programme. This study is concerned with the educational process in which a significant proportion of learning and teaching happens while learners’ tutors are removed from each other in space and time. The learner can study at home, at the place of work, or at a host ‘host university’ campus, in learning centers or through a combination of such arrangements.

DISTANCE EDUCATION FOR TEACHER TRAINING

Moore and Thompson (1990) did a review of more than 300 studies on the effectiveness of distance education. They summarized the study with “The literature points overwhelmingly to the conclusion that teaching and studying at distance, especially that which uses interactive telecommunication media, is effective, when effectiveness is measured by the achievements of learning, by the attitudes of students and teachers, and by cost-effectiveness”.(p.34)

The strengths of offering distance courses in which there are a wide variety of learners and where communication is supported by both asynchronous and synchronous technologies include the potential for:

- more time for learners (and teachers) to reflect,
- increased individual participation,
- more individualized feedback from the instructor,
- a wider range of opinions and views,
- self-paced-directed learning,
- group learning and collaboration, and
- resource-based rather than lecture-based learning (Egbert and Thomas, 2001).

Problems may arise when the technologies for communicating old styles of teaching do not mix with new styles of communicating, and expression is limited to the written words. “Distance course designers must address how teacher educators can observe students applying concepts and what to do so students do not feel isolated and ensure that feedback is appropriate”(Quintana, 1996). Holmberg’s theory of distance teaching (1985) states that distance teaching will support student motivation and promote learning pleasure and effectiveness if learners are engaged in discussions and decisions, and the programme provides for real and simulated communication to and from the learners. As in any classroom, interaction is the core of teaching. Distance education is believed to work very well, and produce results as effective as traditional classroom instruction (Kearsley, 1996). However, the distance education currently in practice has the potential to provide more effective learning with updated pedagogy, more experience, and greater understanding and knowledge of methods. Numerous studies have evaluated student achievement in specific distance learning programmes in higher education.

According to Abrami and Buras (1996), learning at a distance is seldom superior to traditional instruction, particularly for promoting higher level achievement and complex skills. These weaknesses may stem from social and intellectual isolation. Improved distance education practices have the potential to enhance educational outcomes, especially when the amount and kind of learner interaction is increased using technology supported collaborative learning.

ALLAMA IQBAL OPEN UNIVERSITY (AIOU)

Good distance teaching practices have been found to be fundamentally identical to good traditional teaching practices, with quality factors being universal across environments and populations (Wilkes & Burnham, 1991). This means not only that various studies of distance learning may be synthesized reliably, but also that the results of such a synthesis ought to generalize to most comparable education situations. The potential for distance education students to develop a feeling of isolation or separateness is high and must be eliminated. Bialac and Morse (1995) found students at remote sites would sometimes sit back and watch as students at the originating site answered questions.

Effective and successful teaching strategies in regular classroom situations are particularly true in distance education classrooms.

A substantial variety of teaching strategies must be used in every single class period (Beers & Orzech, 1996). Distance learning becomes a substitute for classroom learning. Strehle (2000, p.214) said: If, instead, you assume there is a global demand for learning that cannot be met by our campus-based universities, then you come to a different conclusion. Distance learning will increase the number of students and, as a result, enhance real economic growth and create a more educated population.

“Teachers have a pivotal role in improving the quality and efficiency of education system, for which pre-service and in service training programmes of high quality are essential” (Govt of Pakistan, 1998).

In Pakistan an alternative system to formal education was developed, as a reaction to pressure for the quantitative expansion in education and efforts were made to find practical expression.

The National Education Policy in 1959 mentioned that “No education system is better than its teachers who serve it” (Government of Pakistan, 1959). The Commission Report 1959 set down the following criteria for a good teacher:

- Be academically well-trained in the subjects he teaches.
- Have a sound professional training in how to teach his subjects.
- Have had sound professional training in how to understand the children in his charge.
- Have a deep sense of professional honour (Government of Pakistan, 1959).

Allama Iqbal Open University, since its inception in 1974 as the second open distance learning university in the world, has grown quantitatively into a Mega University.

