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Allama Iqbal Open University
Islamabad — Pakistan**

TO THE READER

Pakistan Journal of Distance Education is dedicated to the distance learning system rapidly growing in Asia and the world over. The Journal welcomes studies, research and review papers dealing with past, present and future perspectives of distance education, with a view to awakening further interest in the newly growing discipline and opening new vistas of research.

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Issue-I

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EDITORIAL

ASIAN DISTANCE EDUCATION RESEARCH GROUP: A NETWORK IN THE OFFING.

Even though the volume of literature may be increasing there was no upsurge of research activity in distance education until the latter half of the 70s. G.B.Childs, therefore, deplored the scarcity of research in the distance education field and said that 'Someone would perform a very great service indeed if he would undertake in a very serious and thoughtful way to relate the generally accepted principles of learning to the process of teaching through correspondence study'.

This challenge was taken up by John Bāath who had contributed a relevant research survey on several distance-education principles followed by Dan Coldeway and Holmberg. Those few researches who have been chronicling the development of distance education over the last one and a half decades have been joined in this decade by a throng of newcomers who promise to widen the scope of analysis and research.

This group of researchers, though small, met in July 1984 in a regional seminar in order to identify and discuss pressing research issues in Distance Education in Asian region. This seminar, under the joint sponsorship of University Sains Malaysia, the International Development Research Centre (IDRC) of Canada, and the Distance Education Council of Asia (DECASIA) was first convened at Penang, Malaysia.

The operational objective was to receive, examine and offer criticism on research proposals brought to the seminar by each participating research team from Indonesia, Malaysia, Thailand, China and Pakistan. The intent was to share ideas, research designs and methodologies among country groups and to discuss ways of sharing scarce research resources. There was no insistence on parallel designs or joint research activities. The findings of research on one problem in one country might be shared and used by others, thus ensuring greater coverage of

research problems within the region. The underlying assumption was that the building of a community of researches working in similar institutional contexts and facing similar problems would contribute to institutional strength in each institution.

The Asian Distance Education Research Group illustrates very well the rationale for developing regional networks to communicate about research. After Penang this group has met in Jakarta (1986) and Bangkok (1987) with a decision of a future venue to meet at Singapore in 1988.

The research projects pursued by network members covered a wide variety of topics, nevertheless, all seemed basically geared towards increasing the quality and effectiveness of their institution's courses and programmes. Inputs, processes and outputs were all represented in the network's studies. Research questions addressed through the use of field data collected from broad cross sections of students for graduate and staff.

Although there was some interest in comparative research, it was decided that the research priorities of the various institutions were too divers to justify it. Thus instead of comparative studies, complimentary studies were undertaken under the assumption that the findings in one institution would be relevant to its sister institutions in the neighbouring countries.

Researchers of this network would like to maintain the network and pursue a new phase under IDRC or other funding agency which could help maintaining the networking of the Asian research group. A good beginning has been made though the main constraints are there that the research personnel have freedom to conduct research of acceptable standard.

In the new rounds of network meetings it is expected that the ties will be further strengthened and some aspects of research in one country will be used in some of the others and research personnel would be provided sufficient time to conduct research.

Dr. Ahmed Noor Khan
Editor

Higher Education at a Distance

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Overview

Education is a vitally important aspect of human life. It is the way in which life attempts to realize the noblest form of existence and a flourishing humanity. It is the process through which individuals, groups and nation endeavour to achieve their ideals and aspirations. The old age Socrates' saying still holds true that "those who provide much wealth to their children but neglect to improve them in virtue are like those who feed their horses high but never train them to the manage".¹³

Recognising the pivotal importance of education at all levels, the nations of the world have always struggled to achieve a respectable future through higher education. It is the seat of higher learning from which the flashes of innovative, creative and penetrating thoughts have emerged.

The recent growth in higher education particularly in the developing countries has been characterised by a spectacular rise in enrolment and the number of institutions of higher learning. The impressive expansion in higher education in developing countries may be attributed to a combination of several factors, for example general upsurge of demand for education, recognition of higher education as powerful means for development, population growth and quest for improving the standard of life, etc.

Keeping in view the relevance of this seminar this paper is an effort to analyse the need, importance and purpose of higher education through most modern and world-wide popular method of distance education followed by a brief appraisal of what is happening around the world in this connection. This paper finally makes a case to establish the Arabian Gulf Open University.

Unesco observed that "It is increasingly felt that institutions of higher learning must move out of the ivory tower and relate themselves to human aspiration and social needs".¹⁶ This implies that higher education should necessarily relate itself adequately to the development needs of the society. Thus it will require a reorientation of structure, contents and methods and the mode of launching academic and research programmes.

Another point in higher education is that large drop-outs, high rate of failures in exams and growing demand has coerced the policy-makers and planners to think about alternative approaches to attack the problem.

Scarcity of resources, in most of the developing countries, has also given rise to innovative methods and techniques.

The trends of equity, equality, efficiency and evidence of contribution have given birth to adopting quick, effective economic and massive approaches to education. As a result, the higher education sectors are making serious efforts to increase productivity and efficiency through institutional development policies, reorientation of admissions and administrative practices and procedures.¹⁴

An author has gone so far that he remarked: "We are in an age that it is possible to think of higher education for all as a goal."¹⁷

Trends in Higher Education

It has rightly been remarked that world has always confronted man with the challenges of constant transformation.¹⁰ Innovation which previously required the work of several generations are now a days accomplished by one. Every ten years, men are faced with a physical moral and intellectual world in which changes have been so great that old explanations no longer hold good.¹¹ This has resulted in the overthrow of some of the traditional concepts concerning approaches and methods in education. A major trend has emerged that education in future should impart a dynamic character to its objectives, contents, methods, institutional forms and structure. The nations and societies who do not keep abreast of recent developments, quickly fall behind times. Education which ends at a definite age will have to give way to continuous learning. Tomorrows' student will be obliged to adapt throughout life to modifications in knowledge, work and environ-

ment. His education would be completed through *non-formal and unconventional methods*.

This trend is reflected by significant innovations in curriculum instructional methodologies, staff development, institutional structure and use of technology. The prominent approach which is rapidly spreading throughout the world is the use of distance education technique for teaching. The impact is discernable and the distance education is assuming the most important role in meeting the present day educational needs. It is regarded as a means to broaden access to higher education and achieve equity at a relatively low cost with a sufficient convenience to learners. In a recent survey conducted by Unesco, 49 institutions from eight countries of Asia reported an enrolment of nearly 600,000 students in a wide range of courses. It is notable that about two third of these institutions first introduced their distance education programmes in 70s. It is imperative here to have an overview of the theory and practice of this approach.

Distance Education Theory

The term distance education is usually defined as teaching, guiding and helping the students at a distance supported by tutors and using multi-media and correspondence techniques. There are many other terms which are simultaneously used for this approach such as self teaching, independent study, external studies, open studies, and correspondence study, etc.

The main characteristics of distance education system are:

- a. The separation of teacher and learner which distinguishes it from face to face lecturing.
- b. The influence of an educational organization.
- c. The use of technical media usually print, Radio and T.V.
- d. The provision of two way communication to bridge the gap of distance in teaching and learning.

The distance educational institutions emerged so far have the following distinguishing features in general.

The institutions are totally committed to external students. There are no conflicts between the staff regarding the

loyalties to the systems, students and academic cause. There is a strong motivation to develop and enhance distance teaching method which is free from the constraints and traditions of face to face teaching. The institutions are free to devise new educational programmes, new target groups and to explore the maximum potential of this system.

The institutions are also free to choose teaching methods media, curricula, course structure, assessment procedure and accreditation policies.

The main purposes of introducing and applying distance education method are:

1. To supplement, augment and bridge the gap between targets and resources.
2. To make the education and training accessible to the deprived massive groups of people specially uprooting the constraints of age, area and capacity.
3. To establish a system of imparting education which is centrifugal and deffusive in nature instead of centripetal and institutionalized.
4. To stimulate the knowledge, skill and capacity according to the learner's needs and choices.¹⁵

There have been studies which indicate that distance teaching method is very much popular among its beneficiaries. The studies also show that students in distance education are more serious, eager, motivated and committed.⁵

Distance education has on the one hand special potential for large-scale education and on the other hand it primarily supports individual learning. What type of studies and subjects are possibly covered in this system is another aspect of its potential. According to the international experts of distance education, it is equally useful in all the three domains of educational objectives i.e. cognitive, affective and psychomotor.⁶ The researches have also indicated that graduates through distance education cost less they like about distance study are that they can work at their own rate and they can fit the course in with the rest of their life.

Perhaps the biggest problem for the Distance Education

institution is the initial effort needed to get a distance learning scheme started. It involves time, effort, money and expertise, particularly in the production of the learning units, but it can lead to a more efficient and effective use of resources.

Distance learning is particularly appropriate for educating people in rural areas, and in countries with institutions of higher and further education. It is one way in which small colleges or universities can extend⁷ their influence to reach a much larger section of the community.

Distance learning methods can be used in many ways, for instance, to provide in-service training for the teaching profession, and to update the knowledge of those engaged in various professions.

Once distance study materials have been designed and produced, they may serve other purposes. They can be used within the context of on-campus education.

Materials can also be exchanged with other institutions or other countries. If a system of exchange can be than those from conventional universities and programmes of Distance Education on large scale are cheaper than the other kinds of teaching.¹²

Advantages, Problems and Uses

The most significant advantage of distance education is that it may be the only way that a particular group of people could receive the education or training they want. For those who are in full-time employment (including house-wives with young children), for those who are physically handicapped and for those who are geographically isolated, distance learning may provide the only chance they ever get.

To suit these types of clientele, the courses must be more flexible than traditional courses. The students learning at a distance have more freedom and responsibility for their own learning than their campus-based counterparts. Each student controls the time, place and pace of his own learning and thus allows him to fit his education into his already full life which probably includes job and family commitments. The teacher still retains a large measure of control of his learning, since it is the teacher and the central institution who decide the content of the course and the method of assessment.

However, it is unwise to say that distance learning courses are of second rate. Many students deliberately choose them and prefer this form of study. The things that developed it can lead to a greater range of materials and can prevent duplication of efforts. It may be possible to develop an agreement between institutions, with each centre preparing materials for a different subject. Further possibilities of co-operation can also be explored.

One particular problem in implementing a distance learning course is preparing the study units on time. The staff involvement is crucial and will include, academic staff, typists and printers; and audio-visual technicians of media other than print are involved. Once produced, the units must be collated, bound and distributed to the students by post or public transport and then the problems of stock control can also become significant.⁴

Distance Education: Growth as a System

The distance education has developed as a powerful and effective system during the past two decades. It is fully maturing in this decade of the eighties. Soon it is going to move over from a field of study to a discipline and a system with all its benefits spreading fast particularly in the developing world with its promises to ease out the mounting pressure on the formal system. Many countries have come to see distance teaching as a flexible cost-effective response to new educational demands. The consistent scarcity of resources in the third world countries for providing formal education is posing a continuous challenge. The bulk of population in these countries is forced to remain educationally deprived, resulting into social and economic pressures. Among the educated there seems a persistent urge for continuing education to keep them abreast of their times and work for higher status. Semi-literate groups of people desire awareness of their culture, basic human rights and rightful place as equally communicating members of their society.

There is a poignant feeling that due to lack of basic education these countries, particularly the Muslim countries, might have been wasting superior talents in this age of higher technology which demands highly capable and intellectual skills. The realization of the magnitude, complexity and pressure of such problems had led more and more countries to turn to seek alternate education which could ameliorate, if not entirely replace, the present conventional system.

Open universities as distance teaching institutions started functioning in and around the globe from the seventies with great optimism and expectations yet little or no awareness about its concept of "openness" as an educational system existed in the general minds of the people. The system worked staggering for quite some-time with great suspicion and pessimism even in the highly enlightened minds.

The first successful example of distance education institution which springs easily to mind is the UK Open University. In many developing countries for example in Kenya, Botswana, Thailand, Philippines and Malaysia, distance learning courses have been designed using simpler media and less money than UK Open University. There are several developments in the Asian Region now.

World View of Distance Teaching

Distance teaching institutions have now started enjoying political support by responding national priorities of their Governments. The reluctance to invest in distance education is changing over to enthusiasm for public spending because these institutions are mostly attuned to the educational needs and provide wider scope of work and employment. In the developed countries the primary priority is now to reduce unemployment, particularly among the young. According to a statistics 40% of the Soviet Union university-enrolments were studying either at a distance or in the evening. The primary motive being linking study and production work for reducing unemployment in the Russian society.

China has long traditions of Correspondence Education for post secondary education system which started in 1960. China has declared priority in a massive programme of modernization and catching up in all fields. The Central China Television University, began in 1977, prepares some 500,000 students which are supervised by 28 local Television Universities, although this number hardly provides the needs of China's one billion people.

The Japan University of the Air was founded after 14 years of planning, started functioning in 1981. The Sukhothai Thammathirat Open University of Thailand, one of the most successful distance teaching universities, seems destined to make major contributions to the expansion of opportunities for post secondary education.

In South Asia and the south Pacific the tradition of distance education is still longer. The University of the South Pacific is undoubtedly doing a remarkable work of teaching an ethnically diverse and widely scattered population although it is highly dependent on satellite communications which greatly facilitate the whole programme. Malaysia is faced with an unprecedented demand for university education. This pressure is due to demand for high level manpower to accelerate socio-economic development and for places in the post secondary institutions due to heavy turn-out from primary and secondary education. The off-Campus Programme in Malaysia is a blend of distance and face to face education by providing second chance opportunities to its citizens. Indonesia is a new member in our fold and has started University Turbuka (Open University) in September, 1984.

We have many other important members in the open learning system, in the Region. Korea, Hong Kong, Philippines, Taiwan, Sri Lanka are worth mentioning. The major thrust for all is providing opportunities and education and skills to their adult population. Australia with its small population has great diversity of distance education. Australia has no national distance teaching university but relies on five of its conventional universities and a large number of other post secondary institutions. India shares some of Australia's problems and has had no distance teaching university till last year when it succeeded in establishing a national university. Prior to this India was relying on some 18 universities having correspondence programmes which reached to nearly half a million students.

Turning to African continent it is inconceivable that the sources will allow the conventional education system to be expanded for meeting demand in the foreseeable future. Increased educational opportunity and a bitter work-related curriculum can only be achieved through distance teaching. African countries therefore have started concentrating on facilities provided by the secondary and vocational education at a distance using both state and private institutions. At present distance education at the university level is provided by the distance teaching departments established in the Ahmadu Bello University at Zaria in North Nigeria, and the University of Lagos in South Nigeria. The University of Nairobi, Kenya, the University of Zimbabwe, the Distance Teaching University of South Africa provide distance education by special units within conventional universities' departments established as far as in 1954 which enrol almost 6,000 students.

In Latin America the universities have made remarkable attempts to offer through distance education the professional programmes students actually want. The region's two autonomous distance teaching universities are the Distance Teaching University in Costa-rica and the National University in Venezuela.

Pakistan's Model of Distance Education

A brief and quick account of what we in Pakistan have been doing would not be out of tune here. Distance education through Allama Iqbal Open University has entered in its 12th year. It was established in 1974 and started offering courses in 1975. Recently we have celebrated its first decade of existence. I can with great pride say that we have succeeded in setting up a direction for distance education and are very well set on the path of consolidation.

1. Introduction

In Pakistan a distance learning model has been successfully used by Allama Iqbal Open University - a multi-media, multi-level, multi-method teaching institution.² Within a short period of less than a decade it has been able to offer courses from literacy to post-graduate level. It attracts large numbers of students-thanks to its distance teaching system which takes the learning-package to the home or work place of its students. As the concept of openness implies, courses are also made available to those who seek knowledge without enrolling for a degree, diploma or certificate programme. It provides a second chance to working adults who for some reason could not continue their education in the formal institutions and seek to improve their educational qualifications. It provides continuing education by providing inservice training to professionals. Courses are also offered at various levels while plans are on the anvil to launch M. Phil and Ph.D. programmes.

Allama Iqbal Open University employs all methods and techniques print, sound and picture (broadcast and non-broadcast) media and their combinations, appropriate to the level of the student and the requirements of the course, including face to face instruction where necessary.

With its system of reaching the student at his home or workplace and the concept of openness, which implies life-long education, Allama Iqbal Open University is filling the gaps left by the conventional system and taking education to the areas and

groups not privileged enough to benefit from the formal system of education.

Generally the learning package consists of printed texts specially designed to suit self-learning without the help of a teacher, and supported by radio and TV broadcasts on national transmission networks and audio/video cassettes and other learning aids.

2. The Strength and Streams of Education

The average yearly intake today is 1,20,000, 33% of these are women residing in urban and well as in rural areas, and compared to the year of our start 1975-76, it has risen to 110%. The course production has increased 22 times higher this year with 110 on-going courses and the future projection by 1988 is 150 courses.

With numerous streams of education which are general education, functional education, teacher education, women education and higher education, education is provided to a large groups of 10 to 75 years of age and above. The functional education takes 30%, general education 40%, teacher education 24% and the rest goes to master degree courses.

