

Open Distance Learning (ODL) in Pakistan*

By

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Background

The demand for education in Third World countries, through the formal system, has consistently run ahead of resources. The bulk of the population, therefore, remains educationally deprived. At the same time social and economic pressures continue to increase. Even among the educated, there is a dire need for continuing education to keep them abreast and enhance their educational and professional level. The Semi-literate people need awareness and other necessary orientations about their basic human rights. Similarly, multitudes of illiterate people need their rightful status as equally communicating and useful members of their communities. All of this requires education.

The realization of the magnitude, complexity and pressure of the problem, and the continuing economic inability of different countries to fund the formal educational system, has compelled their educational planners to explore the possibilities of unconventional methods, which would overcome the limitations of the formal system. This has led more and more countries to turn to distance education as one of the solutions to the situation. Over the last three decades, distance education has become increasingly recognized as a significant alternative approach to solve this problem.

Both the developed and developing countries have seized the advantages of distance education to meet the pressing educational, and social needs of their occupational masses. Consequently, distance education system is maturing rapidly from a field of study towards a discipline in its own right. More importantly, its effects are being felt and revealed, often quite strikingly throughout the world and it has made its way deep into the educational, social and economic mainstreams of many societies.

The Allama Iqbal Open University has successfully used the distance education model in Pakistan. It has established multi-media, multi-level and a multi-method teaching system. Within a modest period, the University has been able to offer courses from literacy to Ph.D. level.

With its system of reaching the students at their homes or places of work and the concept of openness, implying lifelong education, the Allama Iqbal Open University is filling the gaps left by the conventional system. It is taking education to the areas and groups unable to benefit from the formal system of education.

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Establishment of AIOU

The Allama Iqbal Open University was established in 1974 under the name, the People's Open University. It was renamed as Allama Iqbal Open University in 1977 at the eve of the first centenary of the national poet and philosopher, Allama Muhammad Iqbal, who gave birth to the idea of Pakistan. The concept of an "Open University" was presented with the enunciation of broad principles in the Education Policy of 1972-80, in following way:

"Open universities are being used in several countries to provide education and training to people who cannot leave their homes and jobs for full time studies. An Open University will, therefore, be established to provide part-time educational facilities through correspondence courses, tutorials, seminars, workshops, laboratories, television and radio broadcasts and other mass communication media...."

As the first Open University established in Asia, this University started functioning as a recognizable entity in June 1974 in pursuance of Act No. XXXIX passed by the Parliament of Pakistan in May 1974.

Objectives

The main objectives of the University are as follows:

- To provide facilities to people who cannot leave their homes and jobs.
- To provide such facilities to the masses for their educational uplift.
- To provide facilities for the training of teachers.
- To provide for instruction in technology or vocation, and to make provision for research and for the advancement and dissemination of knowledge.
- To hold examinations and award and confer degrees, diplomas, certificate and other academic distinctions.

During its twenty-seven years of existence, the University has made strenuous efforts to bring the above objectives to reality, to offer a second chance - often indeed a first chance. People, who would otherwise have been unable to advance their careers, to satisfy their inner need for knowledge or to equip themselves as better citizens have access to education. Above all, the University has tried to reach out to the disadvantaged, those in greatest need, to the millions scattered across Pakistan. Many are in the remotest parts of the country.

The programmes of the University are offered under its distance education system throughout Pakistan and even in some of the Middle East countries. Its programmes offer a wide choice of courses at a variety of levels. These are beneficial for the general public as well as for professional people.

With its main campus at Islamabad, the University extends its educational facilities to the remotest parts of the country. It does this through the mailing of learning package, its radio and TV broadcasts; and by tutorial services through its regional campuses and study centers established in almost all the major cities of the country. Under its countrywide network of regional centers, the University arranges the tutorial support to students at local level through the study centers established in various educational institutions of the formal system of education. This collaboration at local level is an example of the partnership nature of the University. It is working hand in hand with

government departments and agencies at all levels, as well as with a range of non-government agencies, both national and international, in carrying education and development forward throughout the country.

The Institutional Framework

The University Act has laid down the powers and functions of the authorities and officers. The President of the Islamic Republic of Pakistan is the Chancellor of the Allama Iqbal Open University. The Federal Minister for Education is the Pro-Chancellor, and the Vice-Chancellor of the University is its principal executive and academic officer. Being an academic institution, the AIOU has an academic structure at its core, which consists of four faculties, with twenty-six teaching departments; two institutes, the Institute of Mass Education, and Institute of Educational Technology. These are supported by the Research and Evaluation Center, the Central Library, Computer Center, Print Production Unit, and other administrative and servicing departments. Annexures 1-7 detail the overall institution framework, the Institute of Mass Education, the Institute of Educational Technology, the Research and Evaluation Centre, the Central Library, the Computer Center, and Print Production Unit.

Student Profile/Enrollment Patterns/Geographic Spread

The University made a humble starts through the offering of only a few functional courses in 1976, but with ease and flexibility of distance education systems, the enrollment of students from all over the country and overseas has increased tremendously.