The university has its main campus at Islamabad and 36 regional campuses/centres all over the country providing education in the faculties of Arabic and Islamic studies, sciences, social sciences and humanities and teacher education. The AIOU offers courses from the pre-university level to advance graduate levels to 1,048,000 students as per 2009-10 estimates.

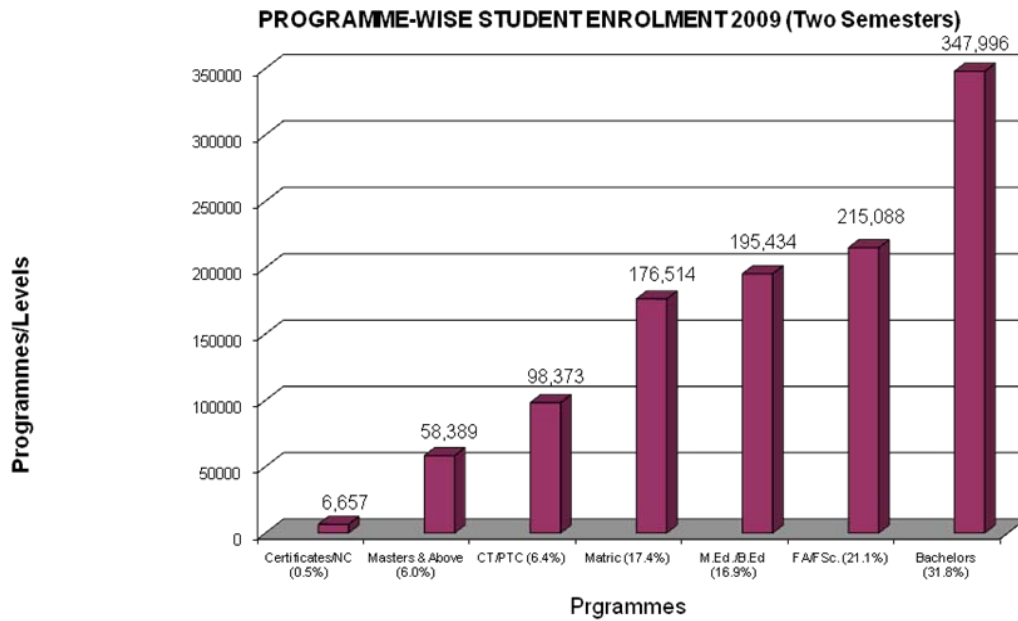


Figure: 1
Programme-wise student enrolment in 2009

The AIOU has appointed regional coordinators in smaller towns to assist prospective and enrolled students.

Table: 1
Details of tutorial support

Part-Time Tutors	31500/Semester
Study Centres	760/Semester
Approved Study Centers (for face-to-face component)	97

Tutorial support and face-to-face instruction is provided through a growing network of more than of 1,100 study centres. This network is monitored and supported by the Director Regional Services. The following table provides the basic statistical profile of AIOU.

Table: 2
Statistical data of AIOU

Faculties	4
Departments (Academic)	35
Research Centres & Institutes	3
Programs Offered	135
Courses produced & Offered	1,200
Students Undergraduate	221,621
Students (Bachelors & Masters)	363,854
Students (M. Phil & Ph. D)	896
Others (Diploma & Certificates)	118,331
Total Students Enrolment	1,048,000

In 1974, People's Open University was established to cope with the necessity of education.

In 1977 its name was changed to the Allama Iqbal Open University. The university is the pioneer distance teaching institution in the Asian Region. (AIOU 2003, p.13). The Education Policy (1998-2010) of Pakistan was designed, "to start a three months intensive orientation programme for providing basic skills of teaching through non-formal education under the umbrella of Allama Iqbal Open University which structure to provide necessary training to a number of non-formal education teachers every year" (Government of Pakistan, 1998, p.67).