3. Medium Media and Tutorial Support

The main sources of distance education are print materials, assignments, tutorials, workshops and mass media, radio and television. The print is to a large extent supported by broadcast materials. Since the broadcast materials have proved very costly we are now switching over to the production of audio and video cassettes which are sent to students alongwith their print materials and the video cassettes are placed in our study centres which have risen to 350 now. Forty of them are soon going to assume the status of being model study centres equipped with all the hardware and software and the broadcast materials made available for use to students. The University functions through 16 full regional centres, 6 sub-regional offices, 5 co-ordinating offices spread all over the country which vouchsafe and monitor the whole programmes prepared at the headquarters. These regional centres employ 1300 part-time tutors & 320 Study Centres to facilitate the students.

4. Courses and Clusters

The University provides a wide range of courses at different level particularly skill orientation & job orientation courses. This permits students a fairly wide choice of subjects which can be clustered together to form major areas for study purposes. Instead of offering unrelated courses, related courses have been clustered together to make studies more purpose-oriented and to provide a base for specialization at M.A. level. The main clusters are in: humanities, Teacher Education, Technical Education, Business Management, Commerce, Social Science, Arabic, Pakistan Studies, Islamic Studies, Home Economics and Women Education. The whole academic programme is planned, prepared and launched by three faculties: the Faculty of Basic and Applied Science, the Faculty of Pedagogy, Adult and Continuing Education, the Faculty of Social Sciences and Humanities. The courses available are meant for functional, secondary, post secondary and higher level.

5. Population Studies and Women Education

AIOU has made special arrangements to offer courses in the areas of urgent needs. Population Education is an important area for third world countries. Courses have specially been prepared for school teachers.

Under the special directive of the Government of Pakistan, AIOU has prepared comprehensive, literacy middle and high school programmes for women education. Priority is given to functional courses leading to matriculation through distance teaching methods. AIOU has decided to provide learning opportunities to women-folk specially living in rural areas. It is planned to educate 10,000 women upto matric level with present span of plan.

6. Student's Counseling and Guidance Services

Many of the University's students may not have full awareness about the procedure and method of education. They require counseling and individual guidance. Some may have study difficulties related to particular course. University provides help to such students through its student's counseling and guidance services.

7. Research and Developments

University has established a Department of Research and

Evaluation. This Department conducts researches and evaluation studies and provides necessary information regarding course launching and development. There is a special Research and Technology Committee which scrutinise and improve the academic work. Research is also done in all academic areas offered by the University.

8. Educational Project

Some educational projects which have important bearings at national level have been undertaken by the University.

Basic functional Education Programme is an activity through which University not only shoulders the national responsibility of eradicating illiteracy but also provides guidance in terms of production of literacy materials, feasible strategies and policies and adoption of viable methods and techniques.

Integrated Functional Literacy Programme is focussed on helping the remote rural communities to learn functional literacy and to get functional education. It was previously called BFEP. The contributions of this project are the production of literacy materials in three languages of our country i.e., Urdu, Sindhi and Pushto. Centres of IFE have helped to provide functional literacy to 7 thousand persons male and female.

Civic Education Project assigned by the Government of Pakistan for members of local council aims at providing training to local leaders to play their role effectively.

Projects of Unesco like ASP (Associated Schools Project) and APEID (Asian Programme of Educational Innovations for Development) are successfully run by the University. ASP focusses on developing international understanding for peace through education. There are 100 Secondary Boys and Girls Schools in this project throughout the country. APEID promotes innovative methods and techniques in education. University works as a national clearing house of materials developed in this project.

University is recently undertaking the establishment of Regional Institute for Complimentary Education with the collaboration of General Secretariate of Organisation of Islamic Countries. This Institute will provide Islamic education and teaching of Arabic to all the Muslims of Asian Region.

Through all academic and research Programme University is

playing a vital role in meeting the educational needs of the country.

REFERENCES

1. Allama Iqbal Open University, AIOU, the First Ten Years, Islamabad, Pakistan, 1986 p. 44.
2. Allana, Ghulam Ali, Distance Education System and the Role of AIOU, Allama Iqbal Open University, Islamabad, Pakistan, 1985, pp 1-2.
3. Coombs, P.H; The World Education Crisis, Oxford University Press, 1968, p. 16.
4. Erikson CWH; Administering Instructional Media, 1961.
5. Hills, P.J. The Self Teaching Process in Higher Education, Croom Helm, London, 1976.
6. Holmberg Borje, Status and Trends of Distance Education, Kogan Page London, 1981, P-14.
7. IEC, Broadcasting on Distance Learning, 1973.
8. Kaye, Anthony and rumble, Gravit, Distance Teaching for Higher and Adult Education, Croom Helm, London, 1981, p.17.
9. Keegan, Desmond J.; On Defining Distance Education in distance Education edited by D. Seward, D. Keegan and B, Holmberg, Croom Helm, London, 1983, p.30.
10. Mahmoud Messadi, Education Present and Future Prospects, Vol-II, No.3, Unesco, Paris, p.268.
11. Paul Lengrand, An Introduction to Lifelong Education, Unesco Paris International Education Year Publications, 1970.
12. Perraton, Hilary, The cost of Distance Education, International Extension College Camberidge, 1982, p.35.
13. Treasury of Familiar Quotations, Avenel Books Newyork, p.84.

14. Unesco, Bulletin No. 24 Higher Education in Asia and Bangkok, April, 1983, Bangkok.
15. Unesco, Prospects, Vol-II, No.3, Autumn 1972, pp.356-7.
16. Unesco, Regional Programme in Higher Education for Development, Report Bangkok, 1981.
17. Unesco, World Survey of Education, Vol-12, Higher Education, p.77, Paris, 1967.

**AN ASPECT OF DISTANCE EDUCATION:
THE ADULT STUDENT OUTSIDE THE UNIVERSITY**

By

**Prof. Edward L. Edmonds
University of Prince Edward Island Canada**

Introduction

For all too many years people went to schools which despised the world of work and went to universities which totally rejected it.

Lord Young, Employment Secretary, U.K.
Government, 1 October, 1985

It would indeed seem an extraordinary anomaly that in an age when theory is, in essentials, combined with practice, and human beings, biologically speaking, reach maturity earlier, students are left marking time until the age of twenty-five and more, in a kind of writing room, where they are held at remove from real life, productive activity, independent decision making and responsibility.

Faure Report, Learning to Be.
The World of Education Today and
Tomorrow, UNESCO, 1973, p. xxx.

Universities Under the Gun

Two canons of belief with regard to university education are being strongly challenged today. One is that a longish period of time in acquiring a first degree is essential and that what happened thereafter is incidental. This belief has changed. The James Report, for instance, suggested that teachers-in-training in Britain should spend a shorter time in university or college,

but that this would be followed thereafter by cycle periods of return to university, or some other institution, for continuing, in-service education throughout their working life. In an age of rapid change, it is generally conceded that knowledge, unless continually up-dated, keeps no better than fish.

Another canon of belief is that students in universities needed to "live in". Life on campus did something for students, and new universities were built with extensive residential accommodation. Escalating costs of residence soon caused this belief to be modified. Students could not afford it. In one Italian university, for example, only one-tenth are residential. But even more important was the challenge to the concept of residential life. In cases where universities have been built within a well-established local communities, students clearly have the opportunity to gain just as much from the rich culture life of that community as from residence on the university campus. Yet a further extension of this barrage of criticism against traditional universities is that in a residential situation, students became divorced from the social climate outside the university. Some students thus had difficulty in adjusting to a wider-based community life, after leaving the cloistered ivory-tower of the university. A few of them in fact became prepetual students. I recall several such in their early thirties: they were usually not the best academically, often sociology students, sometimes strongly radical. Au contraire, there has also been an increasing insistence in various reports that the university (and the school) should be considering many more forms of social service as a basic ingredient in their education--service outside the university and not at all necessarily next door to it.

The advent of educational technology has presented a different challenge to the university. Adult students, in particular, now have access to self-teaching programmes to correspondence courses, to independent learning programmes. One example is the International Correspondence School with branches in Europe, Canada, and the United States. A toll-free telephone system enables students who work through the day at regular jobs to establish contact with their tutor in case of individual difficulties at their own convenience. In two known cases, that of the Open University in Britain, and the University du Quebec in Canada, the new technology of radio, television, video and audio cassettes, has enhanced university pedagogy and made it accessible to an ever-widening audience outside the university. Japan, for instance, recently paid the Open University a very handsome sum for permission to use its "packaged learning" modules.

Yet again, in the cases of research, always the hallmark of a good university, there has been a shift in attitudes. Excellent work of course is still being done. The recent "breakthrough" in the University of British Columbia may one day soon alleviate the suffering of leukemia patients.

More and more, the big corporations are conducting their own research studies jointly with universities, and staff have to be prepared to work cooperatively with institutions outside. In all this, there has been a gradual rediscovery of the importance of adult education. As Peter Drucker says in his "Age of discontinuity":

Continuing education assumes that one learns certain things best as an adult....The more experience in life and work people have, the more eager they will be to learn, and the more capable they will be of learning....

Finally, one has to ask, as new communities develop, e.g., so called "fringe communities", whole new towns, or small isolated communities as in the north of Canada. Are we sufficiently aware of their needs, and are they being met? Again, if the new human rights legislation abolishes compulsory retirement at sixty five, what opportunities for continuing learning will be made available? and where? and when? In our own highly entrepreneurial society, are people who want to better themselves in a vocational sense being afforded such opportunities without having to go back to the university to get that intellectual stimulus only the university is supposed to provide? Again, if people lose employment, or have never had it (a total of 3½ million now in Britain), what opportunities exist for them to refresh existing skills, or acquire new ones, without having to go back to residential life on a university campus? Hostels on campus for mature students are not the answer though a few universities are trying it.

One answer to all these questions is given by Claude T. Bissell in his book "The Strength of the University":

The university should be immediately relevant to the problems of its age.... social relevance is a genuine university virtue.

This being so, what should the university do about it? How can it best help the adult students in today's technological society, i.e., one who is well past the phase of secondary or

even tertiary education, who seeks to better the quality of his/her life in a dozen different ways but without going back to the "ivory tower", so called. The only answer is, given the economics and social climate in which we live, THROUGH DISTANCE EDUCATION.

Vistas of Off-Campus Distance Education

1. The Combat of illiteracy

The pundits will say at once, "What has this to do with a university or distance education"? My answer would be to refer to some experience in Britain by the British Broadcasting Corporation. Years ago, the Corporation put on a small programme for illiterate adults, rephrased as adults who wished to improve their reading and writing skills in their own homes. It was out of prime time, and short-term only. Within weeks it became the most highly watched of programmes and soon moved into prime-viewing time on occasion. The university's contribution was in advising the B.B.C., and including this particular area of education in many of its adult education programmes. The great Athenian statesman Pericles once said that though we may not all be formulators of policies, we should all be sound judges of them. Helping the disadvantaged therefore in this way is not simply altruistic: it is a necessity in any democratic community.

2. Extending opportunity for the academic

Many an adult will tell you in middle life, "I couldn't go to the university because...." The latent desire to go was still there but they couldn't afford either the time or the money to go into full-time residence. Extra-mural study was the only viable alternative. two or three examples of how this need is being met are:

a. The Open University in Britain

Originally designed for the blue collar worker, it soon became the domain of white collar workers, e.g. teachers with a college of education certificate or diploma wanting a university degree. The Open University in Britain pioneered all kinds of distance-learning, using the B.B.C for its television and radio programmes, tutors placed at various locations

throughout the country, work-sheets and study materials sent through the post; and then regular short tutorial plus summer schools two-third of the way through the students' academic year.

b. **The O.A.S.P or Open Access Study Plan in the Atlantic Provinces, Canada**

Students enrolled in the O.A.S.P programmes pursued graduate studies in the academic areas not normally offered in the Atlantic University. Again, though the Centre of the Atlantic Education Institute which pioneered these courses was in Halifax, students could be doing their studies in their own homes on carefully graduated programmes of work, with a tutor from the Institute more conveniently situated within each province. Regrettably, however, this O.A.S.P. has folded because of lack of funding by three provinces other than Nova Scotia. By contrast the sister Ontario Institute for Studies in Education has continued to flourish. It is similar to the London Institute of Education which still prepares candidates for London University degrees, using packaged learning materials and local supervising tutors.

c. **Cooperative workstudy programmes**

This amalgam of the world of the university with the world of work was long overdue. In Britain, in the early 1980's, it was estimated some forty-seven thousand students were taking part in combined study and work programmes. A pioneering university like Bath has gone over to "sandwich" type courses almost exclusively. Teaching companies (analogous to teaching hospitals) have developed with the active cooperation of seven United Kingdom Universities. Very large industrial firms there, like G.E.C. (General Electric Company) are now participating in devising their own courses. Thus, the G.E.C. has close links with the University of Bath. Cooperative work-study programmes have flourished in Canada (e.g. Waterloo and Regina Universities). In the U.S.A., the Council of Advancement of Experiential Learning has also encouraged universities and colleges to develop work-study programmes.

d. **Outpost counselling**

One of the great and obvious advantages of distance education is that it can reach out over thinly populated areas, using radio, television, telephone, etc. But, sometimes academics need to go out, a good example being in Newfoundland, Canada. Under this scheme, the university sends some of its best scholars and teachers into the more isolated communities to teach such courses as the local community requests. This particular form of distance-education is attractive, for the university lecturer takes with him many of the audio-visual aids which are such a valuable supplement to his/her successful teaching. In Newfoundland, which pioneered the techniques of outpost counselling, distances travelled by lecturers are considerable and they may be away from the university for a whole semester or longer, always acting as itinerant ambassadors of technical competence and good will.

e. **Extramural Courses**

These are really a more structured form of outpost counselling, except that the audiences that I have in mind are not necessarily or exclusively adult students working for a degree in their spare time or for some updating certificate of proficiency. The External Examiners' Report on Educational Policy in Canada, 1976, touched on the clientele I have in mind when it stated much critical comment had been received because of the university's failure "to undertake and persist in recruitment from ever wider social milieu". Perhaps we should learn from other universities in this regard. Thus, the University of the South Pacific, through use of satellite technology, beams out programmes to an area larger than all Canada. One American university, Walden, caters almost exclusively for "distance-education" adult students. They attend for one full semester in either the campus at Naples (Florida) or San Diego (California). Thereafter they can pace themselves with a supervising tutor as near as possible to the student's home town. For middle aged administrators seeking a refresher course leading to a doctorate, Walden is undoubtedly the best.

f. **Correspondence Courses**

As has been observed, some universities offer such courses, e.g., U.B.C. (University of British Columbia) has an excellent "menu". But another form is those institutions or bodies offering to coach enrolled adult students for specific baccalaureates, e.g., wolsey Hall in England.

g. **Specific Initiatives**

Already we see signs of the university meeting specific challenges; the model set by such excellent in-service programmes in such institutions as The Institute for Continuing Education and Centre for Degree Studies find a commensurate model in the university. Athabasca University, for example, has expanded its free telephone tutorials to serve students across the country. The Open Learning Institute (OLI) of British Columbia has established a toll-free telephone service giving students access to the library collection of Simon Fraser University. The again, the University of Victoria is offering credit courses to about sixty students via satellite on an experimental basis. Television monotors at five locations in the province offer students two-way communication with the instructor during the lecture. The university programs are broadcast from the campus of the British Columbia Institute of Technology in Burnaby, using the federally owned ANK-B satellite.

Conclusion

Distance education programmes will never replace the more traditional programmes offered on campuses of universities to younger students completing their secondary education and looking to complete their education by a spell of time at a university. The baccalaureate in certain areas cannot be taken except on campus, e.g. a four-year degree course in say music, or in Computer Education, or in some of the Natural Sciences could only be taken in a university setting in the Maritime Provinces of Canada, for only they have the back-up facilities. But what is important to recognize today is that education in all its aspects, vocational or personal, has to be viewed as a lifelong process, a series of ongoing cycles, of which the completion of the period

of compulsory schooling is only the first. In general, men and women must be regarded as the agents of their own education in all its ultimate responsibility for it. If distance education in all its many forms can help them throughout their lifetime, the cost of the new technology in providing that education will be well justified. I am reminded of the story of Lacydes of Cyrene who began learning geometry late in life. Someone quizzed him "Is this the right time of life for such studies on your own"? Let us remind ourselves that distance learning provides more open access to learning for more men and women on a scale once thought impossible; and on any nation's level of education, its future survival will ultimately depend.

NON-FORMAL EDUCATION IN DEVELOPING COUNTRIES

By

Myrian Bacquelaine & Erik Paymackus

1. The emergence of non-formal education in developing countries

Over the past fifteen years, developing countries have seen the number of training programmes outside the formal education system multiply. This expansion can be seen as related to the interest in the early 1960s among scientific and political circles, as well as in international and non-governmental organizations, in a form of education regarded as an indispensable complement to the current education system or as a potential substitute for the system as a whole. Such "non-institutional" educational programmes would pursue objectives not covered by schools and yet would correspond to genuine needs of the target populations. Because of their flexibility (short courses, diversity of teaching methods, reliance on local resources - both human and material), it was considered possible to reach segments of the population which were excluded from the formal process. Moreover, they would be less costly than current schools and would make an appropriate contribution to the satisfaction of endogenous development needs. In reality, these arguments in favour of out-of-school programmes mainly referred to the short-coming of schools which had already been identified and which the school's critics were ready to point out.