The main features and trends of AIOU enrollment are as under:

- More than 75 percent of its students are employed people. AIOU provides opportunities to employed people to take courses relevant to their jobs, and thus improve their skills.
- Female participation: 50 percent of the enrollment consists of females. AIOU provides educational opportunities to females who cannot leave their homes. Many of the courses are for females only.
- AIOU is providing educational access to the people in rural under developed areas as well as urban.
- The University also offers its programmes to the overseas Pakistanis in Gulf States.
- Unlike formal systems, there is no age limit or compulsion to regularly attend the classes. However, face-to-face teaching has been recently started for courses involving intensive practical/lab work for skill development.
- AIOU has the facility available for learners to enroll for the course(s) of their choice at a particular level; to select course(s) according to the time available to them; and to continue at their own pace from semester to semester.
- The University is offering courses (subjects) from literacy to Ph.D.
- A large portion of the clientele is at secondary School certificate (SSC), Higher Secondary Certificate (inter-mediate) and Bachelor levels.

Therefore, the main focus of the University has been at under-graduate **level**.

The geographical spread of the student enrollment and participation rate is given below in the Table 1.

Table-1

AGE DISTRIBUTION						
<u>20 Years & below</u>	<u>21-30</u>	<u>31-40</u>	<u>41-50</u>	<u>51 years & above</u>		
13%	61%	20%	5%	1%		
OCCUPATIONAL DISTRIBUTION						
<u>Employed (Govt)</u>	<u>Employed Private</u>	<u>Student</u>	<u>Household</u>	<u>Business</u>	<u>Agriculture</u>	<u>Others</u>
58%	9%	18%	6%	7%	1%	1%
PROVINCE/AREA-WISE STUDENTS PARTICIPATION (1997-98)						
<u>NWFP</u>	<u>Baluchistan</u>	<u>Punjab</u>	<u>Sindh</u>	<u>AJK</u>	<u>FA</u>	<u>FANA</u>
13%	1%	72%	6%	3%	4%	1%
URBAN-RURAL DISPERSAL						
	<u>Rural</u>	<u>Urban</u>				
	58%	42%				
* Data based on the research studies of Research and Evaluation Centre (REC)						

Staffing

By employing the methodology of distance education, AIOU has become the largest institution of learning in Pakistan with course enrollment of almost a million. It has emerged as the most effective method of imparting education in a resource constrained country. The University is supplementing the efforts of the Federal and Provincial government without placing any burden on their resources because it is substantially self-supporting.

In its first 25 years the University did not focus on the post-graduate programmes, as it did not wish to compete with formal universities in post-graduate studies. In view of the increasing demand for admission in the postgraduate programmes, from the working people as well as women, AIOU has started more than fifteen post-graduate degree programmes in the last few years, including M.Phil and Ph.D. programmes.

AIOU is meeting and managing the vast educational needs through its four faculties and Institute of Mass Education. The collective academic strength at the main campus in Islamabad is 200, with 734 supporting staff. Regional staff totals 364. Total

course offerings of over 850 courses make this very economical, staff-wise, as compared to formal academic universities.

The Academic staff Basic Pay Scale (BPS) hiring tier starts from Lecturer (BPS-17) and continues to Assistant Professor (BPS-18), Associate Professor (BPS-19), and Professor (BPS-20). The entry point in the University calls for a 1st division in the terminal degree. Of course each tier has other requirements of experience, research and publications.

A government ban on the creation of posts has been in place since 1989. Course enrollment in 1988 was around 80,000. Since then, course enrollment in the University has increased 12-fold and reached nearly one million. In light of the government ban, this increase stretched the University academic and administrative staff to the limit. The regional campuses are under particular stress to support, coordinate and organize educational activities with skeleton staff.

After a great struggle, the government allowed the University to open 149 posts, mostly for academic departments and regional centers. This provided some relief, however, at least 800 additional posts are required to strengthen academic departments and regional campuses to the optimum level. It is worth noting that the financial impact of all 149 new posts is entirely borne by the University from its own resources. This has been accomplished because of the continuously increasing income from the new degree programmes.

Staff Development

The induction of academic staff in the AIOU system is based on the selection on merit with first division in the Masters of the specialized subject. Distance education experience is not a pre-condition. Until the late 80's, staff development in distance education was done by sending staff from the different faculties on a three month Distance Education course at the London University, UK through ODA sponsorship. Additional local training was done by externally sponsored workshops. Thereafter, until the mid 90's, it was done through a series of short one week training sessions organized by the Department of Distance and Non-formal Education. This local in-service training by faculty, who has had the exposure to distance education through ODA sponsorship, was a good practice to acquaint the staff that does not have the know-how of distance education. Perhaps because of the reduction in the intake of new staff because of the ban on appointments, this practice was temporarily discontinued. With the beginning of the new millennium it was restarted.

Professional growth in higher studies was done through the government scheme of Central Overseas Training (COT) scholarship until the '90s. Some staff even benefited from the Commonwealth of Learning and British Council scholarships. In 1999 AIOU has launched a programme for staff development including two Ph.D. scholarships for studies abroad, through a sizeable allocation of income from the Endowment Fund. Under this programme, two faculty members were sent for the Ph.D. in UK and Australia in Business Administration and Women Studies respectively. In addition, two more faculty members went for Ph.D. abroad on other sponsorship. In addition, four faculty members are being supported for their doctoral studies in Pakistani universities.