In 1976, the university started with a few courses of Arabic, a Primary Teachers Orientation Course and Foundation Courses, with nine regional offices in the country. On the request of the government, it started Teacher Education Programmes like PTC/CT/ATTC for training and orientation of the untrained teachers working in different government schools (AIOU 1999, p.16). Later on, the range of its teacher education programmes was extended up to B.Ed (General), B.Ed (Arabic), M.A., Education, M.Ed (in four disciplines), M.A EPM, Diploma TEFL, M.A TEFL and M.Phil (in four disciplines). The university also started Bachelor and Master's Degree Programmes in Business Administration (MBA and BBA) through the distance learning system, subsidized by the government to meet the increasing needs of the business community. Recently, Business Administration and Computer Programmes have been started and face-to-face instruction/teaching is provided at the study centers.

METHODS OF INSTRUCTION AT AIOU

The courses offered at the AIOU are now well recognized nationally as well as internationally. The teacher education programmes of the AIOU provide an opportunity for teachers to develop their content and pedagogical skills (Jumani & Zai, 2009, 384). The detail of the methods of instruction at AIOU is as under:

Tutorials (Optional)

Tutor, tutorial and study centre is a triangle of face to face contact and two-way communication. The tutor of distance education can do much to diagnose and help the learner to change the behaviour of the learner.

The AIOU has a strong system of tutorials. A tutor is supposed to be available at notified study centre for students to seek help on their course.

Workshops (Compulsory)

Workshops provide a forum to distance education students as discussion groups designed to stimulate the problems and circumstances of the subject being discussed under the supervision of a resource person. The coordinators explain the purpose of workshops.

At the end of each semester there is a compulsory workshop for each course.

Self Instructional material

It includes self learning printed text and allied/supplementary material, including the following items:

- Course books/Reading material
- Study guide
- Assignments
- Tutorial schedule
- Radio/TV schedule
- General students guide
- Assignment forms

Evaluation

Students are evaluated through both formative (assignments) and summative (final examination) evaluation.

The weightage for course assignments and final examinations is 30:70 respectively and the minimum required marks to pass the assignments and final examination are 40 % (AIOU, 2004, pp.1-10).

AIOU being a distance education institution relies heavily on all varieties of available media to reach to its students in an effective manner.

The main components of AIOU's multimedia package for teacher training programmes are the following:

- Corresponding material including self-learning study package and supplementary study materials (Readers, textbooks, allied material and study guides),
- Radio and television broadcasts generally related to the study materials of the package. AIOU is putting on air its educational media material on PTV-2; which is beaming out its transmission through satellite to more than 45 countries.
- Non-broadcast media: Including slides, audiocassettes, flip charts, and leaflets (generally for basic courses) also audio-video cassettes as integral part of learning material.
- Tutorial instructions: Through contact session and academic guidance facilities at study centers (mostly in the afternoons).
- Group training workshops: for post graduate programme
- Course assignments: as an instrument of instruction, continuous assessment and general academic guidance of students. The tutors evaluate them.
- Final examination: held for each course at the end of the semester (AIOU, 2007).

AIOU has effectively used the print, sound and pictures for its delivery system. The radio and television programmes produced at the Institute of Educational Technology (IET) promote and support the distance teaching based courses of the university.

The material produced is transmitted through the national broadcasting network and non-broadcasting media to be used for small group instruction and individual study.

The media support which supplements the university course material also has a significant public educational value. The educational television is using satellite to beam its programmes.

According to the AIOU News (2001, p.22), "240 courses have media support. The support at present is in the form of 441 TV programmes, 2,345 radio programmes, and 279 audio non broadcast-video programmes".

However, the use of emerging technologies at AIOU is in its earlier stages and university intends to benefit the potential of these technologies.

Figure: 2 shows the total number of radio, TV programs and CDs (from left to right).