Indeed, the role of the school, even as a factor in economic development, had been called seriously into question, especially in the late 1960s. Its weaknesses lay in terms of: structures, methods, contents and objectives; the high costs in both monetary terms (as much as 30% of the national budget in certain countries) and human terms (teachers in need of training, failure to cater to the educational needs of rural areas and of certain underprivileged segments of the population); the low rate of

return; the increased demand due to the population explosion; and the shortage of monetary and human resources. All these argued strongly against the education system's monopoly as the means of training the labour forces of emergent nations, and cast doubt on the validity of the goal of elementary education for all, which, between 1960 and 1962, many countries had set for themselves (the conferences of Karachi, Beyrouth, Addis Adaba and Santiago). This undercurrent of criticism is typified in the following works: The world educational crisis: a systems analysis, by P.H. Coombs published in 1968 [6] Deschooling Society, by I.D. Illich in 1970 [15] and Pedagogy of the Oppressed, by P. Freire in 1972 [12].

This calling into question of schools is one of the factors explaining recent interest in "out-of-school education". Additional factors contribute further to this nascent interest:

- the questioning by critics of the concept of development based on per capita growth of the gross national product, without taking into consideration income distribution or the satisfaction of the population's essential needs;
- recognition (at least at the conceptual level) of the fact that education and schooling are not synonymous and that education is an on-going process ("lifelong education"), as was emphasized by Unesco's International Commission on the Development of Education in its 1972 report [11];
- the World Congress of Ministers of Education on the Eradication of Illiteracy (Teheran, 1965), which drew attention to the need to educate adults, an area much neglected by institutionalized schools, and which crystallized in the launching, in the late 1960s of a series of so-called "functional literacy" campaigns under the aegis of Unesco and UNDP in collaboration with national government (Experimental World Literacy Programme, 1972 [10].

This interest in "out-of-school" education generated a multitude of experiments, particularly between 1970 and 1980, as attest the publications of this period, which primarily involved case studies. However, the out-of-school approach to education, which in the early 1970s was given the name of "non-formal" education (NFE), (mainly to contrast it with "in-school" education also know as "formal" education (FE), existed before the

scientific world, international organizations and governmental and non-governmental organizations made it an object of study and experimentation, and even before the school became the dominant form of education.

Such is the case of endogenous traditional education, autochthonal education in Africa, for example, which, before the advent of colonialism, provided for the education of all youngsters and even today continues to provide for those children - frequently the majority of them - for whom there are no schools. The characteristics of this form of education are very similar to those attributed to NFE, such as its solid integration into the environment, the reliance on teachers from the local community, the absence of a specifically educative infrastructure, etc. [26].

During the colonial period, experiments were made with certain educational models differing from the traditional school. Such is the case of the adult literacy programmes launched in India around 1920 and of certain missionary schools which, in the former Belgian Congo for example, achieved a kind of integration of the formal and non-formal.

It was in 1947 in Colombia that radio was used for the first time as a basic educational tool for the rural population. This model, "Radio Sutatenza" (established within the framework of the Accion Cultural Popular-ACPO Programme), inspired many later experiments in distance education.

2. The concept of non-formal education

Whereas the concept of formal education is a fact of life to which everyone can relate unambiguously, there is a lack of unanimity with regard to the reality covered by NFE, despite numerous attempts at clarification.

The complexity of the sphere of NFE, as illustrated by the numerous forms it may have adopted, as well as the difficulty of drawing a distinct borderline between FE and NFE, explain the many definitions of NFE which have been advanced.

These definitions, often formulated after the examination of a limited number of cases, merely deal with individual facets of a complex whole. As a result, the proposed characteristics of NFE are only fragmented properties valid for a very specific context and, hence, difficult to generalize to the entire field of

NFE.

The nebulosity of the NFE term is further accentuated by the fact that it partly overlaps with certain other concepts, such as continuing education, adult education, functional literacy, distance teaching, etc., which at various times have been used as synonyms for NFE.

In addition to this, the choice of the phrase "non-formal education" has not been unanimously accepted, some people arguing, for example, that the word is a negative label and implies that the activities thus referred to have neither form nor structure. They prefer the terms "non-school" [22], or "out-of-school". The latter term, according to other authors, fails to encompass the totality of NFE activities, since some of them take place in schools, though outside normal classroom hours [7]. It might also be objected that using the term "non-formal" to designate any educational activity existing outside the education system is not completely accurate either, since in certain socialist countries, such as China, Cuba and the Democratic People's Republic of Korea, there exist educational programmes which are in fact full-fledged courses of study existing side-by-side with the education system for children. Bhola suggests that such parallel programmes be referred to as "substitute formal education" [4].

Some authors have attempted to clarify the concept of NFE by proposing typologies. These are mainly of two kinds: the classification of activities in the context of the entire field of education, in which case NFE would be one category", or the classification of NFE activities themselves within the overall field of non-formal education.

One of the most famous systems of classification was that proposed by the International Council for Educational Development (ICED), as part of a study on NFE programmes satisfying the needs of out-of-school rural youth [7]. The system defines education as a continuum and subdivides the continuum into three categories based on the degree of formalization of learning:

- Informal education: a veritable lifelong process by means of which the individual acquires attitudes, values, skills and knowledge through day-to-day experience, educative influences and the resources of his environment, that is, his family and neighbours, his work and his recreational activities, at

the market place, the library and from mass media.

- Formal Education: the hierarchically structured and chronologically organized education system extending from primary school to the university and including, in addition to general academic studies, a variety of specialized programmes and fulltime technical and vocational training institutions.
- Non-formal education: any educational activity organized outside the established formal system - whether functioning separately or as a significant component of a broader activity - and designed to serve identifiable clienteles and educational objectives.

The definition of NFE suggested here is interesting by virtue of its conciseness and the fact that it is sufficiently broad to include a large number of activities. However, the system of classification itself can be criticized for considering the three modes of learning as separate entities when they can exist simultaneously in the classroom for example - by far the most formal of situation [18] - or even overlap (such is the case with regard to traditional education, which according to this classification, would be both formal and non-formal at one and the same time). The objection could also be raised that this approach sees education sometimes as a process and sometimes as any institution, whereas it can be both [19]. What is also noteworthy is the grouping of these three categories in relation to the school, implicitly recognized as the dominant educative model.

The latter is also a characteristic of the model prepared by Paulston. This author suggests an operational definition of educational activities in the formal and non-formal categories based on the contrasting of ten dimensions which are especially typical of school programmes (structures, content, cost, etc.) [23].

Many systems of classification within the field of NFE have also also been attempted. On the basis of case studies and inventories of NFE experiments, these systems of classification rely on various criteria, such as the target clientele, the objective pursued [1], and the underlying rural development theory [8].

Above and beyond the battle of terminology, definitions and

classifications, the value of these efforts is that they reveal the diversity and dynamism of the field of non-formal education (for instance, the trend towards the formalization of NFE programmes once they become institutionalised and the fact that many educational programmes are in reality hybrid forms of NFE and FE, or even informal education, which cannot be neatly confined to anyone of the categories proposed. This explains the obvious difficulty of establishing an absolute separation between different modes of learning.

3. The objectives of non-formal education programmes

In many cases, the objectives assigned to NFE programmes reflect a sectorial outlook on development, and their relationship with the socio-economic and cultural context in which they are situated is not always clearly perceived. This tends to produce half-hearted interventions in the form of a series of limited, non-related efforts, particularly in the case of programmes sponsored by non-governmental organizations [14], as well as by international organizations, who institutionalized this sectorial outlook.

There are few programmes to provide basic education in rural areas, that is, training which combines the acquisition of sufficient practical skills to meet rural development needs and an indispensable minimum of theoretical knowledge. The majority of programmes focus on specific objectives in limited areas, without linkages among them, within a given territory. Thus, a large number of small programmes pursue objectives involving health or agriculture without ever combining these two sectors.

While literacy programmes exist in most countries, the post-literacy phase is not systematically planned for (few maintenance structures are provided via the rural press, a village library, etc).

Most programmes concern vocational training, especially in agriculture. These programmes, the quality of which often leaves something to be desired (the training of personnel, identification of the real needs of the population, etc.), only reach a fraction of the potential clientele [8].

Thus, rural areas, neglected in terms of formal education, appear to be poorly served in the area of non-formal education as well.

In urban areas, meanwhile, organized programmes focus on developing skills demanded by the modern (industrial and commercial) sector; they can be extremely formal in structure (qualified instructors, issuing of proficiency certificates, etc.) and they are generally organized by public authorities in association with employers.

Determining the objectives of NFE programmes poses the problem of identifying the genuine needs of the target population, particularly in rural areas where it would appear that a certain number of programmes are organized on the basis of supposed rather than real needs. Indeed, particularly in the case of projects implemented by non-governmental organizations, the design phase of programmes is carried without input from the population, who, if they are consulted at all, see their wishes reinterpreted by planners. In most cases, the planners are foreign to the context in which the programmes are to be implemented [14]. Such ignorance of the environment increases the chances of triggering resistance among the target population [3].

4. Target groups

Adults constitute the most common target group. Yet women, already disfavoured with regard to formal schools, appear to suffer a similar handicap in the case of NFE: their rate of participation in literacy programmes is low (due to socio-cultural reasons and domestic responsibilities); they are often restricted to activities considered typically feminine (by project planners) such as cooking, sewing, home economics, etc.; their role in agricultural production is overlooked (except with regard to subsistence farming); and the role of mothers as educators of the younger generation is rarely taken into consideration.

Hence, a large proportion of children - as many as 80% in certain countries - do not attend primary school, and very few "compensatory" programmes are organized for their benefit, as if only schools could satisfy this groups needs. Pre-school children, meanwhile, benefit indirectly from programmes intended for their mothers (nursery schools exist in some countries, but they are seen as preparatory to primary school and are to be found only in towns).

There are very few general education and vocational training programmes for out-of-school young people, and those that do exist are often ill-adapted to needs [7].

Thus, contrary to general belief, the most underprivileged group vis-a-vis the formal education system are not necessarily those who benefit from the non-formal system. In actual fact, NFE programmes seem to be especially oriented towards persons with some educational background [7]; agricultural programmes, in particular, are more likely to affect the "medium" farmer rather than the "small" farmer [14] and, in urban areas, the middle class and a few categories of skilled manual worker are the ones to benefit from such learning programmes. Population living on the periphery of urban areas seldom benefit from non-formal education [15].

5. General trends in NFE by region

In Latin America, two main trends are to be distinguished: vocational training for modern industry organized by non-government bodies (the SENAI in Brazil, the SENA in Columbia), on the one hand, and on the other, adult and adolescent literacy programmes, frequently in conjunction with consciousness-raising efforts (a model made popular by Paulo Freire in Brazil) via radio.

Africa presents diverse models focussing mainly on agricultural production and family education (health, nutrition, etc.) in rural areas (Rural Action in Senegal, Technical Refresher-Training Centre in Niger, the "Meres Animatrices" Programme in Mauritania, etc.). Although these programmes may enjoy ministerial support, they are not integrated into a concerted national rural development plan. Radio, because of its centralized character, is very little used in Africa (compare, however, the experiments in Kenya and the United Republic of Tanzania).

NFE programmes in Asia, meanwhile, often focus on community development and are supported by national authorities. A certain number of countries have in fact even created an NFE department within the Ministry of Education (Indonesia, the Philippines) and have large-scale or even nationwide programmes. In addition, a regional NFE co-ordinating body has been set up.

6. The cost of NFE

It is difficult to calculate the cost of NFE, since there are no reliable, complete data on this sector.

There are several reasons for this, not the least of which is the diversity of the sources of funding. Although a programme can come under a single department (such as adult literacy, which

is generally funded by the Ministry of Education), in the majority of cases programmes are financed by several ministries jointly (Health, Agriculture, etc.) and/or international and non-governmental organizations. It is likewise difficult to estimate the share of external sources of NFE funding, for NFE is often implicitly connected with various other areas of activity which are not recognized as educational in the strict sense of the word.

Another problem is the fact that the cost of NFE cannot be measured in strictly financial terms. Indeed, one of the characteristics of NFE is precisely its reliance on available local resources (both human and material). For example, volunteer instructors are called upon to perform the work rather than officially qualified and salaried teachers, and existing building and facilities are used (the instruction is not provided in premises specifically set aside for that purpose). An estimate of the direct and indirect costs of NFE must take these factors into consideration.

Given the diversity of programmes, drawing a general conclusion applicable to NFE as a whole is problematical. The cost of programmes probably varies considerably depending on the equipment used (television is more costly than radio), the input from the population, and the number of people benefiting from the training programme (per capital cost). In cases where NFE is structured in much the same way as school programmes, the cost will probably be equivalent (see, for example, industrial training programmes employing specialized staff and extremely specific tools and materials).

To give an illustration of this, a study conducted in Columbia involving 432 NFE projects showed that the funds allocated to NFE represented around one-third of the funds earmarked for primary education in the national budget - a considerable sum. The remuneration paid to instructors, meanwhile, was in general noticeably lower than that paid to teachers within the formal education system, and the number of volunteers was greater than the number of salaried staff [27].

The dilemma of the cost of NFE raises the problem of the optimal utilization of available resources. It would be interesting to determine, on the basis of small-scale, moderately inexpensive projects, what resources could and could not be used on a large scale (volunteer work, for example). This would make it possible to estimate the cost of NFE programmes at the national level and to make a comparison with the cost of formal education,

provided the objectives are the same and their level is equivalent.

Some authors insist on the need of applying cost/benefit analysis to education [24]. While it is true that a comparison of the cost of NFE with that of FE is desirable, it must be borne in mind that cost/benefit analysis is not a magic formula for identifying with absolute certainty the most efficient, cost-effective education system. For one thing, it is difficult to quantify or measure many of the benefits of NFE, nor can they be expressed in monetary terms. They cannot, therefore, be included in a technical cost/benefit ratio analysis [21]. In addition, identifying the quantifiable benefits presupposes a basis of comparison, either at the national or international levels. Yet, what is valid for a given project or country is not necessarily valid for another [27].

It would be more beneficial to compare the cost of NFE and FE on the basis of a cost/effectiveness analysis [10], [21], since effectiveness can be expressed in non-monetary, yet not necessarily non-quantifiable, terms. The difficulty with this approach is that of formulating the objectives of the programme in such a way that the direct relationship between the means (costs) and the objectives can be clearly established [2].

7. NFE resources

Whereas relying on part-time, unpaid, volunteer instructors without formal qualifications (frequently members of the community) is often recognized as one of NFE's great advantages, it must be acknowledged that use of this resource is not without problems.

It happens that in many programmes the "volunteers" are primary school-teachers to whom additional duties are assigned (teaching adults to read and write, in particular) without any equivalent increase in pay. In most cases, the result is a token performance that does not have any significant impact on non-school activities, for want of time and motivation [9]. Furthermore, since they receive no special preparation for carrying out these tasks, they tend to replicate the conventional methods used in the formal education system. Nor do the other instructors employed on a project receive specific pedagogical training to carry out such activities. This being the case, they, too, tend to reproduce conventional teaching methods, i.e. those used for teaching young children. Thus, it may happen that training in the

fields of health or agriculture takes the form of a lesson totally out of touch with the objectives sought and the learning behaviour of the intended audience, although the latter may express a desire to be instructed according to conventional teaching methods because they associate these with greater respectability [7].

The voluntary involvement of the community, meanwhile, is far from evident. A village chieftain may oppose the programme because he feels it will give the trainers from his community powers that rival his own [3] or certain craftsmen will refuse to share their knowledge, unless paid, on the grounds that they do not wish to train competitors.

Even more important than the problem of mobilization of local resources is that of the mere availability of such resources (either human or material) in the poorest regions [9].

These difficulties, which could curtail the impact of NFE, pose the problem of taking into consideration the real (and not presumed) needs of the populations concerned, and the integration of these programmes into the specific socio-cultural context in which they are implemented.

Another source of funding subject to debate is the financial contribution of persons benefiting from training programmes. The justification given is that, besides providing financial support to programmes which are frequently short of funds, self-financing of this sort sustains the motivation of participants. The validity of these arguments is questionable, given the fact that 20 or 30% of the national budget may already be swallowed up by formal education for the benefit of a minority, of whom no direct financial contribution is requested. And since NFE is supposed to benefit those excluded from schools, in general those with the least resources, would we not be running the risk of excluding them from these programmes by charging fees? It must be said, however, that certain programmes have solved this problem by replacing fees with an exchange of services (a craftsman agrees to teach his trade in exchange for his own literacy training, for example).

It should be pointed out that not all programmes are best with all these difficulties at once and some of them incorporate, from an educational point of view, original approaches worthy of closer consideration and which curriculum planners could use as a model.

8. NFE's contribution to development

The belief that NFE necessarily fosters development - and that it is an alternative solution to formal education - seems to be quite widespread, despite a lack of statistical data to substantiate this claim.