Meeting Educational Demand through Collaboration with the Formal System

The demand of distance education in Pakistan is increasing day by day. In spite of manpower/financial constraints, AIOU is fulfilling its greater demand for education through its collaboration of the academics from the colleges, universities and schools of the formal system. These academics serve in the course development process as members of course team, committee of courses, unit writers, scriptwriters. For the implementation of the courses, AIOU relies heavily on its almost 20,000 part-time tutors who are academics drawn from the formal system educational institutions. (With exceptions, the general formula is one tutor for about 34 students).

Qualifications

The acceptance of the University's diplomas and degrees did not proceed as easily. The first major step forward in the fight for credential credibility occurred in 1980, when the UGC issued a notification that AIOU qualifications had total equivalence with those of other universities. The credibility has now opened new channels. A Memo of Understanding (MoU) has been signed between AIOU and the Pakistan Atomic Energy Commission (PAEC) for M.Sc. Physics programme. The Pakistan Council for Scientific and Industrial Research (PCSIR) has placed the services of its experts at AIOU's disposal for writing textbooks, for providing instructional support, to allow AIOU students to use their laboratories for practical training.

Curriculum Content and Courses of Study

AIOU is a unique educational institution, which offers degrees, diplomas and certificates from basic level to doctorate and research level. All these programmes have a wide variety of clusters and courses, which are developed and launched by the four faculties i.e. Faculty of Education, Faculty of Social Sciences and Humanities, Faculty of Arabic and Islamic Studies, Faculty of Sciences and the Institute of Mass Education. The details of the programmes and courses offered by the various faculties, institutes and departments can be seen in Annexure 8.

The main components of its multi media package are the following:

- ▶ Correspondence materials including self-learning study package and supplementary study materials (readers, text books and study guides).
- ▶ Radio and television broadcasts generally related to the study materials of the package.
- ▶ Satellite Transmission: AIOU airs its educational media material on PTV-2 whose satellite transmission reaches more than 45 countries.
- ▶ Non-broadcast media including slides, audio-cassettes, fillip charts, and leaflets (generally for basic functional and literacy level courses) and also audio/video cassettes as integral part of learning material.
- ▶ Tutorial instruction through contact sessions and academic guidance facilities at study centers (mostly in the afternoons).

- ▶ Face-to-face teaching has recently been started for courses like Information Technology (IT), Computer Sciences and others, which require intensive practical/ lab work or skill development.
- ▶ Group-training workshops for post graduate/ programmes, generally at M.A/M.Sc/M.Phil and Diploma levels.
- ▶ Internship of short term and long term duration in industrial or business, concerns for B.B.A. and M.B.A programmes.
- ▶ Course assignments as an instrument of instruction, continuous assessment and general academic guidance of students. The assignments evaluation is done by the tutors.
- ▶ Final Examination held, for each course, at the end of the semester.

The teaching system components above make up the AIOU teaching methodology obviously very different than the traditional formal instructional system. The curriculum for comparable courses does not differ significantly, as the University is part of the University Grants System (UGC) and abides by the mutually agreed curricula.

Staff Roles and Functions

The difference in the teaching methodology and the way the curriculum is presented in the form of course material demands different roles of the distance educators. They are planners, curriculum developers, writers, scriptwriters, evaluators, monitors, coordinators, pre-testers, tutors, trainers, demonstrators, resource linkers, managers, researchers, reviewers, feedback givers, supervisors, group leaders, field coordinators, and revisers. In view of the requirements of the distance education teaching methodology, the following activities have been notified by the Registrar of the AIOU:

- To conduct feasibility studies and initiate course programme proposals.
- To develop course outlines (curriculum) for courses and programmes.
- To write units (Chapters) for the courses.
- To coordinate the development of courses and study guides.
- To revise and update course materials.
- To compile allied reading materials in form of readers.
- To teach in course related workshops/course revision session at the head office and in the regions.
- To supervise and coordinate the orientation or end of course workshops.
- To participate in tutor training/briefing.
- To carry out research and supervise post-graduate level research.
- To write scripts for media/radio/TV, non-broadcast programmes.
- To participate in media programmes production.
- To prepare assignments for each semester and monitor assignment evaluations.
- To visit tutorials to get feedback.
- To review the three drafts of each units of every course at development stage.

- To proof read units, assignments, student and tutor guides and publicity materials.
- To keep a liaison with other agencies for need assessment/course production and course offerings.
- To prepare working papers for statutory bodies.
- To maintain courses.

With the latest developments in communication and information technology, particularly satellite transmission and Internet, the role of the teachers will further be revolutionized. The correspondence method and tutorial system are likely to be replaced by distance teaching through satellite and Internet and making a quantum jump. The emerging concepts of Virtual University are also seeing the light of the day. A meaningful utilization of the modern tools would revolutionize the entire system of distance learning. The University has already taken steps in this direction. The details of these developmental activities can be seen under the section on technologies in use and future directions. The development of course material in distance education and unit writing is challenging, time consuming, and demanding. At the same time, research based activities should be encouraged as 2nd generation of distance education has gained momentum, and the emerging 3rd generation, based on new technologies will present a new set of problems.