**RADIO, T.V. PROGRAMMES TRANSMISSION AND
NON-BROADCAST COMPUTER CDS.**
(2004-05 TO 2008-09)

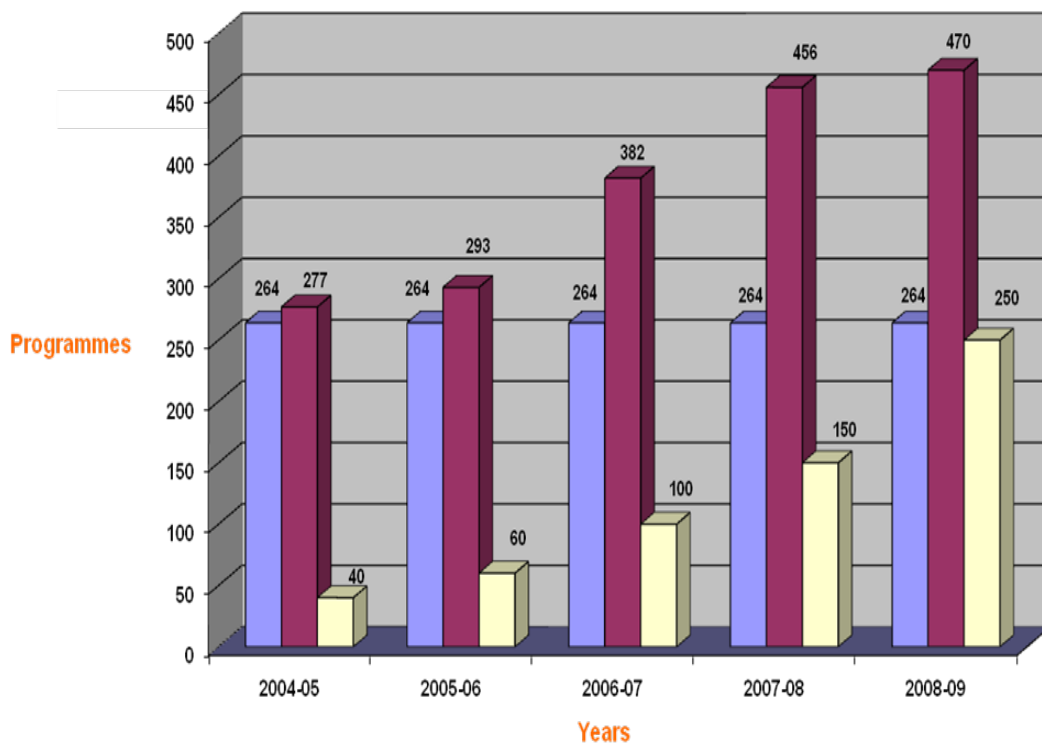


Figure: 2
Radio, TV and CD support

According to the Vice-Chancellor's Report "The University wanted to go online. The government has also encouraged them to launch their programmes on the internet". The report further explained the situation as"

In our education system we have to reach to the remote areas of the country and that is only possible through satellite, now there are plans that the government will have access to some commercial satellites for the education purpose and we will certainly benefit from this.

We ourselves are trying to obtain the license for the radio and television channels" (AIOU, 2003, p.5).

It becomes increasingly obvious that a successful distance education system needs a solid background of effective support system to ensure success for their students.

The students from distance education systems need some help from trained persons because students from distance education system have only study material and there is no regular class work like formal system.