Most of the evaluations that do exist attempt to measure the short-term objectives achieved (quantitative, especially) and those which are closest to those of school programmes (reading, writing and arithmetic). The methods of evaluation employed also appear to be very similar to those adopted in formal education. An evaluation of the long-term impact of these programmes (beyond the actual training period) is rarely carried out, so that there are few answers to questions such as: "Have the persons trained really played the role expected of them in community development"? "Has the health of the village's inhabitants been improved?" "Have agricultural innovations actually been put into practice"? "Has the rural exodus been slowed"? It is clear that the lack of evaluation and, hence, critical reassessment of these programmes hinders their improvement and leads to constant repetition of the same errors.

It would also be interesting to know why so few evaluations are carried out. Several explanations can be proposed: trainees are not conditioned to make evaluations; sponsors have no interest in long-term evaluation; programmes fall into oblivion once funding is cut; the evaluation phase is not perceived as an integral part of the programme and, as a corollary to this, the human and financial resources required for follow-up programmes are lacking, and central authorities do not always make provision for follow-up support structures, such as post-literacy programmes (a rural press, village library, etc.) or loan facilities to encourage self-employment. The latter factor may be due to the failure to take NFE into account in the educational planning process in particular, and in socio-economic development plans in general.

9. Interaction between FE and NFE

The negative consequences of the dispersion of frequently scares resources, the duplication of efforts and diminished effectiveness of educational activities due to the overlapping of activities and to the unbalances which inevitably result" [13] render effective co-ordination between the school system and non-formal educational activities more necessary than ever.

Yet, the coexistence of two educational "network" evolving independently still seems to be the rule in the majority of developing countries. With the exception of a few models set in a specifically revolutionary context (Cuba, China and the United Republic of Tanzania), no satisfactory model of harmonious integration of FE and NFE resources exists at the national level. Attempts at linkages are often sporadic in nature - as part of a pilot study limited in time and space - or only envisage the institutional link within a specific field.

Interaction can take the form of a bridge connecting the two networks which aims to reintegrate into the school system those who were excluded from it (see the Philippine homologation and equivalency programme, the Costa Rican and Colombian occupational skills certification programmes). In reality, this approach subordinates NFE to FE, in no way calling the school system itself into question as a result, or offering a genuine alternative to it, since it has no goal of its own. This approach, therefore, fails to solve problems related to schools and does not bring about a genuine reallocation of resources.

The most visible link established between schools and NFE in many countries is the inclusion within the Ministry of Education of a department responsible for adult education (literacy in particular), without genuine interaction between the two systems. In this case again, the influence of FE on NFE is evident: adult instruction relies on the collaboration of teachers working outside their normal hours; classrooms left vacant in the evenings are utilized; and school principals act as the chairmen of literacy committees.

Community participation, meanwhile, considered to be one of NFE's major resources, is often limited in the context of FE to the construction or remodelling of school buildings.

Literature on the subject often speaks about the underutilized sharing of equipment, human resources, methods and content between FE and NFE. The theoretical possibilities of shared resources are sometimes made use of in a limited experiment of some kind. However, the reasons for which these potentialities are usually overlooked and the obstacles preventing interaction need to be pinpointed.

Integrated FE and NFE planning would certainly run into three fundamental obstacles: the fact that the Ministry of Educa-

tion is not solely responsible for the co-ordination of the activities; that of maintaining the flexibility of NFE programmes, and that of guaranteeing local involvement in the planning process [16]. These three factors call into question educational planning as it is currently known, in particular, its centralized and centralistic character. They presuppose that planning be intersectorial, that responsibility be distributed among the various administrative levels and including the actual organizer of educational activities, and that the role of the local community in the decision-making process be recognized [17].

What is more, interaction between FE and NFE would require prior organization of the non-formal education sector itself. Indeed, the activities of which it is composed are generally implemented without regard for co-ordination with already existing programmes, so that, far from being a coherent whole, the area of non-formal education resembles a vast mosaic whose constituent elements can be mutually inter-changable or complementary, but they can also function as competitors or even be mutually exclusive. The organizational process should find better solutions to the needs of the population and base itself on cataloguing previous non-formal educational activities. Such as inventory, as the IIEP stressed [17], would only be the first step in a process whose second step would be to relate instructional opportunities to needs in order to measure their adequacy.

In reality, positive collaboration between FE and NFE would require that they be perceived as distinct forms of a greater whole - which is education, designed to serve the needs of society.

Finally, interaction between FE and NFE should not overlook the contributions of autochthonal education, which remains for many the only form of education they will ever know.

10. Conclusions

Whilst NFE, in principle, offers an attractive solution to the problems and shortcomings of schools, the many situations in which it has actually been put into practice permit cautious optimism at best.

It is vital that rigorous evaluation (in qualitative and quantitative terms) of the results achieved by these experiments should be carried out and factors responsible for failures must be identified.

In addition, an analysis of the obstacles to the effective integration of FE and NFE would make it possible to go beyond the merely theoretical feasibility report in literature on the subject. An analysis of reforms of the formal education system attempted in a certain number of countries (ruralization of schools, introduction of productive activities, pre-vocational training) will make it possible to suggest solutions for obstacles encountered by attempts at integration. The greatest obstacle is perhaps the social rewards, (real for some, presumed for the majority), which schooling is supposed to bring. Indeed, schools function as a means of perpetuating the privileges of a minority which has no interest in the democratization of schools (through such measures as expanded enrolment, modification of contents, etc.). Deformalization of school would constitute a threat to the privileges this minority derives from the present schools. As far as the groups mainly targeted by NFE (those excluded from schools) are concerned, they continue to perceive the school, (and the diplomas it confers) as the promise of social and financial advancement, despite current evidence to the contrary (graduate unemployment). Hence, any model departing from the classical school model is considered to be "cheap education". A third stumbling block is probably the attitude of teachers, who regard any change in the current school structure (through such innovations as reliance on non-graduate personnel, the introduction of practical training) as a violation of their civil servant status, which at times is already precarious.

Above and beyond these obstacles, it would be of little worth to see in NFE a panacea containing the seeds of change and, in particular, bringing with it an improvement in the living conditions of the majority of the population. Such change cannot be achieved through education alone. It presupposes a genuine political commitment to promote it, as well as profound changes in socio-economic structures (more equitable distribution of wealth). This means that it would be illusory to look to education as an important source of development without providing for a comprehensive programme to promote self-employment and thus guarantee that the abilities acquired are put to use. In the case of NFE in particular, subsidies (for rural areas especially) must be budgeted, fiscal and price policies must be adjusted so as not to discourage those who underwent training in the hopes of improving their lot-NFE, after all, should benefit the least favoured - and a loan policy which enable the most disfavoured to utilize the skills they have learned must be implemented. The truth is that very often, when NFE programmes are launched, these conditions

are not satisfied. As a result, unless policy changes are made in a great number of sectors, NFE programmes are doomed to have little or no impact.

BIBLIOGRAPHY

1. Allemano, E. Non-formal education. RAMS Project (Rural Assessment Manpower Surveys), Washington, DC, Agency for International Development, 1981, 237 p.
2. Balogh, T.; Streeten, P.P. The coefficient of ignorance. Bulletin of the Oxford University Institute of Economics and Statistics, May 1963, p. 97-107.
3. Balloncle, G. La question educative en Afrique noire, Paris, Karthala, 1984, 271 p.
4. Bholá, H. S. Non-formal education in perspective, Prospects (Paris), Vol. 13, No.1, 1983, p. 45-53.
5. Bock, J.C.; Papagiannis, G. J. The demystification of non-formal education, Amherst, M.A., Centre for International Education, School of Education, University of Massachusetts, 1976, 241 p.
6. Coombs, P.H. The world educational crisis: a systems analysis, New York, Oxford University Press, 1968, 241 p.
7. Coombs, P.H.; Prosser, R.C.; Ahmed, M. New paths to learning for rural children and youth, New York, International Council for Educational Development, 1973, 133 p.
8. Coombs, P.H.; Ahmed M. Attacking rural poverty, how non-formal education can help, Baltimore, MD, The Johns Hopkins University Press, 1974, 292 p.
9. Evans, D.R. The planning of non-formal education, Paris, Unesco: International Institute for Educational Planning, 1981, 102 p. (Fundamentals of educational planning, 30).
10. The Experimental World Literacy Programme: a critical assessment, Paris, The Unesco Press, 1976, 198 p.
11. Faure, E., et. al. Learning to be: the world of education today and tomorrow, Paris, Unesco; London, Harrap, 1972. 313 p.

12. Freire, P. Pedagogy of the oppressed, New York, Herder & Herder, 1970, 186 p.
13. Furter, P. L'articulation de l'education scolaire et de la formation extrascolaire: problemes relatifs au developpement coordonne de l'education scolaire et non scolaire, Paris, Unesco, 1984, 83 p. (Etudes et documents d'education, no. 53).
14. Gueneau, M.C. Afrique: less petits proiets de development sont-ils efficaces? Paris, L'Harmattan, 1986, 230 p.
15. Illich, I.D. Deschooling society, London, calder & Boyars, 1971, 116 p.
16. International Institute for Educational Planning. Educational planning in the context of current development problems, Vol I: An IIEP Seminar. Paris, 308 October 1983, Paris, 1984, p. 35-53, p. 81-92, p. 113-127.
17. International Institute for Educational Planning The diversification of the educational field. In: Educational planning in the context of current development problems Vol II: Papers presented at an IIEP Seminar. Paris, 3-8 October 1983, Paris, 1985, p. 141-270.
18. Labelle, T.J. Non-formal and informal education: a holistic perspective on lifelong learning; International review of education (The Hague, Martinus Nijhoff for the Institute for Education, Hamburg), Vol. 28, No.2, 1982 p. 159-175.
19. Le Thanh Khol. Problematique des relations enter l'education formelle et non formelle, In: Agence de cooperation culturelle et technique; Le formal et le non-formal dans l'education de mass, Paris, 1985 p. 1-13 (Alpha, No.10).
20. Levine, H.M. Cost-effectiveness: a primer. Beverly Hills, CA, Sage, 1983, 168 p. (New Perspectives in evaluation, Vol.4).
21. Merrett, S: The rate of return to education: a critique, Oxford economic papers (London), November 1966, p. 289-303.
22. Michigan. State University. Program of Studies in Non-Formal Education. Non-formal education: the definitional

- problem, East Lansing, MI, 1973, 46 p. (Its: Discussion papers, No.2).
23. Paulston, R.G. Non-formal education: an annotated international bibliography, New York, Praeger Publishers, 1972. 332 p.
 24. Psacharopoulos, G; Woodhall, M. Education for development: an analysis of investment choices, New York, Oxford University Press, 1985 337 p.
 25. Salifou, A. L'education dans la societe traditionnelle africaine. In: Conference africains sur l'ecole africaine? Niamey, 1981. Faut-il changer l'ecole africaine? Pourquoi? comment? Morges, suisse, Confederation mondial des organisations de la profession enseignante, 1982, p. 17-31.
 26. Swett Morales, F. X. Aspects of financing non-formal education: Prospects (Paris, Unesco), Vol.13, No.1, 1983, p. 55-60.
 27. Vertonghen, R.; Rompuy, V. Van, Social-economische kostenbattenanalyse, Leuven, Belgium, ACCO, 1986, 213 p.

TRAINING OF PRIMARY SCHOOL TEACHER
AT THE
ALLAMA IQBAL OPEN UNIVERSITY

By

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Training of teachers, curriculum developers and course writers plays a vital role in improving the quality of instruction at all levels of education. The training arrays the teachers not only with the methodology of teaching to carry out the instructional work efficiently and effectively but also imparts knowledge about new and changing curriculum. Presently in every province of Pakistan, Teachers Training Colleges and Colleges of Elementary Teachers for both female and male are functioning. These institutions arrange pre-service training and conduct in-service training courses for different levels of education.

Most of the candidates from urban areas enjoy the privilege of getting training as all the institutions offering teachers training are located mostly in big cities and towns. This situation gets even worse when we take a stock of female candidates. Women and rural candidates are deprived of the advantage, with the result that our rural schools are deprived of trained teachers. This situation has to be taken care of as the present government has again reiterated the importance of primary and literacy education and has accorded them unprecedented new high priority.

As against the heavy future demand for additional primary teachers, if we depend only on the existing training institu-

tions, the supply situation seems to be very thin. The maximum capacity for the preparation of teachers in these institutions is far less from the future demand. Some non-formal and non-traditional methods of training the teachers have to be adopted.

This problem, somewhat, has been solved by Allama Iqbal Open University and its services have been recognized and appreciated. The courses offered to the trained and untrained teachers are useful. In this paper I will delineate some of the courses being offered for primary school teachers at the Allama Iqbal Open University.

Allama Iqbal Open University has played a special role in the national education system and is meeting a wide range of educational and social needs of the country. Through distance learning system the university is making the significant contribution at all level and type of education.

The Parliamentary Act which brought the university into being outlines the main functions of this institution as follows:

- a. To provide educational facilities for people who cannot leave their homes and jobs.
- b. To provide facilities for the educational uplift of the masses.
- c. To provide facilities for the training of teachers.
- d. To provide instructions in such branches of learning, technology and vocations as it may deem fit and to make provision for research and for the advancement and dissemination of knowledge in such a manner as it may determine.

According to the Act three broad areas of activity were developed: general education, teacher training and functional education. It is the second area where the university has made very significant contribution since her inception and is still catering in a big way.

Primary Teachers Orientation Course was the second earliest course launched by the University in order of sequence. In 1974, a new curriculum for the primary school was introduced. The new scheme of studies for primary school teachers was:

1. Principles of Education and methods of teaching
2. Child Development and Counselling
3. School Organization and classroom Management
4. Language and methods of teaching
5. Mathematics and methods of teaching
6. Science and methods of teaching
7. Social Studies and methods of teaching
8. Islamiat/Islamic History and methods of teaching
9. Arts and Practical Arts and methods of teaching
10. Health and Physical Education

The task of implementing this new curriculum was a colossal one. Not only the new subjects were added but up to date material and new teaching methods in the concerned areas of knowledge had to be introduced. The number of schools existing at that time was 54,000 and the number of teachers to be trained was over 1,50,000. The teachers had to study content courses given at numbers 4 to 10 above and with equal emphasis on how to teach these subjects to primary school children. The job of training in-service school teachers was entrusted to the Open University.

Provision for the in-service education of teachers already existing in all the province of the country could not be met adequately. This task assigned to AIOU with its distance learning system, was the only means of launching this programme. The university had the advantage of being able to concentrate solely on primary school teachers and offer them a comprehensive course covering all the subjects in the new curriculum.

The crucial factor of cost was also solved. After initial development cost of the programme eventual cost per student was much lower in comparison to the in-service conventional courses for such a large number of teachers. The actual costs of the Primary Teachers Orientation Course taking into account overheads was less than Rs.190 per teacher. The teacher studies for 6 months (about 8 to 10 hours a week), receives and retains the printed correspondence text and continues to teach his/her pupils. In contrast the cost of a six week in-service training course, studied full time by a teacher, is from Rs.1200 to Rs.1400 per teacher ignoring the social cost of the teacher's absence from the classroom during the 6 week period. Another advantage was that instruction could be provided to the teachers without leaving their homes while they were also not leaving schools unattended. There was no cost of travel and accommodation to be borne by the teachers or the institution.

Primary Teachers Orientation Course was launched for the first time in October 1976. There were two main characteristics of this programme. First it was taken as a principle that PTOC should have more emphasis on the new content. Though teaching methods were not ignored completely but there was a firm believe that a teacher can only teach effectively what he himself knows. Secondly, there was a range of subject matter to be covered in new curriculum. With its ability to draw on a national pool of academic professionals alongwith its own high qualified staff, the university was able to offer a comprehensive course which reflected th ambitious scope of the entire new curriculum.

The following is the list of correspondence units (one week study) and other components of the course:

	<u>Subjects</u>	<u>No. of units</u>
-	Islamiat	2
-	Urdu	3
-	Mathematics	3
-	Science	4
-	Health & Physical Education	3
-	Arts and Crafts	3
-	Evaluation and Examination	2
-	Social Studies	2
-	Population Education	1
	Total:	<u>23</u>

Synchronised with the correspondence text radio programmes were broadcast. There were 24 of these, one introductory 23 based on each unit, having fifteen minutes duration. They were broadcast weekly, with repeats, by all radio stations in the country. Enrolment was totally by nomination through provincial and district educational officials. For the 1st cycle the number of students was 5,426, indicating clearly that better liasion between educational officials and the University would be necessary in future. The course lasted nine months and the examination was

held in July, 1977. 62 percent of the enrolled students passed the examination.

A detailed assessment was provided by an evaluation study carried out by the University. It was also supplemented by visits to schools, tape recorded interviews of the students and letters from regions. The overall impression was a positive and encouraging. Certainly the University had demonstrated that an operation on a national scale was quite feasible and certainly cost effective.

The PTC course could be produced and distributed for one sixth of a conventional six week in-service course. The teachers found the course professionally valuable and relevant, and there were, of course two very important extra advantages. Firstly, the course materials provided the teachers with a permanent set of reference material for their work in school. Secondly, the curriculum changes were brought to the teachers directly and it did not take the usual long procedures.