Learning Support Services: The Directorate of Regional Services

Directorate Regional Services and Student Advisory and Counseling Cell are the major providers of student learning support services. The Directorate of Regional Services constitutes a distinctive aspect of AIOU that differentiates it from the formal universities. Through this service the University extends its educational facilities to the doorsteps of the masses. The broad spheres of activity comprising regional services are discussed following, after which the Students Advisory and Counseling Cell is presented.

Tutorial Support and Study Centres

Tutorial support is arranged through part-time tutors (teachers of formal institutions) who evaluate students' home assignments and hold tutorial meetings at the local Study Centers in the evenings and on weekends. The current number ranges between 8000 to 9000. The enrollment of AIOU courses is increasing every semester and the number of tutors and study centers has increased accordingly. This increase in the regional services out reach is shown in Annexure 9.

The University has established over 500 Study Centers (in other institutions' premises) where tutorials are held as per study schedule. Seventy of these Study Centers are equipped with Audio/Visual aids. At some places there are exclusive Study Centers for female students. Special needs are met in other ways. Conduct of face-to-face workshops for students joining professional courses provides opportunities of intensive academic interaction. Prolonged practical for Technical & Vocational Courses are arranged usually on weekly holiday.

AIOU's evaluation of student's achievement takes place through continuous assessment and final examination. Regional Services undertakes all continuous assessment through its part-time tutors. It identifies examination centers, supervisory

staff, and facilitates inspection of university examinations, which are conducted in almost each district twice a year.

Regional Services constitute the field operation side of the University and its campus; centers are the focal point from where the student support services emanate throughout the country. It is through the activities in the regions that the University is recognized in the large cities as well as the most remote corner of Pakistan.

There are thirty-two regional offices covering the length and breadth of Pakistan. Five new regional offices have recently been created, with four being in the far-flung areas of Balouchistan and one in Skardu. AIOU now has two buildings of its own on regional campuses at Multan and Lahore, while four campuses are under construction at Karachi, Mirpur, Dera Ismail Khan, and Quetta. The regional network and the outreach system is shown at Annexure 10.

Today Regional Service is catering to the needs of around one million-course enrolment from all over Pakistan. Centers are equipped with the latest electronic office equipment such as personal computers, (both for office and library), internet and photocopiers.

In addition to all the activities mentioned above, this Directorate also takes care of the arrangements for the promotional activities, student support services and co-curricular activities for the students in all the regions throughout the country.

Learning Support Services: Students Advisory and Counseling Cell

The Students Advisory and Counseling Cell was established in 1984 with the main objective of providing academic assistance to the students to enabling them to continue their course of studies smoothly. It also aims to remove the hurdles and bottle-necks which can impede the progress of the students during the semester. The major activities undertaken by the cell for the students are as follows:

- The cell provides guidance and counseling services to the distance learners through media, telephone and letters.
- Individuals as well as group (face to face) counseling sessions are also conducted for the students on campus as well as at the Regional Office level.
- The cell acts as a liaison between the students and campus, it also aims to promote healthy interaction amongst the students through curricular/co-curricular activators so as to motivate them to become active learners through out their course of studies.
- The cell attracts new learners and facilitates them in the choice of courses/programs, orients them with the distinct features of distance education.
- A weekly radio programme "JAMIA NAMA" is also written and conducted by the Director Students Affairs. The programme provides current information regarding university programmes for the students and general public. It also highlights the pressing issues of the students and suggests remedial measures.
- To respond to the queries of general nature, standard proforma regarding university programs/procedures are designed in the cell.

- The staff of the cell helps in resolving the problems of the students by making liaison with the relevant academic and servicing departments.

In addition to providing these services to the in-land students, the advisory cell has also been assigned the task of coordination of the overseas students and the overseas cell has been shifted to the advisory cell. The coordination includes the following:

- Admission of Overseas Pakistani residing in the Middle East/Gulf Estates and Saudi Arabia.
- Providing information guidance and academic counseling to the overseas students.
- Keeping liaison with the Pakistani Institutions abroad for enrolment of the students as well as provision of tutorial support where possible,
- Coordinating with the Foreign Office and Embassies abroad for the conduct of examination and imparting admission information to the Pakistani residing in their vicinity.
- Replying the queries of the students as well as general public abroad.
- The study packets are also delivered in the supervision of Overseas Cell.
- The assignment schedules supplementary materials and students guide is also prepared and provided to the Overseas Students by the Director Overseas.
- The assignments of the overseas students are received in the Cell and the evaluation is arranged through the courtesy of Director Regional Services.
- The final examinations are arranged and conducted by the Examination Department. However, the Overseas Cell conveys the information regarding examinations and results.
- The complaints regarding examination are also processed/tackled/got resolved conferred by the Overseas Cell.