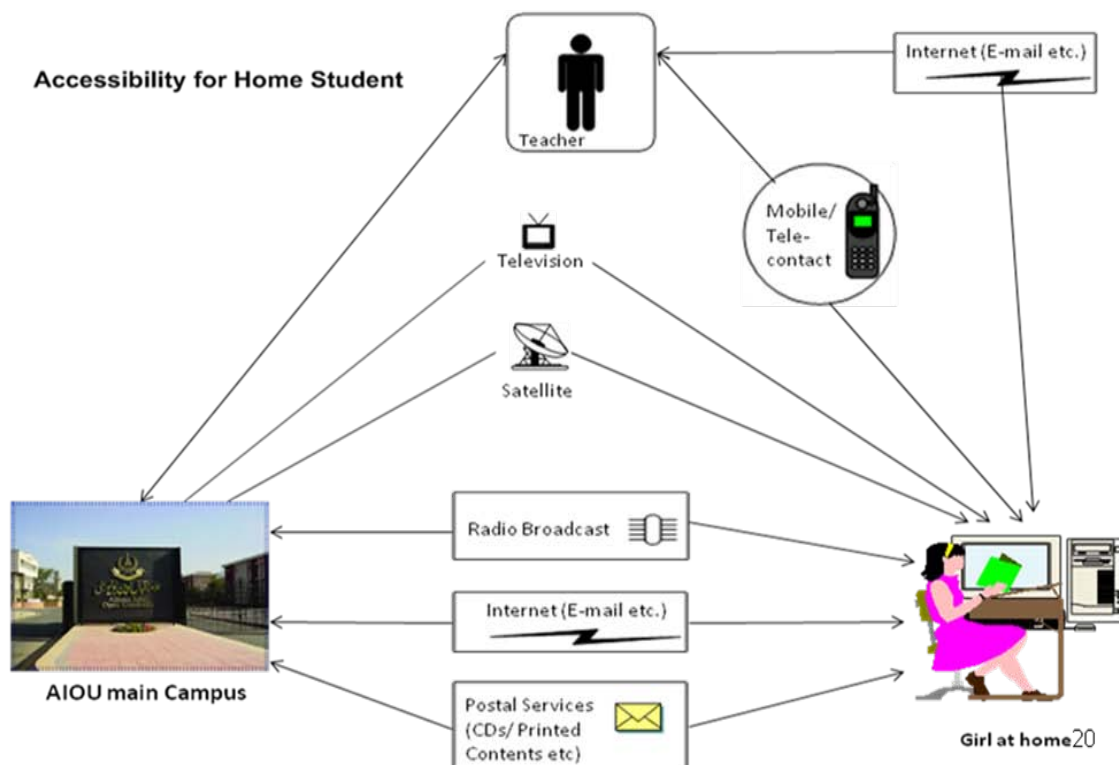


Figure: 3
AIOU access model for e-learning

Distance Education students have to write assignments, attend workshops and qualify for examination. The Education Policy 1998-2010 policy declared some objectives of teacher education. Some of these are:

- To create a matching relationship between demand and supply of teachers.
- To upgrade the quality of pre-service teacher training programmes by institutionalizing parallel programmes of longer duration at postsecondary and post –degree levels (Shah, 1997).

BACHLOR OF EDUCATION (B.Ed) PROGRAM AT AIOU

In Pakistan the aims and objectives of the B.Ed programme of teacher training are to provide the trainee with:

- the students ability and attitudes and the competencies essential to become a good trend at secondary school level,
- the principles and procedures fundamental to teaching learning process,
- the ability to plan and conduct his teaching in accordance with the sound pedagogical principles of evaluation,
- the capacity to work and adjust in the school environment and develop suitable moral and ethical code of conduct to live and work with his students, with his fellow teachers and with his seniors in both equal and subordinate role,
- effective teaching communication skills so that s/he can communicate and pass on the knowledge and subject matter to his students (University Grants Commission, 2001, p.12).

SCHEME OF STUDIES OF B.ED PROGRAM AT AIOU

Compulsory Courses

- Perspectives of Education(course code 512) Half Credit
- School Organization and Management (course code 513) Half Credit
- Research, Evaluation and Guidance (course code 514) Half Credit
- Educational Psychology (course code 518) Half Credit
- English (Compulsory, course code 651) Half Credit
- Islam, Pakistan and Modern World (course code 652) Half Credit
- Workshop (course code 655) Full Credit

Elective Courses

A-General group

- Teaching of English (course code 519) Full Credit
- Teaching of Pakistan Studies (course code 517) Full Credit
- Teaching of Urdu (course code 658) Full Credit
- Teaching of Islamiat (course code 654) Full Credit
- Teaching of Home-Economics Full Credit
- Teaching of General Science (course code 657) Full Credit

B-Science group

- Teaching of Mathematics (course code 661) Full Credit
- Teaching of Biology (course code 520) Full Credit
- Teaching of Chemistry (course code 653) Full Credit
- Teaching of Physics (course code 656) Full Credit

Total Duration

Three semesters (One and half years)

Duration of Workshop and Practice Teaching

Two weeks duration for workshop and four weeks for teaching practice along with two elective courses.