The second cycle was launched in July, 1977 with the final examination in 1978. One important change was the reduction of Arts and Crafts units from three to two and the addition of the units on Adult Education. There were also other three major differences. The first was that the enrolment reached 14,501. Secondly, the students were set three assignments based on the course units. Thirdly, part-time tutors were appointed for marking the assignments and to provide tutorial classes for students. Both of the last two changes were of fundamental educational importance. Over seven hundred tutors were hired on a sub-regional basis. As the students had to pass both the continuous assignment and examination pass percentage was low.

The third cycle was launched on 1st June, 1978. Course units remained the same but some of them were revised. tutors were appointed. However, the importance of proper briefing for tutors was realised and a programme of meetings was organized. Out of 7,559 students enrolled, 47% was the pass rate which was a very hopeful indication that the system was becoming known and was more effective. One aspect of the course that received some investigation during the third cycle was tutorial attendance. Average percentage attendance was 71% which can be considered quite a remarkable rate. For the third cycle of PTOC a survey was carried out. The result of the sample survey is outlined below:

Figures for sample of groups in PTOC 3rd cycle

Number of groups	77
Average group size	25.7
Average group attendance	18.22
Average percentage attendance	71.00
Number of students in sample	1,976
Number of students in cycle	7,507
Sample	26%

The fourth cycle was started in October, 1978 with an enrolment of 7,050 which lasted upto April, 1979. It completed the first phase of PTOC.

For the fifth cycle, a complete revision of the material was planned, all correspondence units were re-written and the radio programmes re-made. The changed structure of the programme is as follows:

Urdu	3 units
Mathematics	3 units
Science	4 units
Health & Physical Education	2 units
Social Sciences	2 units
Arts & Crafts	2 units
Islamiat	2 units
Evaluation	2 units
Adult Education	1 unit
Population Education	1 unit
Library	1 unit

Full evaluation of the course contents was carried out and it was very encouraging and perhaps for some, surprizing. There was undoubtedly the problem of dropout the solution of this problem was found in enhancing the roles of both tutors and District Education Officers. A long-term incentive was given in the form that a PTOC credit could be counted towards F.A. certificate. The contents of this course were appreciated and were recommended reading for teachers training institutions. In spite of some difficulties, it can be claimed that it was an experiment

of the kind, unique in the educational development of Pakistan.

With this early history of the course we have reached the stage when more than 50,000 teachers have been trained and we have completed 17th cycle of this course.

The most significant outcome was a scheme for untrained teachers agreed on between the University and the education secretaries of Provinces. The second course dealing with basic content and method, offered by AIOU for primary teachers is Primary Teachers Certificate (PTC). This programme was launched for untrained teachers, with full collaboration and consultations with the Provincial Education Departments of the four province and the state of Jammu and Kashmir. Admission in the course is given through nominations by the Provincial Education Department concerned.

PTC programme consists of the following components:

- Correspondence text
- Radio progrmames based on text
- Part time tutors guidance
- Meetings in the study centres
- Under the supervision of part-time tutor
 - a. One week practical workshop
 - b. Teaching practice (3 weeks)

In 1984 the Department of Teacher Education was established as a part of the newly created Faculty of Pedagogy, Adult and Continuing Education. The entire programme of training teachers at all levels became the responsibility of this Department. Now the Department is launching the following training programmes for primary school teachers:

1. **Primary Teacher Certificate-I.** This is full credit course of inter level. Applicants are nominated by District Education Officers/Ministry of Education.
2. **Primary Teachers Certificate-II.** This course is meant for the in-service untrained primary teachers in the country who have not received any formal training in their career. Matriculate un-trained teachers having one year's teaching experience and nominated by DEO/ Ministry of Education are eligible.

3. **Primary Teachers Orientation Course:** This course is offered as an independent re-training course for in-service primary school teachers for their re-training in view of the modernized Primary Curriculum and appropriate subject areas.

The fourth course offered for primary and middle school teachers is Certificate of Teaching or C.T. It is one and a half credit course. First half credit is based on educational foundation which is compulsory. The students have to select two courses each of half credit from the following:

- Social Sciences and its teaching
- Urdu and its teaching
- Science and its teaching
- Home Economics and its teaching

The enrolment for teachers training programmes over the years 1975-85, is given below:

Table

**Primary teachers training programmes
1975-76 to 1985-86**

S. No.	Courses	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
1.	PTOC	-	5426	22032	18502	8987	4333	7419	8866	1640	3035	3338
2.	PTC	-	-	-	-	1764	854	717	1275	3931	7764	19556
3.	CT	-	-	-	-	-	-	576	398	1449	5001	4748
Total:		1. PTOC		83568								
		2. PTC		35861								
		3. CT		12172								

The University has played an important role in the training of teachers and specially primary school teachers since its inception. The following table shows the comparative input of the university in this area:

AIOU Total Course Enrolment 1975-85

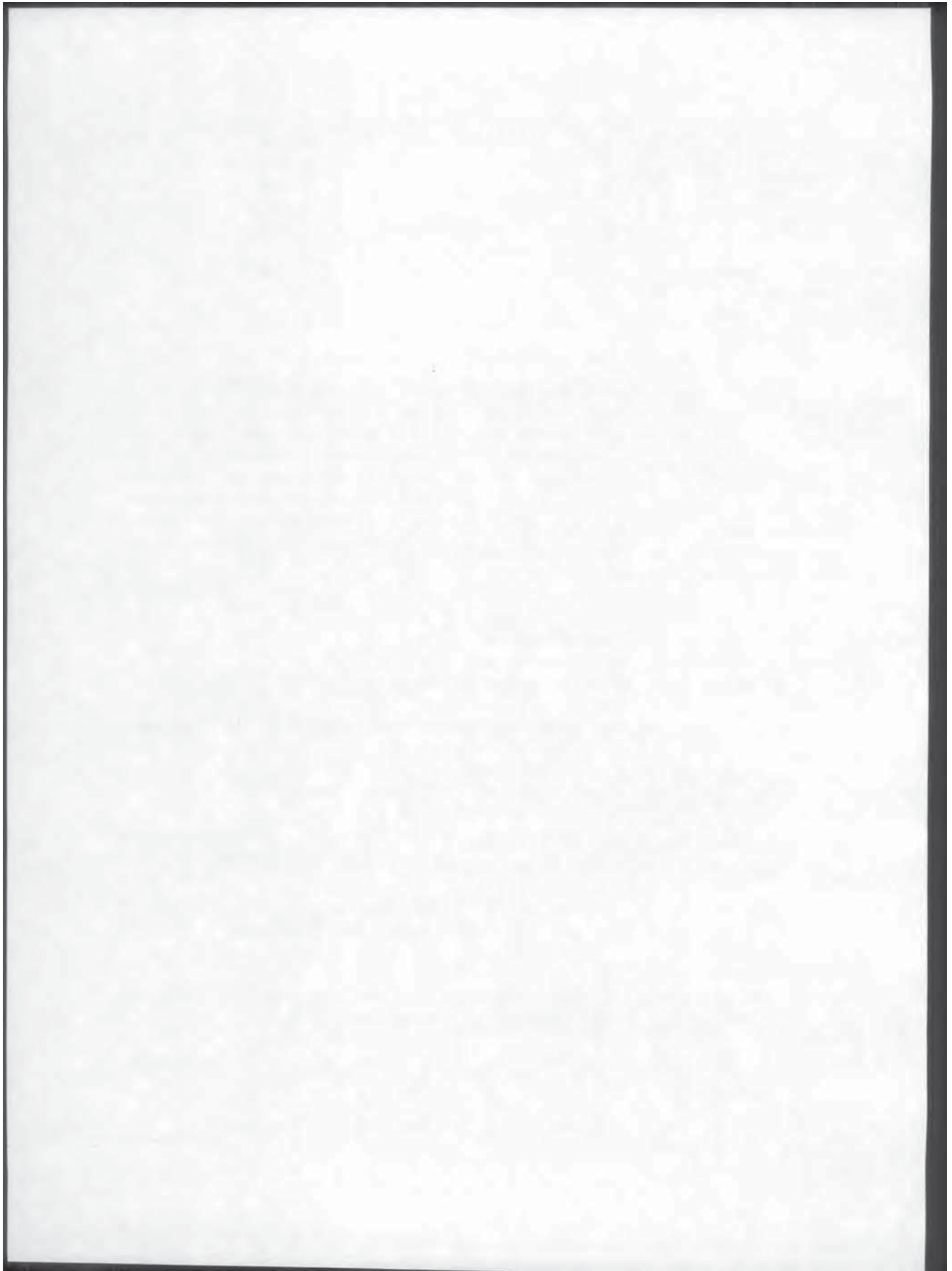
24%	Teacher Education	1,06,797
10%	Functional (Non-Credit)	42,414

16%	Functional F.A.	68,145
28%	General F.A.	1,24,214
40%	Functional B.A.	17,600
17%	General B.A.	72,497
1%	M.A. Courses	3,930
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	Misc. Courses	640
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	Total Enrolment	4,36,246
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The University has to play a vital role in the future also if the country envisages Universal Primary Education by the year 1990. No system of education can rise above the teachers who serve it. Training of teachers, therefore, is the most crucial task. There is a need to take primary school teachers into confidence by informing them about the changes of curriculum from time to time. This job can only be accomplished by Allama Iqbal Open University by making its teachers training programmes more effective and relevant.

REFERENCES

1. Five Point Programme of Prime Minister of Pakistan, 1986.
2. Education Policy, 1979, Government of Pakistan, Islamabad.
3. Allama Iqbal Open University, The First Ten Years, 1975-85 Islamabad, 1986.
4. Planning Commission. Government of Pakistan, The Sixth five Year Plan, 1983-88, Planning commission, Islamabad.
5. Report of a Survey on Effectiveness of Primary Teachers Orientation Course, Allama Iqbal Open University, Islamabad.
6. Allana G. A., Distance Education System and the Role of Allama Iqbal Open University, Islamabad, 1987.
7. It is never too late to start with, Allama Iqbal Open University, 1987.



**SERVING LEARNERS AT A DISTANCE
PERSPECTIVES ON ATTRITION RESEARCH**

By

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Despite common beliefs to the contrary research identifies ways to improve student retention. This article discusses three courses of action:

1. Modifying elements of the learning environment, including admissions, assessment, counseling, faculty training and rewards, grouping of students, media integration, and timing of feedback.
2. Influencing student attitudes, especially self-confidence, goal clarity, perceived support of others, and realistic expectations about events.
3. Using meaningful measures of the present attrition problem and its changes over time, comparing with classroom sections of the same course, courses at other distance education units, and points of difficulty within a course.

Research can guide efforts to reduce student attrition.

All too often the terms "dropout" or "Attrition" stimulate concern among distance educators, but not full understanding. A primary reason for this is the frequent assumption that the specific policies of an institution (such as refund of tuition) impact the rate and timing of student retention in ways that are different from that of other institutions. It is the purpose of this article to present a number of research-based conclusion that transcend many institutions. Accordingly, an examination will be made of:

1. what elements of the learning environment facilitate retention;
2. what student attitudes are associated with completing courses; and
3. what techniques can be used to study attrition.

WHAT ELEMENTS OF THE LEARNING ENVIRONMENT AID RETENTION?

Even though much of the existing attrition research indicates that students complete distance education courses less often than their counterparts finish classroom-based ones (Giltrow and DUBY, 1978; Orton, 1977), research studies on distance education units have revealed a number of ways to improve course completion.

Admission Criteria

The imposition of admission standards can greatly influence an institution's retention rate. While the completion rates of British Open University courses are about 70 percent, 50 percent of those applying to enter that institution are refused, which contrasts with the common 30 percent course completion rate of an open admission program (Shale, 1982). In contrast, in a survey completed by 42 American and 15 Canadian correspondence programs, 70 percent had open admission with no requirement for a prior level of education (Hegel, 1981).

After acceptance, universities prepare students in different ways. For example, Deakin University in Australia utilizes an orientation program that provides an acculturation period of several months before instruction begins so students can organize their private lives and prepare for the demands of study. The program materials alert students to likely difficulties and available resources, plus give advice on study techniques. Also,

students are helped to review their reasons for enrollment in order to build confidence (Gough and Coltman, 1979).

Assessment

Measuring what material a student has mastered at various points in the course, the process called assessment, can serve as valuable communications between students and faculty (Field, 1983). Recommendations have been made for the varied use of written, oral, and self-assessments including examples of good pieces of work, feedback on drafts and outlines, and providing information to students on the distribution of scores (Store and Armstrong, 1981).

Counselling

Many institutions devote considerable resources to face-to-face or telephone counselling sessions that address individual uncertainties, which are not easily generalized (Friedman, 1981: 127). For example, local and regional support facilities for students of the British Open University absorb 30 percent of that institution's recurrent budget (Kaye and Rumble, 1981:28).

Deadlines

Some institutions don't insist upon a fixed time for course completion, which makes comparison hard with those that do. Because of those varied situations and the fact that many institutions grant finite extensions of time (most often six months, but sometimes three months or a year), it is hard to know when to measure the dropout rate.

Mid-course progress checks can be reinforced by motivating postcards and telephone calls. When an encouraging postcard, then letters, were sent at one-month intervals to students who had not submitted an assignment in the previous month, the experimental group had a 46 percent response rate versus 31 percent for the control group (Rekkedal, 1982).

Faculty Training and Rewards

Some practitioners advocate paying faculty a fixed salary rather than per assignment (Rekkedal, 1981). A more common investment is to provide training programs. A major focus of training is to show how to use friendly welcoming and motivating letters, as well as telephone calls.

A variety of faculty development strategies have been observed: rotating committee assignments, creating internship position; providing orientation meeting and manuals; encouraging new faculty to work with experienced faculty; initiating faculty exchanges with other institutions; sharing ideas through workshops and retreats; and evaluating performance from interviews, surveys, and document analysis (Medsker et al., 1975: 189). Unfortunately, there are few detailed descriptions of training programs for faculty who work with students at a distance.

Grouping of Students

Instructional planning often includes program designs for the students' common goals and characteristics. Use may also be made of self-help groups for cognitive/emotional support and packing. Many of the British Open University students attend such group regularly (Field, 1983).

Most often of all, many institutions believe that students are more likely to complete courses by studying at a steady rate and that a regular pace of study will be attained more reliably if the institution itself sets the pace. Furthermore, the more complicated the institution's support systems and use of media, the greater the need for group pacing as a limitation upon resource commitments (Neil, 1981: 118). In a comparative study made of completion rates in identical courses given on a self-paced basis (at Athabasca University and North Island College) versus on a semester schedule of dates for group starting and examinations (at the Open Learning Institute), a regular rate of study was shown to have a positive effect on course completion (Coldeway, 1982: 33). With regard to another pacing strategy, several researchers have observed that correspondence retention rates of 25 percent have been increased to about 65 percent with the addition of a television component to the same course (Lipson, 1977; Chamberlin and Icenogle, 1975). In this case the television lessons served as a packing mechanism (Brown, 1975).

Integration of Nonprint Media

Broadcast notes can be used to integrate radio or television programs with print. Well-prepared materials provide instruction on how to learn rather than be entertained by a multipurpose medium such as television. During course development, steps should be taken to design the print and other media simultaneously. The advantages of student control (pacing of learning) should also be pointed out. Whenever possible, the medium should

be used for its distinctive capabilities. Some writers have provided excellent recommendations, e.g., Bates, 1982.

Research

Probably the most important part of an ongoing attrition research program is to measure the current situation and patterns over time. For example, Shale (1982) and James and Wedemeyer (1959) found that students who start but do not finish a course submit about 1/3 of the work on the average. There are two major formulas for measuring course completion rates. One approach calculates completions as a percent of all students who enroll for a course; the other approach deducts the number of students who do not complete at least one assignment (no starts) from the total enrollees before calculating the percentage of completions (Mathieson, 1971).

Sessions for Face-to-Face Interaction

Many distance-learning institutions have required or voluntary orientation sessions at the start of each course. Students who attend such sessions have higher retention and achievement rates than those individuals not present (Bowlay, 1980). However, it has been observed that it was not possible to determine whether seminars contributed to high-performance learners or whether seminars contributed to high performance. From interviews with students, it was seen that if the seminars were designed to be directly related to course requirements, up to one-third of those invited might attend. However, many students made it clear that they would not attend seminars just for an opportunity to socialize with others (Peruniak, 1980).

Study Techniques

Common methods of providing students with help on study techniques are to provide a small separate course or to offer a tailored unit within each course (Gibbs, Morgan, and Taylor, 1983).

Turn-around Time of Assignments

Reductions in the time it takes students to receive faculty comments on their assignments (turn-around time) has made a big difference. In one study, after a reduction in delay time from 8.3 to 5.2 days, the course completion rate went from 69 percent to 91 percent. Other related findings include: most students will

accept up to a week's wait. With quick (one day) response, more units are submitted during the first three months (Rekkedal, 1981). Using a computer to produce stored comments from the faculty member has increased completion rates by 16 percent or more (Phillips and Young, 1982).

WHAT STUDENT ATTITUDES ARE IMPORTANT TO COMPLETERS?

In addition to changes that can be made in the institution's learning environment, the development of certain student attitudes can also facilitate course completions.