The advisory role of the Cell adopts the following modes for the satisfaction of the students:

- Standard answer sheets
- Personal/specific letters
- Telephone Counseling
- Face to face guidance
- Regular communications through media
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Student Assistance and the Funding of Activities

In order to assist the needy students, especially in costly courses like Computer Sciences, Physics, Business Administration, etc., a Students Assistance Fund has been created. With the approval of the AIOU Executive Council, it is funded through a levy of Rs.10 per course from each student of the University. Similarly, a levy of Rs.5 per course per student has been made for organizing student's activities. The income from above two sources is approximately Rs.15 million per annum. The funds are distributed

to needy students after careful evaluation of applications. The University has also announced free education for its employees and their children to University programmes.

Assessment of Student Achievement

Each student usually can take maximum of two full credits (or four half-credit) courses in a semester. A special concession has been given for taking three credits in courses where 80% attendance is compulsory for practical and lab work.

A full credit course has study period of 18 weeks. It has 18 units and four assignments (the half credit course has 9 units and two assignments). A correspondence unit for each week requires 10-12 hours of study per week. Most courses have nine or more radio programs during the semester and several courses have television programmes. Some courses have a workshop component also.

Each student is required to complete his assignments and send to his tutors for assessment. The evaluated assignments are returned to the students with instructional notes. The marks obtained by the students in these assignments are sent to the Controller of Examinations for recording and eventual preparation of results. The final examinations are held in the last week of each semester. The overall result is based on a combination of continuous assessment (30%) and final examination (70%). The minimum pass mark in each course is 33% but the aggregate marks for the award of a complete certificate (e.g. for BA) is 40%.

At the end of each semester, Examinations Department conducts final examinations of each course (like other Boards/Universities of the country). The main examinations are conducted twice a year, that is, in March/April and August/September each year. Three chances for reappear are given for the final examination if the student fails.

Course and Programme Development

AIOU programmes are offered through its faculties and institutions. The initiation of all the programmes are done by the concerned departments with the formation of the course team and development of the course outlines of the programmes. In case of projects, feasibility is done before the course team formation takes place. The Course Team formulates outlines and course proposals, which are discussed by the Committee of Courses (COC). In some cases the outlines are deferred at the level before recommending it to the Faculty Board/Board of Study. The course outlines/proposal have to go through various Statutory Bodies before its final approval from the Academic Council.

After the final approval the course production stage starts and goes through various stages as given in figure 10. Ideally before the launching of the programme, its courses should be pre-tested. This is not the case with all the AIOU programmes. Only project courses are pre-tested, as there is financial provision for carrying out such exercise. The pre-tested courses compared to the other courses are definitely quality assured. However, the other courses development process as shown in the figure 9 does ensure quality. At the implementation stage quality is checked through monitoring. Again the monitoring of academic programs now is possible in projects only.

The quality of the course is also ensured by the feedback forms given in each course for submission on the conclusion of **the course**. This feedback helps in addressing both

issues related to administration or academic. Based on this feedback sometimes the contents are revised before the course life cycle of 5 years. The Research Center also undertakes research to see the effectiveness and quality of the course.

Programme Management and Quality Assurance

Programme management is done by the close collaboration of the Bureau of Course Production and Academic Planning (BCP&AP) with the faculties and academic departments. The Bureau is a central office in the course development process as it functions in close collaboration with the Committees of Courses, Faculty Boards, Group for Academic Policy and Planning (GAPP), Research and Technology Committee, Academic Planning and Development Committee and the Academic Council.

The Bureau participates in course planning, and administers course production and launching, in liaison with the faculties, academic and servicing departments, as well as with many other bodies, who influence the formulation of policy and planning for academic programmes of the University. The overall co-ordination of writing the courses, and all associated activities is a major responsibility of the Bureau. In monitoring the progress of course production, it endeavors to meet the deadlines and arrange meetings with course teams coordinators/course development coordinators and the personnel in the printing, editing and designing sections of the University. The course development process can be seen at Annexure 11.

About a semester ahead of the beginning of each semester, the Bureau ensures details of academic courses/programmes, printing/reprinting of course books, assignments and allied materials, telecasting/broad-casting schedule of TV and Radio Programmes of the courses to be launched in the ensuing semester. It also ensures the availability of required coordination/consultation with the Faculty, Academic Departments, Institute of Educational Technology, Print Production Unit, the Editing and Designing Cell, Computer Center, Admission and Mailing Sections, and Advertisement Committee, etc. Thus it serves in many respects as the nerve center of the University.

University Admissions Process

The University divides the academic year into two semesters. Each semester normally lasts for (6) months, from October to February and April to August. All the admissions are notified well in advance through advertisement in the national press. There is always a deadline set for admission in each semester.

Approximately 150,000 admission forms received are processed for admissions in various programs each semester. The admission process takes about three months from the receipt of forms to finalization of the admissions. After checking, the eligibility the forms are coded by the admission section, and are sent to the Computer Center for preparation of enrollment list and address labels. After admissions, the Mailing Section sends instructional materials to the students at their addresses. The admission lists of various courses are passed on to the Regional Offices located in all provinces for appointment of Tutors and establishment of Study Centers according to the clusters of enrollment in the courses.