- Elective Courses
- Two elective courses containing 40 lessons each in practice teaching.
- Admission Criteria
- 50% marks in Bachelor degree for male candidates and 45% for female candidates.
- Tutors' Qualification
- M.A., M.Ed with minimum 5 years teaching experience.

It is worthwhile to mention here that Higher Education Commission Pakistan has decided to revamp teacher training program in Pakistan and in this regard a project funded by USAID entitled PRE-STEP (Pre service teacher education program) has been launched and under which a four year bachelor degree program will be offered both for elementary and secondary teacher.

CONCLUSION

It is an undeniable fact that education is the only factor, which contribute maximum in the socio-economic, cultural and industrial development of any nation. Pakistan is one of the densely populated countries in the world. Keeping in view the need of education for the development of Pakistan in all sectors to go along with developed countries, the only tool was to educate its maximum mass; in 1974 Government t of Pakistan established an Allama Iqbal Open University. This was the first university of its own kind in Pakistan for imparting education through distance mode.

At present, it is one of the mega universities in the world and within the country the most prominent university with highest number of students. Education at doorstep, international level reading material, No age limit and unique examination system are the characteristics of AIOU. AIOU is delivering education not only from certificate level but also doctorate level. University is providing education opportunity to those who have left education years ago at some stage due to some problems or those who have urge to add some degree on their credit but situation does not allow them to continue their education. AIOU welcomes these groups of people to education and offer them quality education at their doorsteps through its transparent and unique system of its own kind. AIOU is playing its role in mounting the literacy rate higher than before as well as preparing the huge mass of Pakistan specially the field of science and technology to keep pace with the developing countries of the world.

Teachers are the most prominent element of the triangle of parents, children and teachers. Now the Teachers have power to change the whole scenario of system of education. Teaching methodology is one of tool with which a teacher can perform his/her instructional work. National Education Policy 1998-2010 states that teacher is the most crucial factor in implementing all education reforms at the gross root level. In Pakistan, there are 246 conventional teacher-training institutes, which are preparing teachers to teach at different levels. Parallel to this conventional system, Allama Iqbal Open University is producing teachers through distance learning mode. The clients of AIOU are of two types, firstly the one who are already in service teachers based on PTC, CT and B.Ed, these teachers are enhancing their knowledge by doing M.Ed, secondly, those who have made up a mind to be a teacher in future. AIOU provides equal opportunities to all of its consumers.

AIOU train its teachers by providing blended approaches. Tutorial, workshops, assignments and evaluation system makes AIOU prominent from other institutes. For these purposes, AIOU hire the most eminent personalities in the field. In the teacher training programs, AIOU always embedded new trends time to time, which appear in the field of teacher training. At main campus and now at regional campuses, AIOU provides basic facilities like multimedia, Internet and Wi-Fi technology. The only aim of AIOU is to prepare such teachers who can face the challenges of the 21st century with more or less same pace like developing countries.

BIODATA and CONTACT ADDRESSES of AUTHORS

DR NABI BUX JUMANI



Dr. JUMANI has been working as Head, Department of Secondary Teacher Education, Faculty of Education, and Allama Iqbal Open University Islamabad Pakistan. Dr Jumani has acquired his academic credentials for M.Ed, M.Phil, Ph.D and Post Doc. His areas of study and specialization have been Curriculum Development, Teacher Education, and Distance Education.. Having studied these various facets of Educational Discipline, he possesses necessary knowledge and skills for teaching at higher levels and conducting research. The teaching and training

experience of Dr. Jumani reveals that he has been in the field of education for over 25 years and dealt with different levels of educational systems from Secondary to University level.

Dr. Jumani has been widely published in different journals of repute both within Pakistan and outside. He has been publishing his research over a decade. His work has got space in the International Journals published not only in Pakistan, also from India, USA, Turkey, Japan, Africa and Azerbaijan. Dr. Jumani is on the Editorial Board of Journals of high standards, like IRRODL (International Review of Research in Open

and Distance Learning – published from Canada), AsianJDE (Asian Journal of Distance Education-published from Japan), TOJDE (Turkish online Journal of Distance Education-published from Turkey), EJEL (Electronic Journal of E-Learning – published from United Kingdom), Quarterly Review of Distance Education (published by Information Age Publishing, USA), CIER (Contemporary Issues in Education Research – published from USA) etc, in addition to being on the Board for Pakistan Journal of Education and Journal of Educational Research published by Islamia University Bahawalpur, Pakistan.