Self-confidence

The importance of an individual's self-confidence to course completion was reported by 280 first-year students at the University of New England in Australia (Bowlay, 1979). Yet, since many distance learners usually take only one course at a time, often there is no concurrent course performance to balance one's difficulty in a "hard" course (Woodley and Parlett, 1983).

Perceived Support from Significant Others

The high value of encouragement by family and friends was indicated by 280 first-year students from Australia (Bowlay, 1979).

Clear Reason for Taking the Course

The importance of goal clarity was noted in interviews with 55 college and 125 high school students (James & Wedemeyer, 1959). However, an initial goal may have been achieved, changed, or met better elsewhere (Woodley and Parlett, 1983).

Nonreluctance to Contact Faculty and Staff About Problems

Interviews have revealed how hesitant students are to consult institutional staff about difficulties they are encountering (Rekkedal, 1981).

Realistic Expectations About How Long to Wait for Faculty Feedback

To minimize frustration, students must be alerted to the length of time it takes to receive comments from faculty (Rekkedal, 1982).

Positive Attitude Toward a Medium Used

It is important that students know how to use the medium for learning (Bates, 1982). It has been noted that the more television or radio programs, the lower the attrition (Woodley and Parlett, 1983).

Low Test Anxiety

Anxiety about tests is reduced if there are more tests and more descriptions about any tests used (Woodley and Parlett, 1983).

Flexibility in the Use of Study Techniques

The more successful students enlist a variety of study approaches (Gibbs, Morgan, and Taylor, 1983).

WHAT TECHNIQUES CAN BE USED TO STUDY ATTRITION?

To monitor any changes in the impact of known environmental and personal influences upon retention, as well as to identify new influence, a variety of research techniques are needed. Some of the possibilities include the following:

1. Ask students' advice on what skills and behavior are needed to be successful for hypothetical kinds of students (Dodds, Guiton, and Lawrence, 1981).
2. Examine aspects of classroom part-time study (Glatter and Wedell, 1971; Hammer and Smith, 1979).
3. Determine limits of classroom-based attrition research. For example, it has been observed that the impact of traditional financial aid is more limited for adults who are working, and that the social class of parents is less a factor to older learners (James and Wedemeyer, 1959).
4. Get interviews with dropouts and stopouts (Rekkedal, 1981; James and Wedemeyer, 1959).
5. Track students on the basis of many goals (e.g., primary and secondary) for enrollment (Rekkedal, 1981; James and Wedemeyer, 1959).

6. Make comparisons with:
 - a. on-campus sections of similar courses;
 - b. other distance education units; or
 - c. the same program over time.
7. Determine proportion of student who submit no work. (Coldeway and Spencer [1980] found that it is usually 17-24 percent).
8. Figure out the points within a particular course where many students stop working once they started.
9. Make course team goals more explicit to compare with student goals (Woodley and Parlett, 1983).

CONCLUSIONS

It appears that there are many research findings that can guide the trial altering of institutional policies and practices in order to reduce student attrition locally. Research also alerts us to various techniques for monitoring the magnitude of an institution's attrition "problem" and the success of efforts to improve the situation.

BIBLIOGRAPHY

Bates, A.W. 1982. "Trends in the Use of Audio-Visual Media in Distance Education Systems." In Learning at a Distance: A World Perspective, edited by John S. Daniel, Martha A. Stroud, and John R. Thompson. Edmonton, Alberta: Athabasca University.

Bowlay, D.J. 1979. Motivation and Persistence at External Tertiary Studies: The Mature Age Open Entry Student. Armidale, N.S.W.: University of New England.

-----1980. "Orientation Programmes for External Students--Do They Work?" A.S.P.E.S.A Newsletter 6:2.

Brown, Lawrence A., Jr. August, 1975. Learner Responses to the Use of Television in UMA Courses. Executive Summary No.8 Lincoln, Nebraska: University of Mid-America.

Chamberlin, Martin N., and Icenogle, Darrel. November, 1975. Courses from Television--Potential for International Education. Mimeographed. A paper prepared for the Wingspread Conference on The Media and World Understanding.

Coldeway, Daniel O. 1982. "Recent Research in distance Learning." In Learning at a Distance. A World Perspective, edited by John S.

Daniel, Martha A. Stroud, and John R. Thompson. Edmonton: Athabasca University. ———and Spencer, R.E. 1980. The Measurement of Attrition and Completion in Distance Learning Courses. Edmonton, Alberta: Athabasca University.

Dodds, A.E.; Guiton, P.; and Lawrence, J.A. 1981: "External University Students' Perceptions of the Influences on Their Studies." Australian and South Pacific External Studies Association Forum.

Field, Jack. 1983. "Student Learning from Media: Student Diversity Versus the Centralized Institution." In Student Learning from Different Media in the Open University, edited by John Martin. Milton Keynes, England: The Open University.

Friedman, H.Zvi. 1981. "Systems for Student Administration." In Distance Teaching for Higher and Adult Education, edited by Anthony Kaye and Greville Rumble. London, England: Croom Helm.

Gibbs, Graham; Morgan, Alistair; and Taylor, Elizabeth. 1983. "Why Students don't Learn." In Student Learning from Different Media in the Open University, edited by John Martin. Milton Keynes, England: The Open University.

Giltrow, D.R., and Wedell, E.G. 1971. Study by Correspondence: An Inquiry Into Correspondence Study for Examinations for Degrees and Other Advanced Qualifications. London: Longman.

Gough, J.E., and Coltman, B. 1979. "Counseling the Distance Student: Fact or Fiction." Open Camopus 2:39-37. Mimeographed. Geelong, Victoria, Australia: Deakin University.

Hammer, P., and Smith, W.A. "Attrition-Completion Study in an Open University," Paper presented at the Annual Forum of the Association for Institutional Research (San Diego, California, May 13-17, 1979). Ed 174096.MFPC.

Hegel, E.J. 1981. "Survey of Policies in University-Level Correspondence Programs in Canada and the United States of America." Mimeographed. Saskatoon, Saskatchewan: University of Saskatchewan.

James, Bernard, and Wedemeyer, Charles A. 1959. "A Completion of University Correspondence Courses by Adults." Journal of Higher Education V 30 n 2: 87-93.

Kaye, Anthony, and Rumble, Greville, eds. 1981. Distance Teaching for Higher and Adult Education. London Croom Helm.

Lipson, Joseph. September/October 1977. "Technology and Adult Education: A Report on the University of Mid-America Experiment." Technological Horizons in Education Journal 4.36-38, 49-50.

Mathieson, David e. 1971. Correspondence Study: A Summary Review of the Research and Development Literature: Syracuse, New York: Syracuse University, ED 047 163. 108 pp. MF. PC.

Medsker, Leland L.; Edelstein, Stewart L .; Kreplin, H.; Ruyle, J.; and Shea, J. 1975. Extending Opportunities for a College Degree: Practices Problems, and Potential. Berkeley: Centre for Research and Development in Higher Education.

Neil, Michael W. 1981. Education of Adults at a Distance. London: Kogen Page Ltd.

Orton, L.J. summery 1977. "Completion and Nonstart Rates in Correspondence Courses." Canadian Journal of Univrersity Continuing Education 4(1):21-26.

Peruniak, Geoff. 1980 "Seminars as an Instructional Strategy in Distance Education." Mimeographed. Edmonton, Alberta: Athabasca University.

Phillips, C. Alex, and Young, Roger G. 1982. "Increasing Completion Rates with Computer-Assisted Lessons." In learning at a Distance: A world Perspective, edited by John S. Daniel, Martha A. Stroud, and John R. Thompson. Edmonton, Alberta: Athabasca University.

Rekkedal, Torstein. 1981. Introducing the Personal Tutor/Counselor in the System of Distance Education. Oslo, Norway: NKI., ----1982. "The Dropout Problem and What to Do About It." In Learning at a Distance: A World Perspective, edited by J.S. Daniel, M.A. Stroud, and J.R. Thompson. Edmoton, Alberta: Athabasca University. shale, D.G. 1982 "Attrition: A Case Study." In Learning At A Distance: A World Perspective, edited by J.S. Daniel, M.A. Stroun, and J.R. Thompson. Edmonton, Alberta: Athabasca University.

Store, R.E., and Armstrong, J.D. May 1981. "Personalizing Feedback Between Teacher and Student in the Context of a Particular Model of Distance Teaching." British Journal of Educational Technology 12(2): 140-157.

Woodley, Alan, and Parlett, Malcolm. "Student Dropout." In Teaching at a Distance. n. 24:2-23.

RESEARCH NOTES

COMPUTER ASSISTED INSTRUCTION
IN ADULT BASIC EDUCATION
A MODEL TO PREDICT SUCCESS OF ILLITERATE
ADULTS IN LEARNING TO READ

By

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The purpose of this study was to develop and test a CAI/ABE model for the prediction of success in teaching illiterate adults to read using computers. It examines satisfactory performance of adult basic education (ABE) learners using computer assisted instruction in learning to read. It also examines the relationship of the cultural, physiological, psychological and educational characteristics of the ABE learners to their success. The CAI/ABE model was validated by using the new computer diagnostic program outcome Advisor (R), Fattu and Patrick (1983). The OA (R) program is a program originally designed for use in the medical field and adapted by the Reading Practicum centre (RPC) IU, Bloomington for predicting success with remedial reading programme IU is the only educational institution permitted to use the program experimentally.

The CAI/ABE model development process progressed through five steps:

1. The first step of the study was to review the literature available in each of the following component areas: Computer assisted instruction (CAI), model building, and adult basic education.

* Ph.D Study Carried out at Indiana University, Bloomington, USA, May, 1986.

2. The second step was to present an original model, rational for the mode, and the description of the relationship between the variables in the model.
3. Third, the model was pilot tested and changes made before its application to a field test sample.
4. Fourth, the model was tried with five adult non-readers to ascertain its explanatory and predictive ability. The findings were validated with a computer diagnostic program called Outcome Advisor (R).
5. Finally recommendations for the application of the model and for further research and development of CAI/ABE approach were put forth.

The process of model development involved the examination of many models; instructional models (prescriptive and descriptive) CAI models, teaching models, evaluation models, Therapy models, computer diagnostic models, each of which was examined against the model features characteristics of instructional models described by others were used wholly or partially in a given model. The final model was named CAI/ABE model because it combines the use of computer assisted instruction (CAI) with aspects of preceding models most appropriate to adult basic education. The CAI/ABE model integrates the RELAT model and Educational Therapy model. The RELATE model is the only instructional model in ABE reading. Educational Therapy model is a recent model for the instruction of functionally illiterates. In the integration the therapy model gains an instructional framework and the RELATE model is filled out to better accommodate the needs of the new adult reader.

The computer is a component of great significance in the model because the proponents of CAI point out the following features as advantages over conventional methods of teaching:

- Immediate response, feedback and reinforcement.
- Adaptability to individual needs and differences. (The computer has the capability to allow specific programs to work in a variety of ways to meet the needs and differences of the learners.)
- Rate of learning and instruction at the discretion of the learner.

- The case of the use of the computer allows the instructor to use classroom time in a better way in individual instruction and individual guidance of students.
- Provides motivation which is especially important for the illiterate adult frustrated from previous attempts at learning to read.
- Serves as a tireless drill master with "patience" which is welcomed by the adult new readers.
- Help build confidence and independence.
- Privacy of computer instruction is very significant for the illiterate adult and contributes to positive attitudes. (Communication is between the learner, tutor and computer, there is no embarrassment when an incorrect response is given or entered in the computer.)

The four variables of the CAI/ABE model are diagnosis prescription, intervention and follow up:

Insert figure

Phase one of the diagnosis takes care of the initial steps of identifying the community resources, instructional resources, funding resources, and above all getting acquainted with the learner. Prescription in phase two is based on the information elicited through the diagnosis phase thereby paving the way for the actual instruction in phase three of intervention. Finally phase four of followup is the joint review process of the learner's success by the learner and tutor(s).

The model was field tested with 5 learners from Bedford and Bloomington, Indiana over a period of 12 weeks. Four were (ages 62, 45, 30, 25) total non-readers who did not know the alphabet or have any reading skill. One (age 19) was a beginning level reader who knew the alphabet and had some word attacking skills.

The CAI/ABE model identifies the reading problem in the diagnosis phase through tutor learner dialogue and addresses it precisely in the prescription phase. Prescription is accomplished by selecting the CAI reading package that satisfies the stated needs of the learners. In case of CAI/ABE model Bill Bates material was used. Bill Bates is an adaptation of the original mate-

rial "Language for future" by Dr. Newman, of IU, Bloomington with the computer version by Carol Szatkowski, a Graduate student at IU. The material is related to the learner's lives. When completed it will consist of twelve chapters about a working class family of five. The CAI/Bill Bates is a combination of graphic and text. The graphic text format is not demeaning for the adults. It allows sufficient repetition and reinforcement necessary for the adult without undue instructor involvement. The adult is kept active in the process by following the directions of pressing the keys to advance to the next frame.

The intervention phase focusses attention on different ways of presenting instruction with computer reading, uses printed text, utilizes language experience stories, and highlights the educational principles such as frequent repetition and sufficient reinforcement underlying each mode of presentation. As such the model not only provides choices from given strategies for facilitating student learning by their experiencing success or achievement for each level, but also encourages the learners to be more honest in their acknowledgement of their learning needs. Goals based on candid admission of personal deficits address more deeply felt needs. This active involvement of the learners with setting their own personal goals appeared to facilitate learning more intensely than have been the case if the goals had been programmatic or instructor determined. The goal of each learner varied. For example:

Learner Goals

"I want to learn to read and write before I die.
I want to be able to write a letter in six months.
I want to learn capital and small letter."

HH (M.Age 62)

"I want to read for the benefit of my family.
It is my choice to come to school now, before It was required."

MS (M.Age 19)

"I want to learn to read to help my two little girls with their school work. I want to read to them story books."

CE (F.Age 25)

"They are putting in computers to help do my job. I will lose it if I don't learn to read so I can run it."

RH (M.Age 45)

"I want to read better for my job."

PP (M.Age 30)

HH's goal was to write a letter in six months but write his first letter at the end of three months. The four elements of diagnosis prescription, intervention and follow up were implemented by the tutors and researcher with undeniable success.

Recommendations for CAI/ABE Model

1. In addition to its advocacy of individualized instruction, the CAI/ABE model he used to provide guidelines for group activities and group learning situations.
2. The tutor training component be developed into greater depth because very often the volunteer tutors of adults are part time teachers of children and have not worked with adults or computers.
3. The training of software selection can be part of teacher/tutor training.
4. The computer diagnostic program, Outcome Advisor should be used early in the course of diagnosis after the information on learner/characteristics have been collected. So that it can help in prescribing an accurate treatment.

Suggestions for Further Research

1. A follow up with the five learners is recommended with remaining chapter of CAI/Bill Bates package of twelve chapters.
2. Further software development/evaluation is needed on the appropriateness of material for adults.
3. More work is needed on software development and its compatibility with different computers.

4. A possibility of mobile computer lab for centres without computer may be explored.
5. CAI/ABE model should be adopted for teaching the skills of writing numbers and especial groups like English a Second language' (ESL).
6. CAI/ABE model be used in school with students having reading problems or who are slow readers.
7. With the increasing trend in the uses of technologies, it is recommended that CAI/ABE be adopted for use with literacy programmes in developing countries. In Pakistan firms already having computer facilites can use the CAI/ABE model with their illiterate employees at the lower level. The Allama Iqbal Open University the only national and innovative university can make a break through in its multimedia approach by introducing computer instruction.

BIBLIOGRAPHY

1. Alderman, DI.I 1978. Evaluation of the TICCIT computer - assisted instruction system in the community college. Princeton, New Jersey: Educational Testing Service.
2. Belz, E. 1984. A therapy model for the treatment of functionally illiterates. *Adult Education Quarterly* 35(2) 96-108. New Brunswick, New Jersey: American Association for Adult and Continuing Education.
3. Brown, D.A. & Newman, A.P. 1968. A literacy program for adult city-core illiterates:(1) An investigation of experimental factors pertinent to instrument to predict succes in learning to read, and (3) A study of the initial teaching alphabet as a teaching method for adult city illiterates. Buffalo, New York: State University of New York At Buffalo.
4. Coalition for Literacy. 1983. How to form a community volunteer literacy program. Chicago: B. Dalton Booksellers & Time Inc.
5. Cross, k.P. 1981. *Adult as learners*. San Franisco: Jossey - Bass.

6. Dixon, R.C., & Clapp, E.J. 1983. A computer-based computer tutorial model. Illinois University, Urbana Computer - Based Education Research Lab.
7. Harper, O.D., & Stewart J.S. 1983. Run computer education. Monterey, California: Brook/Cole Publishing Company.
8. Havighurst, R.J., & Orr, B. (1956). Adult education and adult needs. Boston: Centre for the Study of Liberal Education for Adults.
9. Knowles, D.C. 1973. The adult learner: A neglected species. Houston, Texas. Gulf Western.
10. Lanning, F.W., & Many, W.A. 1966. Basic education for the disadvantaged adult: Theory and practice. New York: Houghton Mifflin Company.
11. Newman, A.P., & Parer, M.S. 1978. Literacy Instructor Training. Indiana: Indiana University.
12. Newman, A.P, Andrews, S., Metz, E. 1986., A computer diagnostic program to predict success in ABE learners.
13. Park. R. 1984. Preventing adult illiteracy: Eight issues related to policy and practice. (In Press).
14. Rizza, P.J., & Walker - Hunter, P. 1979. New technology solves an old problem: Functional illiteracy. Audio visual Instruction, 24(1), 22-23; 63.
15. Szatkowski, C.J. 1985. A personal view and implementation of CAI unpublished paper for the 1984 Summer Reading Conference. Indiana University.
16. Tillman, M., Bersoff, D., dolly, J. 1976. Learning to teach: A decision making system Lexington. Massachusettes: Heath.