Financing ODL

AIOU's income and expenses are divided into two broad categories in accordance with government practices—development budget and recurring budget. Development funds cover the cost of construction, equipment, and new project development. The recurring budget deals basically with fixed expenses like salaries, physical plant maintenance, supplies, and other costs. AIOU over the years has generated enough funds for its sustainability. The funds have been generated from student fees, utilization of IET studios, and sale of publications

The budget of AIOU in the first year of its establishment was at Rs. 2.83 million. With the expansion of activities and diversification of its programs, the situation has changed tremendously. In the year 1999, the total Budget of the University stood at approximately Rs.503 million of which Rs.423 million was raised by the University from the fees collected from the students, and approximately Rs.80 million was provided as a grant by Government. In addition, the University collects about Rs.15 million per annum for the Students Assistance and Activities Funds from the students. The University also received Rs.27 million as grants for donor sponsored project like the new Primary Teacher Orientation Course (PTOC). The Government share of the revenues for 1999-2000 came to about 14 percent (85 million), whereas the university budget was Rs. 610 million. The University has raised 86 percent of its income from its own resources. AIOU is thus fast moving towards self-sufficiency with a balanced budget.

Taking the total revenues of the University into account (including the development grant by the Government), the share of the Government both for Recurring as well as development activities comes to about 12.5 percent of the total. With the addition of new academic programmes, it is hoped that the income from fee collection will steadily rise in the coming years.

Technologies for Open Distance Learning (ODL)

Technologies in use

AIOU has realized the need of information technology in its administrative and academic departments. For this purpose, AIOU has heavily invested in technology-based infrastructure.

Following are a few notable examples.

a. *Faculty and staff Training*

AIOU has equipped every department with PCs—about 500 have been inducted. Extensive training of both staff and the faculty has been carried out. Almost all staff members and faculty have signed up for courses on computer application and course material development. This internal training is being provided by Computer Science Department.

b. *Development of Databases*

Even though the initial computerization of student enrolment presents many data processing problems, the need was felt for updating software and systems and applications are being posted to Oracle database. All administrative system records, including admission, exam, fees, in student needs etc. are being posted to Oracle based applications.

c. Internet and Web application

All regional offices are connected with the University mail server and web server. The University has a sponsored inter-net connection on the Internet and that is provided nationwide to all the AIOU regional offices.

The University website is at www.aiou.edu.pk

d. Multimedia courseware

The Computer Science Department is heavily engaged in development of RCD facilities geared towards University computerization. In this connection a multimedia courseware laboratory has been established. This is being used to train faculty and develop the courseware. The laboratory is well equipped with necessary hard ware and software.

e. Media Laboratory

The Computer Science Department in collaboration with IET is developing the media laboratory. This laboratory will be used for development of video materials for its courses at graduate level and for general public.

f. Development of Internet based Academic system

AIOU has now focused on Internet based academic system development. The first course on E-Commerce was developed with the help of an expert from Open Polytechnic, New Zealand. Another professor from the University of Illinois, Chicago has been deputed for technical support in the computer science future programmes.

Future Technologies

AIOU has now visualized the technology supported infrastructure as key component of our distance education system. A serious thought is being given towards the development of a virtual University model. Following are the main components where AIOU is making initiatives:

- Online Admissions and examinations System
- Online tutoring and faculty support
- Development of web based student management system
- Specialization in multimedia and web based courseware in all disciplines.
- Rural Internet communication infrastructure development through Ministry of Science and Technology.
- Development of a model study center in remote areas of Pakistan
- Digital TV transmission and receiving capacity at model study centers in support of academic learning

We hope that all such endeavours will lead AIOU to earn a respectable place in the world of learning.

International Collaboration in ODL

From its inception, AIOU has successfully enlisted international support from a number of aid-giving agencies under collaborative arrangements. The most prominent of the donors was the British government (ODA), whose intensive funding continued from 1976 to 1994.

UKOU and ODA: Since its establishment AIOU has been getting British ODA sponsored technical assistance from The Open University in the UK (UKOU) in the form staff training, consultancies on all aspects of distance education, and setting up the Institute of Educational Technology, the university press, Data Processing Center, academic programs at basic level through the Integrated Functional Literacy Project (IFLP), the Functional Education Program for Rural Area (FEFRA), and Basic Functional Education Program (BFEP).

Netherlands government helped the university in the Matric Women Project providing educational opportunities to women in rural areas, who could not attend the formal institution due to social, financial and cultural reasons. The project has now become a regular programme of the University and open to male students.

The Government of Norway funded the New Primary Teachers Orientation Course (New PTOC) for the training of 50,000 primary teachers over a period of almost ten years.

Other agencies helped AIOU in the formative years:

- UNDP for equipping the first TV studio
- UNICEF for Integrated Functional Education Projects in the four regions at Daultala, Sarai Naurang, Samahni and Bhit Shah
- UNESCO helped with staff training, research activities and conducting workshops for development of distance teaching material. In the 90s AIOU became the regional UNESCO Chair in Distance Education. In recognition of its pioneering work in the field of non-formal and basic education, the University received UNESCO NOMA Award and the Raja Roy Sing Award.
- Arab League Educational Cultural & Scientific Organization (ALESCO) has been collaborating with the AIOU to train approximately 2400 in-service Arabic Teachers of secondary schools. ALECSO provided five Arabic Trainers and financed educational software and audiovisual equipment.