Dr. Jumani is interested in extra-curricular activities too, like having won Education Talent Award in 1996, Outstanding performance in English Essays in 1992-93, attending training of teachers in formal and non-formal education conducted by Ministry of Education, Govt. of Pakistan and Commonwealth Secretariat, London, online discussion to the Australia/Pakistan/Iran Education Project in 2007etc indicate his diverse abilities and interests.

DR NABI BUX JUMANI

Head, Department of Secondary Teacher Education & Coordinator,
Pre Service Teacher Education Program (Pre-STEP-USAID),
Faculty of Education, Allama Iqbal Open University Islamabad, PAKISTAN.
Email: nbjumani@yahoo.com

FAZALUR RAHMAN did his master from University of Peshawar with distinction. His PhD research is on metacognition of teachers. He started his career as coordination officer in Teacher Training Project (ADB assisted), Federal Ministry of Education and served where he has been associated with a group of international and national experts for devising a national plan for teacher training. In 1999, he Joined Allama Iqbal Open University, Islamabad as lecturer in the department of Teacher education. The areas of his interest are teacher training, distance education and ICT in education. Eight articles have been published in national and international journals of repute. He has a privilege of working as deputy editor of journal "Busy world International". Presently he is associate editor of Journal of community learning India and reviewer of various journals. He participated in a number of workshops/seminars/conferences at national and international level on the area of teacher training and distance education.

FAZALUR RAHMAN

Department Of Early Childhood & Elementary Teacher Education
Allama Iqbal Open University Islamabad, PAKISTAN
Phone: 92-51-9057268
Email: fazalaiou@yahoo.com



Dr. Chishti has been working as Assistant Professor in the Depatt of Education, Intertnational Islamic University Islamabad. He did M.B.E from University of the Punjab and PhD from ARID University Rawalpindi in 2001. He has also worked as Pricipal of a rewnowned organization of Pakistan i.e City School Islamabad for ten years.His areas of specialization are curriculum developoment and educational management and leadership. He is working as Project Director, Institute of Professional Development which deals with the In-service teachers training. He has written a good number of research paper and associated with several research journals as reviewer and member of international and national professional organizations.

Dr. SAEED UL HASAN CHISHTI
Project Director Institute of Professional Development
International Islamic University Islamabad, PAKISTAN
Email: saeed-ul-hasan@hotmail.com

Dr. Samina MALIK

Dr. Samina possesses PhD in Education. She is responsible for all the academic programs offered by Department of Education. She lectures to post graduate students and supervises trainees on teaching practice. She also supervises postgraduate research degrees (MPhil and PhD). Her main teaching interests include: Human Development and Learning, Higher Education and Research Methods. The majority of Samina's research experience is in the areas of women and education.

Dr. Samina MALIK

Assistant Professor, Incharge (Female Section), Department of Education,
International Islamic University, Islamabad, PAKISTAN
Ph#(Off.) 92-51-9019371 Fax#92-51- 9257929
Email: samina.malik@iiu.edu.pk