COMPUTER PROGRAMS

17. Fattu, J.M., & Patrick, E.A. 1984. Outcome Advisor (R): A computer diagnostic program. Patrick Consult Inc. Englewoods Cliffs, New Jersey: Business and Professional Division of Prentice Hall.

18. Hartley Courseware Inc. 1982. Capitalization Practice. Diamondale, Michigan: Hartley Courseware, Inc.
19. Szatkowski, C.J. 1985. Bates Family: Introductions; Bloomington: Reading Practicum Centre, Indiana University.
20. Szatkowski, C.J. 1985. School Bloomington: Reading Practicum Centre, Indiana University.
21. Szatkowski, C.J. 1985. Learning at School. Bloomington: Reading Practicum Centre, Indiana University.
22. Szatkowski, C.J. 1985. The apartment Bloomington: Reading Practicum Centre, Indiana University.
23. Szatkowski, C.J. 1985. Who's who: picture print identification exercise. Bloomington: Reading Practicum Centre, Indiana University.
24. Szatkowski, C.J. 1985. Alphabet-ID. Bloomington: Reading Practicum Centre, Indiana University.
25. Szatkowski, C.J. 1985. Alphabet-After. Bloomington: Reading Practicum Centre, Indiana University.
26. Szatkowski, C.J. 1985. Alphabet-Before. Bloomington: Reading Practicum Centre, Indiana University.
27. Szatkowski, C.J. 1985. Alphabet-Between. Bloomington: Reading Practicum Centre, Indiana University.
28. Szatkowski, C.J. 1985. Alphabet - Scrable: Bloomington: Reading Practicum Centre, Indiana University.

VOCATIONAL TRAINING THROUGH NON-FORMAL SYSTEM
IN PAKISTAN (RESEARCH REPORT)

By

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Concept of Non-Formal Education

The concept of "Non-Formal Education" embraces an enormous number of diverse activities and structures. Any attempt to study the substance of what is named by the concept is likely to be relative, either implicitly or explicitly, what is needed are ways to formulate explicit basis of selection and focus.

The Keer Commission recommended, for example, "that alternative avenues by which students can earn certificates and degrees or complete a major portion of their work for a certificate and degree be expanded to increase accessibility of higher education for those to whom it is now un-available because of work schedules, geographic location, or responsibilities in the home".

In the same context the Gould Commission, suggests that there should be continuous experimentation with forms of non-formal study which minimize the traditional rigidities of campus life; time (prescribed years of study); space (residence on campus); and system of academic accounting (credits or honour points earned)".

A frequent objection against public training scheme is that they have been poorly adjusted to employers' needs and failed to guide students into the vocations for which they were trained. Since vocational training is considerably more expensive than

* less time, mere options, education beyond the high school. A special report and recommendations by the Keer Commission on high education.(New York, McGraw Hill), January, 1971.

general education, this situation can therefore lead to misinvestment. From this the conclusion is often drawn that vocational training should be left entirely to in-plant training by industry.

Costwise difference between formal and non-formal educational system

The formal education system is labour intensive because of its organizational budgets. Since the personnel costs grow due to wage increases, there is a continuous rise in costs per student. The overall structure of costs in the formal education system remain stable with personnel costs being and other elements unchanged. The costs are higher at the higher educational level and rise with each successive level. The academic calendar also imposes a cost burden because classrooms laboratories, libraries and playground facilities are only used six hours a day. Besides, there are long vacations, holidays, weekends, etc. The formal education system, therefore, permits limited economics of scale.

Cost Saving Features of Non-Formal Education

Non-Formal Education involves little or no capital cost. The programmes such as rural farm forums, on-the-job occupational training, youth and women clubs, village self-help groups and correspondence courses all use either the existing physical facilities or low cost structures. The personnel costs are also low because part-time instructors, volunteers, local people with special experience and resource persons from development agencies are employed. Another important feature of non-formal education is its possibilities of becoming self-financing. It can recover or reduce the operating cost-burden by generating some income or in-kind contributions from programme activities.

Role of existing Non-Formal Institution in Pakistan

In Pakistan the following institutions are engaged in imparting vocational education through non-formal system:

<u>Name of Institution</u>	<u>Established in</u>
Allama Iqbal Open University, Islamabad.	April, 1974
National Institute of Technology, Lahore.	January, 1948

London Institute of Photography, Karachi.

December, 1967

From the above lines we may see that teaching of vocational education through non-formal systems in Pakistan has been in progress since 1948.

Annual Intake Capacity

Table I and II indicate that the annual training capacity of these three institutions is 39400 and annual enrolment upto the year 1985-86 is 3456 respectively. The training capacity for various trades varies from 500 in T.V. Technician and 20,000 in Electrical Wiring trade.

TABLE - I
INFORMATIONS REGARDING THE ANNUAL
TRAINING CAPACITY*

S.NO.	Name of Trade	Annual Training Capacity of			Total Capacity
		A.I.O.U Islamabad	N.I.T Lahore	London Instt. of Photography Karachi	
1.	Electrical Wiring	20,000	-	-	20,000
2.	Electrician/Elect: Supervisor	4,400	-	-	4,400
3.	Radio Servicing/Tech:	-	10,000	500	10,500
4.	Photography (Black & White)	-	-	2,000	2,000
5.	Colour Photography	-	-	1,000	1,000
6.	T.V. Technician	-	-	500	500
7.	Rubber Stamp Making	-	-	1,000	1,000
TOTAL:					39,400

* On the basis of available facilities of the training institutions in the country

TABLE - II
PRESENT ANNUAL ENROLMENT FOR 1985-86

S.No.	Name of Trade	A.I.O.U. Islamabad	N.I.T Lahore	London Instt. of Photography Karachi	Total Enrolment
1.	Electrical Wiring	1466 (April, 86 Semester)	-	-	1466
2.	Electrician/Elect: Supervisor	304 (-do-)	-	-	304
3.	Radio Servicing/Tech:	-	86	350	436
4.	Photography (Black & White)	-	-	600	600
5.	Colour Photography	-	-	300	300
6.	T.V. Technician	-	-	300	300
7.	Rubber Stamp Making	-	-	50	50
				Total:	3456

Problems being faced by the Institutions

It may be mentioned that some institutions non-formal have various problems respecting training activities, administration, tutoring or general. Thus keeping in view the different situation of all the non-formal institutions some problems are tabulated in Table-III:

TABLE - III

PROBLEMS OF THE INSTITUTION IMPARTING
VOCATIONAL EDUCATION THROUGH NON-FORMAL SYSTEM

Problems	A.I.O.U Islamabad	N.I.T Lahore	London Insti- tute of Photo- graphy, Karachi
Un-necessary interference of the Board of Technical Education		X	
Non-availability of Financial Aid from Government		X	X
Non-admissibility of tax relief		X	X
Discouragement from Govt/ Educational Organizations		X	X
Centres far from the students			
Lack of interest due to part-time study			
Lack of Media specially T.V.			

a. **Un-necessary Interference of the Boards of Technical Education**

Institutions except Allama Iqbal Open University are purely privately managed and are registered with the Boards of Technical Education. Due to this affiliation, officers of the Board frequently visit the institutions. Boards demand registration and examination fees from each trainee and Boards impose their rules and regulations on these institutions. Institutions running on a private basis do not want such interference of the Board because in return for such interference Boards do not give any financial assistance in the shape of grant or equipment, etc.

b. **Non-availability of financial Aid from Government**

The Government does not help by giving financial assistance to these institutions so the institutions are not intaking any effort to increase and expand the technical trades through non-formal system.

c. **Non-admissibility of Tax Relief**

Actually these institutions except Allama Iqbal Open University are running on a commercial basis and the salaries of the staff and other expenditures are met from the fees received by the students. Thus the institutions feel that since they are providing a service in Vocational Education they deserve tax relief so that their expenditure may be met easily.

d. **Discouragement from Govt. Educational Organisations**

Existing non-formal institutes feel the problem about non-valadity of their awarded certificates in the market on Government level. Hence due to this reason day by day not only is intake decreasing but also the Government is not paying positive favour to these institutions which has a demoralising effect.

In the light of aforementioned problems, management/Head of departments offered some suggestions which are listed in table-IV and some of which are very justified.

TABLE - IV
SUGGESTIONS OFFERED BY THE INSTITUTIONS
HAVING NON-FORMAL SYSTEM OF EDUCATION

Suggestions	Institutions		
	A.I.O.U Islamabad	N.I.T Lahore	London Insti- tute of Photo- graphy, Karachi
Experimental Centres at smaller town may be introduced by using various workshop & repair shop for out reaching the rural areas.	X		
Adequate publicity in target areas may be done.	X		X
People be motivated by using various means.	X		
Govt. should give due recognition to non-formal institutions.			
Govt. should give Financial Assistance.			X
Exemption from the Income Tax.			X
Technical Board should not interfere for imparting the courses through non-formal system and thus excused from the Act. 1977.		X	X
Govt. should finance/assist to meet the expenditure of the institutions so that Tution/Practical Fee can be reduced.	X	X	X

Tuition/Practical Fee can be reduced.

Recommendations

- a. System of non-formal education for organizing and imparting Vocational Education should be further geared to meet the growing manpower demand.
- b. Courses through non-formal system for the continuing education of in-service workers be introduced in various trades to up-grade their skill and knowledge.
- c. The institutions offering non-formal courses should:

Publicised through various media to create awareness in public and workers of the existence of facilities for occupational development.

Cooperation between formal and non-formal institutions need to be further strengthened for the success of any programme through non-formal system.
- d. The facilities of various industrial and construction units be also utilized by the institutions of non-formal education.
- e. In institution of non-formal education arrangements be made to evaluate the success of their programmes with a view to improving.

WINDOW ON DISTANCE LEARNING INSTITUTIONS

I - INTRODUCING AL-QUDS OPEN UNIVERSITY

Al-Quds Open University (QOU), now a project in its preparatory stage, is intended to provide opportunities in higher education and training for the maximum number of palestinian, Jordanian and Arab men and women, through techniques of distance learning. QOU will endeavour, therefore, to evolve close ties of cooperation with all universities and institutions of higher learning in the West Bank and Gaza and the other Arab Countries, and it will try to contribute to the improvement of the quality of education, by making it more relevant to the needs of development by employing the latest in educational technology and programming.

Fortunately for QOU, it already has before it a rich world-wide experience in both distance teaching, and the employment of technology in education and training. Such experience as it has developed in countries as U.K., Canada, China, Germany, Japan, Spain, Thailand and others, will certainly lend itself handsomely to the building up of QOU as a university of high and internationally recongnized academic and training standards.

II - ORGANIZATION OF QOU

The objectives of QOU will be served by the following organizational structures:

1. A central management which, in addition to the general administration, will undertake the design and production of educational and training programmes, the delivery of educational materials, the design of tests and examinations and the granting of degrees and diplomas.

2. Regional centres to coordinate the work between H.Q. and the sub-regional and local centres.
3. Sub-regional study centres where students will have easy access to tutors, laboratories, workshops, libraries, etc.
4. Local study units will be established in cities, towns, villages and refugee camps in order to maximize interaction between students and tutors and among students themselves.

In combination with core curricula courses such as Arabic and English languages, cultural orientation, etc., QCU will offer courses leading to specific degrees in the following programmes:

a. **Technology and Applied Sciences:**

This programme will cover the basic principles of modern technology and sciences, including fields of electronic and mechanical engineering, and informatics. The emphasis throughout the programme will be on adapting theory and application to the local development needs of the society.

b. **Home and Family Development:**

The family as a cohesive and productive unit is the primary objective of this programme. It will provide, therefore, education and training in all skills relevant to the management and maintenance of a good home, as well as the knowledge of home crafts and the arts needed for education, health, and welfare of all members of the family-children in particular.

c. **Land and Rural Development:**

This programme is intended to ensure a better utilization of land, and development of rural communities. It will include, therefore, education and training in the various fields of agriculture, local crafts and industries and in the fields of social and economic organization and management.

d. **Management and Economics:**

This programme is designed to equip students with basic

knowledge and competencies to promote their potential entrepreneurialship and managerial talents to enable them to commence small businesses on their own, or to better the management of existing firms where they would be employed.

e. **Education and In-Service Teacher Training:**

This programme aims at the improvement of the quality of education, educators and educational standards throughout the different cycles in schooling, particularly through better and more relevant programmes in teacher training.

III -THE FEASIBILITY STUDY FOR THE QOU

At the request of the Chairman of the Palestine National Fund, UNESCO, in collaboration with the Arab Fund for Economic and Social Development, undertook a feasibility study to establish an Open University that will meet the increasing needs of the Palestinian and Arab people for higher education. The Director-General of UNESCO submitted the Feasibility Study to the Chairman of Palestine National Fund in September 1980. However, the necessary steps for implementation were delayed for four years. In July, 1985, Dr. Walid Kamhawi was authorized to establish Al-Quds Open University.

IV - WHY QOU ?

Among the major findings of the Feasibility Study was that progressively a higher percentage of Palestinian and Arab school graduates will not be able to find places in the conventional universities and insitutions of higher learning in the region.

Another was that the programmes offered in those universities and institutions were not geared to the needs of those graduates. It was found that only 35% of those expected to apply during the period 1985 - 1990 to universities and institutions will find places; and only 30% in 1990 - 1995.

The magnitude of the problem called for unconventional measures. The need to establish an Open University based on distance teaching was compelling. Hence, the need for the QOU. Distnce teaching through a university such as QOU recommend itself also for the following reasons:

1. The wide dispersion of the Palestinain people: This dispersion in many countries plus the national and

socio-economic conditions under which most Palestinians live, the constraints which govern their mobility from one country to another, make full-time study in a residential university, and in a field of their choice, extremely difficult for thousands of Palestinian young men and women.

2. The freedom of the student to proceed at his or her pace while working - thus combining bread-earning with studying.
3. Reduction in the costs of higher education: In distance teaching, the more students the lower the costs per student will be.
4. Flexibility in admission.

V - OBJECTIVES OF QOU

The following will be among the major objectives of QOU:

1. To provide the opportunity for the largest number of Palestinian and Arab young men and women to obtain higher education and training. 60,000 students are expected to enroll in the second phase of the development of QOU; more than half of them are expected to carry a full load of studying. The estimated number of students is likely to multiply once Arabsat is employed.
2. To develop Palestinian and Arab manpower: QOU will design a variety of educational and training programmes in middle technology to train students in the fields of modern technology.
3. To enhance the employment of modern technology in the Arab society: In addition to teaching technology and applied sciences, QOU will employ the state-of-art in educational technology such as micro-computers, video and sound cassettes, training kits. Such interface will certainly assist in effecting technology transfer.
4. To contribute to the democratization of higher education in the Arab society: QOU through the system of distance teaching will make higher learning and train-

ing accessible to the less fortunate among the socially and economically disadvantaged classes.