More recent collaborations include:

The Government of Japan (JICA) helped the University in modernizing and updating its studios and equipment of the Institute of educational Technology. Now AIOU is in the negotiation process with JICA for starting the second phase of this project through the provision of latest digital technology for producing quality educational film. AIOU got a silver medal from JICA for the documentary films entitled *Sohni Dharti*

A four member delegation of JICA led by the managing director, Takashi Kanko have in their very recent visit have offered their services for the improvement of AIOU in the area of technology.

Commonwealth of Learning (COL) is assisting AIOU in offering a diploma in Youth in Development Programme. It is 1-1/2 years course specially prepared by Commonwealth Youth Programme (CYP).

The World Bank along with British Council is sponsoring matric for girls in the northern areas under a project called Northern Area Education Programme (NAEP). It started off in Spring 2000 with 200 girls in hard to reach two districts of Ganchi and Diamer in the northern area. From Spring 2001 it has been extended to 500 girls. The program will continue till Spring 2003.

Korea through its technical assistance has sent a list of AV equipment in July 2000 for which it has asked AIOU to send its requirement.

International Linkage of AIOU is also through its membership of International Council for Distance Education (ICDE) and Asian Association of Open Universities (AAOU).

Creation of Persian Department at AIOU with Iranian Help : The Cultural Attache of Iran during his recent visit to AIOU has expressed an interest in the creation of Persian Department at AIOU.

MoU between AIOU and Oracle USA: AIOU and Oracle Corporation(USA) have signed an MoU for professional information technology training. AIOU under this arrangement will be able to launch Education programmes through its selected study centres nation wide. This will help build capacity of AIOU study centres by offering low cost Oracle training and give a big boost to AIOU students by providing quality education.

AIOU online service for foreign students: AIOU will soon start online education service very soon both for local and foreign students. This was stated in the press release of NEWS May 18th, 2001. The online education service of AIOU will facilitate students belonging to any country.

Collaboration between AIOU and American Institute of Pakistan Studies: Dr. Brian Spooner, Chairman American Institute of Pakistan Studies, University of Pennsylvania in January 2001 had detailed discussions with AIOU officials for collaboration in the field of research studies, seminars, conferences and promote meaningful exchanges between the two countries.

AIOU to help set up Open University in Saudi Arabia: Saudi Arabia is planning to set up an open university with the help of Allama Iqbal Open University which is the first University of its kind not only in the Islamic world but Asia and is widely accepted for its quality education.

All the foreign aided projects period is over. The University is now attempting to secure assistance through the Social Action Programme.

Directions and Priorities for setting Future Policy and National Direction

The future directions for ODL in Pakistan, AIOU, and the nation are rich and many. The section below is a compendium of the vast potential of directions for ODL in Pakistan. The advent of modern Information Technology, the use of satellites and most importantly the internet have opened new vistas in the field of distance education.

As the access to Internet increases, the University will be in a position to supplement its instructional efforts through the Internet throughout Pakistan. The traditional system

of correspondence, tutorials and written words will be gradually replaced/supplemented by on-line teaching through the Internet. The University is preparing for this major change in its methodology by training its faculty members in the use and applications of Internet. It is also improving its ability to use this technology for imparting education through its own website, by creating a wide area network throughout Pakistan, by connecting all of its Regional Offices to the Data Processing Centre as well as the academic departments.

The University is similarly trying to get a license for starting its own full time Radio and Television stations to harness them in support of its educational programs. Presently it gets only one hour every day in the afternoon on PTV-2, which is inadequate as well as the timing is not suitable. As soon as we are able to start our own Radio and Television network and get necessary transmission facilities from the PTC and PTV, the University's ability to use the media effectively in support of its educational programmes will be augmented considerably. (Siddiqui, 2000).

The University can also play an effective role in the field of mass literacy by using its cost effective methods of Distance Education. It has already contributed significantly in this effort by doing basic research, providing quality indigenous literature and by training of teachers. The innovative approach used in the literacy initiatives earned AIOU the UNESCO award of Noma and Raja Roy Singh. In Spring 2001, it was assigned an important role along with the Pakistan Literacy Commission (PLC) in the literacy campaign. The University can contribute significantly in this campaign through its expertise and nationwide network.

The University has already made a significant beginning in the fields of Basic and Applied Sciences. Science and Technology is the focus of academic expansion in the next five years or so. Innovations in the modern Information Technology, and collaboration and cooperation of sister institutions like the Pakistan Atomic Energy Commission (PAEC) and Pakistan Council of Scientific and Industrial Research (PCSIR) is making AIOU's task easier.

The University has made a beginning in the field of medicine. It has launched post-graduate diplomas in eye care, nutrition and dietetics with the expertise of recognized hospital in the country. It hopes to start degree programme in the near future.

AIOU has taken on a special role in the remote northern areas. It was recently announced that AIOU would provide free education from primary to university level to the children of people who fought and died in the recent Kargil military operation.

The National Policy has assigned AIOU a crucial role in the development of teacher training packages, learning material and teaching aids. In addition AIOU will also be involved in developing, post-literacy skill training programs through distance learning. The teachers of Non-formal Basic Education (NFBE) community schools will be encouraged to take PTC and CT courses of AIOU.