REFERENCES

- Abrami, P. & Buras, E. (1996). Computer-supported collaborative learning and distance education. *The American Journal of Distance Education, 10(2), 37-42.*
- Allama Iqbal Open University (AIU). (1999). *Vice Chancellor's Annual Report*. Islamabad: AIU.
- Allama Iqbal Open University (2001). *AIU News No.2 Vo.2*. Islamabad: AIU.
- Allama Iqbal Open University (AIU). (2003). *Vice Chancellor's Annual Report*. Islamabad: AIU.
- Allama Iqbal Open University (AIU) (2004). *Manual of Teaching Practice*. Islamabad: Faculty of Education.
- Allama Iqbal Open University (AIU) (2007). *Teaching Methodology*. Retrieved on Oct 12, 2007 from www.aiou.edu.pk/Teachingmethodology2.asp
- Amundsen, C.L., and Bernard, R.M. (1989). Institutional Support for Peer Contact in Distance Education: An Empirical Investigation. *Distance Education, 10(1), 7-27.*
- Beers, M.I., and Orzech, M.J (1996). In B. Robin, J.D. Price, J. Willis, & D.A. Willis, (Eds.). *Technology and Teacher Education Annual, 1996. Proceedings of the Society for Information Technology and Teacher Education (SITE)*. (Pp.679-681), San Diego, CA.
- Drucker, P. (1994, November). The age of social transformation. *The Atlantic Monthly, 58-53.*
- Egbert, J. & Thomas, M. (2001). The New Frontiers: A Case Study in Applying Instructional Design for Distance Teacher Education. In *JI of Technology and Teacher Education .9(3), 391-404.*
- Garrison, D. R. (1986). The role of Technology. In R.G. Brockett (Ed.). *Continuing education in the year 2000*. (pp.41-54). San Francisco: Jossey Bass.
- Garrison, D. R. (1987). The role of technology in continuing education. *New directions for Continuing Education, 36.41-53.*

- Gasper, R. F. & Thompson, T.D. (1995). Current trends in distance education. *Journal of Interactive Instruction Development*, 8 (2), 21-27.
- Government of Pakistan. (1959). *Report of the Commission of National Education*. Karachi: Ministry of Education.
- Government of Pakistan. (1998). *Education Policy 1998-2010*. Islamabad: Ministry of Education.
- Jumani, N.B. & Zai, Y. (2009). Distance Teacher Education in Pakistan. in 'Quarterly Review of Distance Education'. Association for Educational Communications and Technology. IAP Publisher, USA.
- Kearsley, G. (1996). Education as usual: Comments on Chris DEDE'S ARTICLE. *The American Journal of Distance Education*, 10(2), 55-58.
- Keegan, D.J. (1986). *The Foundations of Distance Education*. Dover, New Hampshire: CroomHelm.
- Lauzon, A. C. & Moore, M.G. (1989). A fourth generation distance education system: Integrating computer-assisted learning and computer conferencing. *The American Journal of Distance Education*, 3(1), 38-49.
- Perraton, H. et al. (2001). *Teacher Education through Distance Learning*. France: UNESCO.
- Perraton, H. et al. (2002). *Teacher Education Guidelines: Using Open and Distance Learning*. France: UNESCO.
- Perraton, H. (1997). *The cost effectiveness of distance education for primary teacher training*. Retrieved on January 17, 2007 from <http://www.col.org/consultancies/97primeteach.htm>
- Quintana, Y. (1996). Evaluating the Value and Effectiveness of Internet-Based Learning. *INET 96: Annual Conference of the Internet Society. Montreal, PQ: 26 June 1996-28 June 1996*. Reston, Virginia: Internet Society. Available on CD-ROM and on http://www.isoc.org/isoc/whatis/conferences/inet/96/proceedings/c1/c1_4.htm
- Shah, R. A. (1997). *Education and Teacher Education in Pakistan*. Jamshoro: Pakistan Studies Centre, University of Sindh.
- Strehle, G. (2000). Distance learning in America: How institutions and corporations are stimulating growth. Retrieved on February 11, 2005 from <http://www.ingenta.com/institute2000/strehle.pdf>.
- Toffler, A. (1990). *Power Shift: Knowledge, Wealth and Violence at the Edge of 21st Century*. New York: Bantam Books.
- Townsend, T. & Bates, R. (2007). *Handbook of Teacher Education, Globalization, Standards and Professionalism in Times of Change*. Netherlands: Springer.
- University Grants Commission (2001). *Curriculum of Education for B.Ed., M.Ed., M. A. (Edu)(Revised 2001)*. Islamabad: UGC.
- Wilkes, C. & Burnheam, B. (1991). Adult learner motivations and electronics distance education. *The American Journal of Distance Education*, 5(1), 43-50.180.