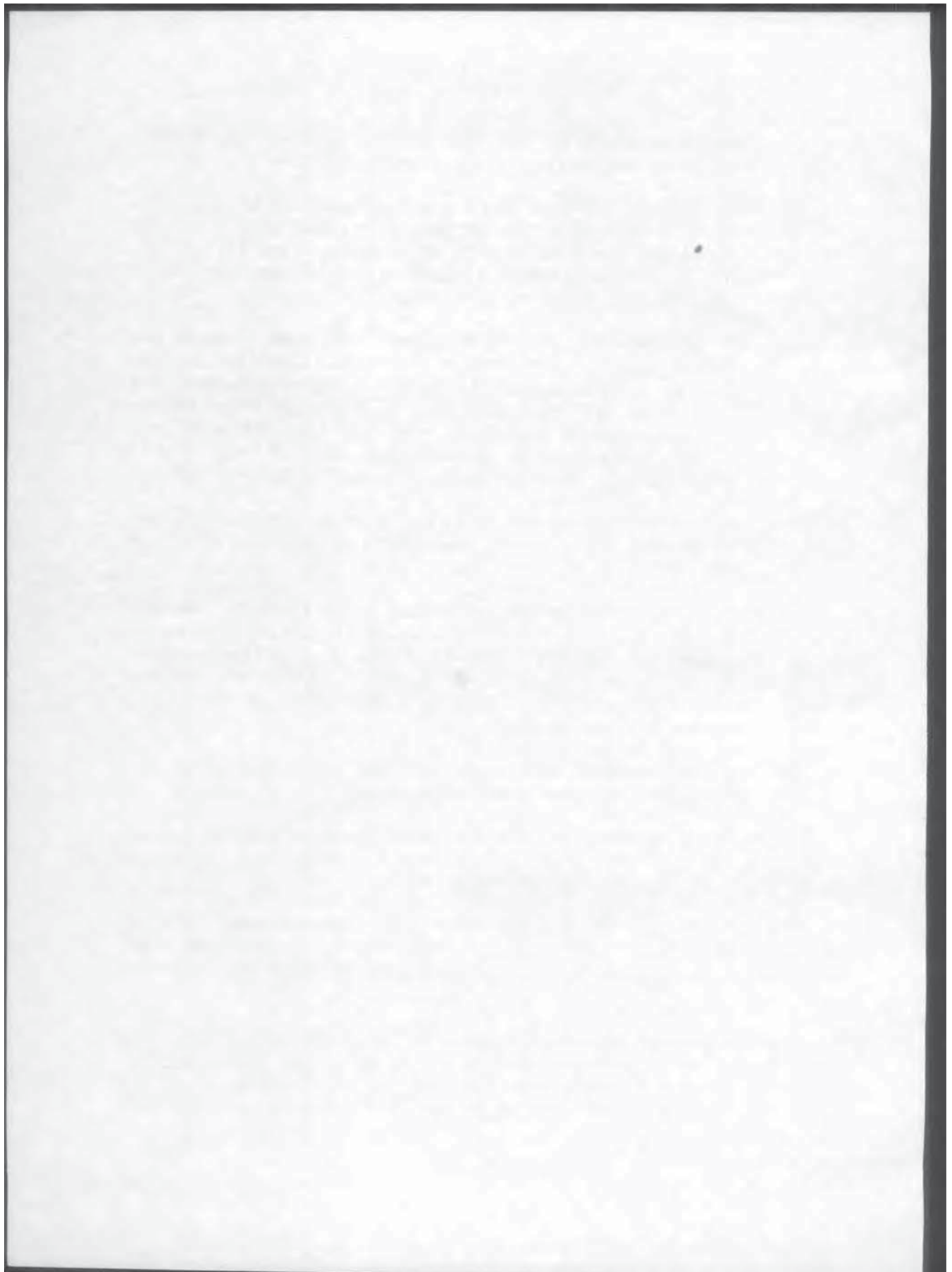
5. To provide general education and training to the community at large through the provision of life-long education and training to everyone willing to improve his or her education irrespective of age, academic achievement or economic means.
6. To improve the quality of higher education through the inter-disciplinary and multi-media approach in the design and production of educational programmes and materials. QOU will endeavour to make its characteristic trademark: Excellence in the standards of its educational materials, and relevance of these materials to the needs of students and of the community.

QOU will try to establish its study centres on the campuses of existing residential universities and colleges.

7. To reduce the volume of brain-drain from the region: Large numbers of students who fail to find places in local residential universities and colleges seek higher education abroad. Many of them do not return after graduation. The role of QOU here is to absorb most of those students.
8. To contribute to the welfare and development of the Arab communities under occupation.
9. To contribute to the homogeneity of education and to unification of the scientific and technical language in the Arab higher education.

In brief, QOU will hopefully play a pioneering role in distance education in the region. Needless to stress the fact that distance education will soon be a general trend all over the world.

QOU welcomes any suggestions, exchange of experience, and intellectual contributions. New as it is, QOU also highly appreciates assistance of many kind, particularly, teaching aids and materials to guide our experts in their efforts to produce QOU courses.



SPECIAL FEATURES**NEWS AND VIEWS**

The first half of 1987 was punctuated with some eventful activities in the Allama Iqbal Open University. Several distinguished delegations and consultants visited the University; the fourth Convocation of Allama Iqbal Open University was held during this period; a number of academic staff members attended international conferences and seminars. Many of them were nominated and had training abroad. A look at these activities will present more clear a picture of what happened during this period.

Delegates to AIOU

- A two member World Bank Post Appraisal Mission comprising of Dr. Julian Schweitzer, Education Planner, South Asia Education Projects and Dr. Christine Allison, Economist, South Asia Country Programmes Department visited the Allama Iqbal Open University on March 14, 1987. The visit was made in the background of the World Bank Assistance Programme for the training of some 15,000 rural female primary teachers which is to be executed through the Allama Iqbal Open University.
- A two member World Bank Post Appraisal Mission comprising of Miss. I. Buxell and Mr. Bashir Pervez visited the Allama Iqbal Open University on March 2, 1987 for providing facilities and expertise available with the University to some fifteen thousand primary school female teachers in Punjab over a period of 5 years.
- Mr. Peter Scopes, Educational Advisor, ODA, London and Mr. Peter King, Phase-III Implementation Coordinator (for ODA assistance to AIOU) visited the University, its Regional Directorates and Special Project areas w.e.f. 9-3-1987 to 20-3-1987.

- The first meeting of the newly constituted Board of Directors of the Regional Institute for Complementary Education (RICE) Islamabad was held on March 10, 1987. Dr. G. A. Allana, Vice-Chancellor of the University, chaired the meeting. Welcoming the members of the Board of Directors, the Vice-Chancellor remarked that the establishment of RICE is a great challenge for devising new and innovative ways of opening the minds of the Muslims of the region for the changes occurring in the modern world, it has lent, more importantly, of interpreting those changes. On this occasion, his Excellency, the Ambassador of the Arab Republic of Egypt, Mr. Mohammad Sami Hiba proposed the name of Dr. G. A. Allana as Chairman of the Board of Directors, which was endorsed by other members.
- Dr. J.A.G. Jones, Senior Chief Area Education Officer of the Country Council U.K. visited the University on May 4, 1987. He was shown the introductory slides documentary about the University followed by a questions and answers session.
- Mrs. Mina Ray and Mrs. Jenny Simmons Language-Teaching Units Regional Council in Scotland visited the University on 17th January, 1987.
- Mrs. Barbara Kolueki, Consultant on Mass Media and Audio-visual Material for Handicapped Children visited on 19th and 20th January, 1987.
- Mr. Richard Sammuell, Under Secretary, Asia and Occania Division ODA visited on 2nd February, 1987.
- Mr. Richard Manning, Assistant Secretary, Southern Asia Department ODA United Kingdom visited AIOU on 10-5-1987.

The University Convocation

The 4th Convocation of Allama Iqbal Open University was held on April 9, 1987. The President of Pakistan, General Mohammad Zia-ul-Haq who is the Chancellor of the University presided the Convocation. The Federal Minister for Education and Pro-Chancellor of the University, Malik Naseem Ahmed Aheer also attended this august ceremony. Later on, the Chancellor awarded degrees, diplomas, certificates and medals to the students.

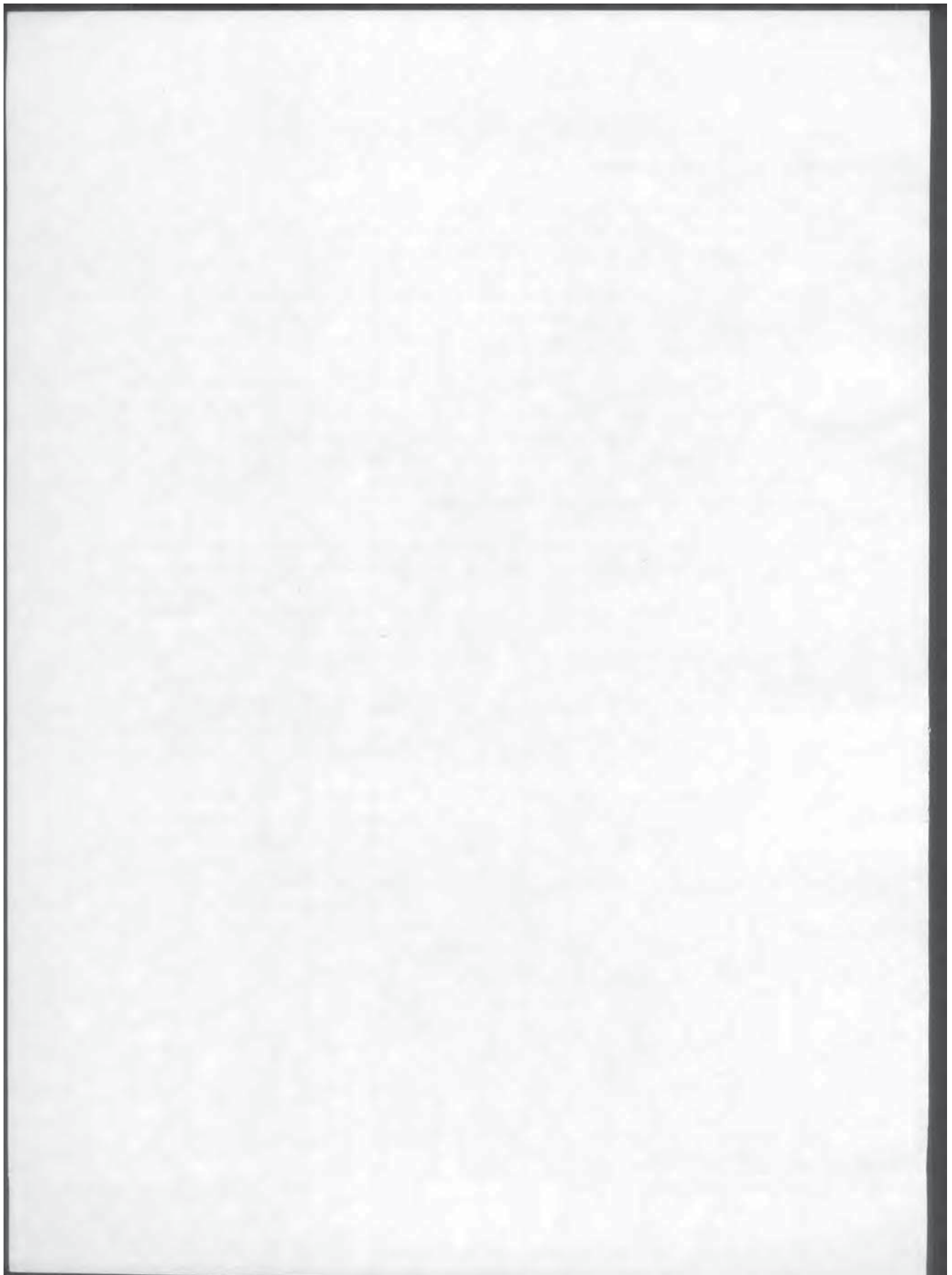
Staff Training Abroad

- Mr. Nazir Siddiqui, Chairman, Department of Urdu, attended an International Seminar on Allama Iqbal at Aligarh, India from 15th to 25th February, 1987.
- Dr. Muhammad Riaz, Chairman, Department of Iqbaliyat, attended an International Seminar on Allama Iqbal at Aligarh, India, from 15th to 18th February, 1987.
- Mrs. Razia Abbas, Director, Bureau for University Extension and Special Programmes, attended a Regional Seminar on Development of Education in Rural Areas at Khatmandu, Nepal from 19th to 31st May, 1987.

UKOU Attachment Training Programme

The following officers attended a six-week training programme beginning from May 11, 1987 at UK Open University London:

- | | |
|------------------------|--|
| 1. Mrs. Lubna Saif | Asstt. Professor,
Department of Pakistan
Studies. |
| 2. Dr. Mohammad Rashid | Associate Professor,
Department of Distance
Education. |
| 3. Dr. Parveen Liaquat | Associate Professor,
Department of Women Educa-
tion. |
| 4. Mr. Mohammad Haroon | Designer,
Design Section,
I.E.T. |



BOOK REVIEW

ZABAN AUR SAQAFAT
DR. G. A. ALLANA

SPECIAL PUBLICATIONS COMMITTEE, ALLAMA IQBAL OPEN UNIVERSITY,
ISLAMABAD, 1987-PP:156 - PRICE:125/-(HB); RS.100/-(PB).

The language is the basis of human communications. It enables a man to tell other ones about his inner animations, variable views and the tempo of thinking. Without this gifted element of human structure, there could be no exchange of ideas, experiences and ambitions. It is also essential to most kinds of physical communication - the transporting of people or goods from one place to another. Most exchanges of goods between men are only a fulfilment of some agreement which has been reached by the use of words. Even the means by which a man can make his way from one place to another, or steer a ship from one continent to another, would not be known unless those who had gone before and possessed a vast experience of travelling, had passed on what they know through the media of words. Thus the spoken words - a significant symbol of language - have always had played a dominating role in the realm of human development from the very day of *creation*.

But it is also to be kept in mind that the fruitfulness of language as a means of communications is shown by the development of science and the arts. No one ever makes great discoveries in science or thinks out new ideas or produces works of art entirely by himself. He depends largely on others, and needs the stimulus that is given by discussion and criticism. If we study the way in which there arise what are known as "Schools" of art or literature or music - that is, large groups of men who are producing writing or works of art of much the same kind, we use that they usually come from the mingling of different traditions, thoughts, culture and civilization. As such, the language flourishes along with the development of culture. These twin points may be called the interconnected issues without which all the global activities are meaningless and mediocre.

These were the two dominating points which prompted Dr.

Ghulam Ali Allana to write this comprehensive book on language and culture. As a renowned linguist of the East, he knows all the pros and cons of the language. It is because of the vast knowledge of the subject and a commendable command over the long-ranged history of the philology that Dr. Allana deliberately discusses the issue in a logical way. To begin with, he elaborates how the language came into existence, and in what form and shape. He has erased all sorts of shadows engulfing the thoughts of the so-called linguists of the subcontinent. He goes in depth to trace out the starting point which visualized the very shape of spoken words. It would have been, indeed, a tedious task to turn out the hidden pyramids of philology, but the gien researcher has successfully covered up the whole range and brought all the lingual aspects in the light logically, scientifically and emphatically.

During his linguistic survey he has elaborately dealt with the interconnected issue of the subject e.g. the culture. He emphasises the manifold impact of language on the growth and development of society and its culture. According to his view, the life is baseless without the existence of language. It is lingua franca which stimulates the way of life, the segment of civilization, the trend of thinking and the colouring of culture. In highlighting this very aspect of the language and culture, the author has given an impetus to those not habitual of giving importance to this inter-linked phenomena. I think it a worthwhile service rendered by the renowned author.

Dr. Allana has also brought in focus the historical background of the Sindhi language. With authentic documentations and solid proofs, he has picturised the philological phenomenon of this provincial language. Dealing with the subject, he has traced out the impact of Islamic era that emerged in Sind, and in proof, he has chalked out a number of Arabic words and phrases being indulged in Sindhi. The author's approach is so much systematic that the reader will not go astray in absorbing the methodology. This chapter of the book opens a new dimension in the realm of language-study.

To sum up, it may be said without any sense of hesitation that for the first time such thought provoking book has been written in the national language of Pakistan which widens the linguistic horizon. The learned author deserves all praise and prestige.

Dr. Mahmudur Rahman

DATA BANK
STATISTICAL GLIMPSES
OF
ALLAMA IQBAL OPEN UNIVERSITY
BY
Waqar Ahmed Siddiqi
Allama Iqbal Open University
Islamabad----Pakistan

Established : 1974
 Course enrolment from 1975 to Autumn 1987 Semester : 678522
 Courses offered from 1975 to Autumn 1987 Semester : 162

GLIMPSES OF SUMMER/AUTUMN, 1987 SEMESTER

Courses offered : 123
 Course enrolment : 85841
 Student enrolment : 35155
 Course enrolment: Overseas : 407
 Student enrolment: Overseas : 188
 Increase in courses over the October 1986 Semester : 29%
 Increase in course enrolment over the October 1986 Semester. : 19%
 Increase in student enrolment over the October 1986 Semester. : 17%

	Male		Female
Course participation ratio	67%	:	33%
Student participation ratio	68%	:	32%

Field of Study	Enrolment	Full Credit	Half Credit	Total Course
I Functional Courses (Non-credit):				
1. Agricultural courses	685	-	-	3
2. Elementary Arabic	959	-	-	1
3. Daftari Urdu for Federal Government Officers	439	-	-	1
II Functional Courses (Credit):				
1. Intermediate	4331	2	9	11
2. B.A.	4506	7	4	11
3. Secretarial Courses	576	-	8	8
III General Education:				
1. Intermediate	23352	10	3	13
2. B.A.	14896	12	10	22
IV M.A. Educational Planning and Management:	502	6	-	6
V Master of Business Administration:	1707	-	4	4
VI M.Sc. Pakistan Studies:	942	-	4	4
VII M.Phil Iqbaliyat:	82	2	-	2
VIII M.Phil Islamiyat:	91	2	-	2
IX M.Phil Urdu:	93	2	-	2
X Teacher Education:				
1. Primary Teaching Certificate	5270	2	-	2
2. Certificate of Teaching	2527	-	5	5
3. Arabic Teacher's Orientation Course	657	1	-	1
4. Postgraduate Diploma in English Language Teaching	131	2	-	2

5. M.A.(Teaching of English as a Foreign Language) TEFL	100	2	-	2
XI Matric Courses:	1660	5	2	7
XII BFEP:	1760	-	-	8
XIII IFL	575	-	-	6

REGIONAL SERVICES:

1. Regional Offices	:	13
2. Sub-Regional Offices	:	6
3. Study Centres	:	418
4. Model Study Centres	:	66
5. Tutors	:	1873
6. Regional Coordination Office	:	1
7. Regional Coordinators	:	6
8. Regional Libraries	:	18