The National Policy also expects radio and television to play a crucial role and be extensively used for social mobilization and promoting the cause of basic education, particularly amongst rural females, and to impart life skills to the neo literates. AIOU can handle the media component for this.

Education Sector Reforms (ESR) Innovative Programme of the Government of Pakistan, Ministry of Education:

One of the key features of the ESR is based on a long-term framework with a three-year action plan for 2001-2003. It is "To meet the human resource of the country a shift to science and technology is being made at the secondary and higher education levels thereby creating employment options for young men and women. An innovative project of video textbooks and library is being initiated in collaboration with the AIOU and the Ministry of Science and Technology."

Another innovative programme of the ESR is the National Education Assessment System (NEAS). In order to evaluate and assess learning achievement of students at primary (class I-V) and elementary (class VIII) levels, NEAS will be introduced in collaboration with the provinces. The objectives of NEAS are to assess and supplement real learning environment, define and development assessment/ achievement goals at primary at elementary level, set up minimum standards/norms for performance, enhance quality of education through improvement/revision in curricula, text books, teacher education and training and examinations.

The NEAS group of Islamabad capital territory (ICT), Federal and tribal areas (FATA), Northern areas (NA), and Azad Jammu and Kashmir (AJK) have recommended the National Institute of Psychology Quaid-e-Azam University (QAU) and the Institute of Mass Education (IME) of Allama Iqbal Open University and other institutions with expertise in assessment to provide inputs to support the government's assessment initiative.

Media Strategy for Education For All and Education Sector Reform 2001-2004:

A national "Media Strategy for Education" proposal covering the six goals of Dakar Declaration has recommended a core group (8-10 people) for devising the National Media Strategy. The group will consist of two members of media, two NGO's, one from UNICEF and from AIOU.

ODL Use by Other Educational Institutions and Organizations

ADB Teacher Training Project: The teacher-training curriculum in the country has been changed. The change is a positive one. It has been possible under the ADB Teacher Training Project of Diploma in Education. Under the ADB Teacher Training Project, the Diploma in Education has been created to enhance and substantially improve teacher education for elementary school teachers in Pakistan. The Diploma in Education will enable graduates to teach from classes 1 to 8. It will be available for both year 10 and year 12 high school graduates. If the course is taken completely through distance education, the year 11 and 12 courses may be undertaken through an approved distance education programme such as that offered by Allama Iqbal Open University.

Army School of Administration: The Army School of Administration is using in its administration course AIOU Short Term Educational Programmes (STEPS) programme of Management as Distance Education (DE) component. A group of sixty officers have gone through the STEPS course since last two years

MoU between AIOU and First Women Bank Limited (FWBL): AIOU has signed an MoU with the FWBL. As a result of this joint venture, the following will take place:

- To provide education, training, and research programmes focus on macro, small and medium size enterprise.
- To provide loan schemes for female students interested in pursuing higher studies.
- To facilitate AIOU female faculty in enhancing professional growth.

IME has taken a start with this activity from its field base in Kharian.

MoU between AIOU and Agha Khan Planning and Building Service: An Memorandum of Understanding has been signed between AIOU and Agha Khan Planning and Building Service for starting two new degree programmes from Autumn 2001 in BE (computer software engineering), and B.Tech (mechanical). The University has also planned to start M.Sc engineering in mechanical telecommunication engineering, post graduate diploma in telecommunications and computer software engineering, three years associate engineers diploma in auto and diesel technology, electrical, electronics and computer technology.

IT Virtual University: The Minister of Science and Technology (Prof. Dr. Atta-ur-Rehman), IT and Telecom announced the creation of an IT Virtual University. As per this announcement two-hour slot on PTV will be given for IT education. In this way the new IT studio of AIOU will be utilized to the maximum. In addition, negotiations are underway with a number of reputed foreign universities for affiliating the IT Virtual University with them.

University of Lahore (TUL) Virtual Lab: AIOU is discussing collaborative arrangements with the University of Lahore (TUL) to jointly become a Virtual University. TUL Virtual Lab will be the first of its kind in Pakistan set by South Asian Media Wise (SAMW). It will provide students with the opportunity to work on cutting edge technologies like Gigabit Ethernet, Fast Ether Channeling, ATM, QOS, Inter VLAN Routing, Voice over IP (VoIP), Voice over Frame Relay (VoFR), Voice over ATM (VoATM), Virtual Private Networks (VPNs), IP Security (IPSEC), Integrated Services Digital Network (ISDN) to name a few.

Conclusion

The Distance Education system, primarily in the form of Allama Iqbal Open University in the case of Pakistan, has proven its potential for expansion and growth. It has supplemented the efforts of both the federal and provincial governments by easing their load, and served the citizens of the nation by making educational access more available. In this respect perhaps its largest contribution has been in making education accessible to the female learners and working people.

The twenty-seven years journey since AIOU's inception has seen more vistas of learning opened that was ever imagined. If only a small portion of the possibilities currently on the horizon are realized, the future contributions of AIOU will be phenomenal.

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