C O N T E N T S

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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PAKISTAN JOURNAL OF DISTANCE EDUCATION

Volume III   **1986**   **Issue No. II**

DOES REGIONAL SUPPORT PROVIDE
EDUCATIONAL ACCESS IN DISTANCE EDUCATION?

Education from a distance requires strong network of monitoring system. To reach potential students who are geographically isolated and who would not approach traditional institutions, education from a distance has proved the best alternative. The success of such a growing system, however, solely depends on an effective sound monitoring provided through regional support.

A distance teaching institution is inter-dependent in the operation of its various central units and between them and its regional centres. The regional centres thus are not simply administrative units but that they have an educational role to play which is concerned with the scope and quality of education that the distance institution has to offer. Regional centres have the advantage of being independent of any particular institution yet accessible to all. Institutions benefit from such an arrangement due to the intermediary and educational ombudsman function performed by such centres.

Strong student support is essential to achieving high completion rate. There is a need for encouraging student achievement through improving the quality of their contact with the distance institution. This contact can be made both from a distance and on a face to face basis. There are many options for personal and academic aid available to learners from a distance. The flexibility of the system thus ensures that individual needs can be met.

There are pluralistic approaches to educational access through regional support, which include regional workshops, study centres, telephone and tutorials. The regional centres have to provide complete range of support services including preliminary advice and continuous tutorial support through effective correspondence tution and the best possible opportunities for study centre meetings that resources may allow.

To concentrate on the independence of the learners is to dehumanize the learning process. The tutor in distance education as a friend, teacher and assessor, therefore, provides a variety of specific examples for the creation of a friendly dialogue by mail.

Attention has to be paid to the content and structure of the learning materials. Production of excellent learning materials is only half the picture. In order for the students to get full benefit of these materials and to complete their studies to best advantage, the regions have to play their part.

One wonders whether various support practices provided to distance education should be abolished because of their inflexibility or their resemblance to traditional teaching! Yet some people strongly urge the value of such support since they allow inter-action between students and encourage questioning, both important aims of any form of education, hence it seems assured that mediation of some form between the distance learner and the impersonal study materials will always be an essential ingredient of distance education because distance education is no longer the "step child" of conventional education nor is it any longer regarded as "second rate" education.

Dr. Ahmed Noor Khan
Editor

PAKISTAN JOURNAL OF DISTANCE EDUCATION

Volume III   1986   Issue No. II

THE OPPORTUNITIES OF DISTANCE[*]

by

Professor Geoffrey Bolton
Murdoch University, Australia

Growth of distance education[**]

All the same it will be tolerably obvious that for a number of reasons the establishment of correspondence classes for primary school children was not quickly seen as a model for more sophisticated forms of distance education. Correspondence education depended on the mediation of untrained women and was designed for a rural minority whose educational attainments were not expected to be especially high. There were still serious limitations on the technology available to distance educators. Until the 1930s correspondence was virtually the only means through which a tutor could establish contact with students scattered over a wide area. There were practical limits to the number of books and exercises which could be mailed to any individual or to the number of written essay-type assignments which either tutor or student could be expected to handle in any one year. There was the factor of cost. Governments seeking rural votes are characteristically cautious spenders because farmers are traditionally grudging taxpayers even in the best of times — and the best of times came seldom between the two world wars.

Compared to the facilities available through on-campus learning at even the most remote and provincial North American or Australian senior high schools and universities, correspondence education was clearly a second-best. It was a second-best which was preferable to no education at all, and during the 1920s and 1930s a number of universities in the British Commonwealth came to provide external tuition by correspondence using methods basically similar to those of the primary school correspondence classes. Their main targets were school-teachers and civil servants working for a bachelor's degree, who did not wish to lose time unduly when their turn came for posting to a country town.

Few if any attempts were made to extend this clientele in ways which might have encouraged economies of scale or at the very least have provided companionship for the external student. External tuition was perceived as a device improvised to meet universal conditions rather than as a contribution to educational methodology at large. In any case there was a good deal of reluctance to believe that the established centres of academia in Europe could have much to learn from the newer societies of North America or the Southern Hemisphere. Culture was still seen as diffusing from metropolitan centres, and European universities still basked in the prestige of seniority. Distance education was a Cinderella awaiting the Fairy Godmother of improved technology.

But distance education was not destined to remain Cinderella forever. From the 1930s onward the portents of change should have been increasingly clear for those with eyes to see. Radio broadcasting as an adjunct to primary education came to the fore in Canada and Australia in the 1930s and in Latin America in the 1940s. Civil aviation, already well-developed by the Second World War, offered opportunities of speeding up the process of communication between teachers and students. It can hardly have been a coincidence that 1938 saw the first international conference of the body which I have the honour of addressing. Educationists at that time glimpsed the possibilities offered by new technologies in media. Some foresaw that a part might be played by film and television. With all these possibilities on the horizon it is a first sight puzzling that in most parts of the world thirty years would elapse — another generation — before distance education at the university level came into its own.

It might seem obvious that the Second World War and the subsequent problems of postwar reconstruction exercised a profoundly disruptive influence. This however was not the case.(6) Several nations devised comprehensive programmes of education for those serving in the armed forces, originally because many recruits were found to have surprisingly inadequate literacy skills, later because educational programmes were considered to have a value of their own in terms of moral or social usefulness. In Australia, for example, there was a remarkably successful periodical called *salt* which introduced servicemen and women to a wide range of issues in current affairs. Nor must we forget the impact made in those years by paperbacks such as the Penguin series. When it gradually emerged that the aftermath of the Second World War would not be a recession as happened after the First World War, but instead sustained period of affluence with, at any rate in the Western democracies in the early years a considerable amount of hopeful optimism about beneficial social engineering, one might have expected the speedy unfolding of a bright future for distance education.

But change came slowly, and I may illustrate this by my own experience. Between 1966 and 1970 when I taught modern history at the University of Western Australia, the university had on its books a number of external students who were undisguisedly second-class citizens. The specialist staff attending to their needs consisted solely of a female clerical assistant of mature years and no great bureaucratic seniority whose duties were confined to arranging the efficient despatch and receipt of assignments and books. Assignments still consisted entirely of written essays. Academics tutoring externally were given no special training except for such informal advice as the head of the department cared to offer. In several instances the task was shuffled on to a part-time tutor. When the tutor and I arranged to meet a group of external students for a Saturday seminar at a central country town I was astonished to be informed that this was the first time such an experiment had ever been attempted. Of course external tuition was confined to those living outside the metropolitan area. Those living within a twenty-mile radius of the city centre were expected to attend lectures and tutorials on campus no matter how great the inconvenience. I well remember the time-consuming arguments which were necessary to ensure external status for a mother of six children living on the margin of the metropolitan region who required one unit to complete her degree. Plainly

she could only do so as an external student but, Heavens, the trouble we had to persuade the Administration!

I would not wish in the least to suggest that the University of Western Australia was unusually negligent or backward-looking. Still the question remains: why hadn't there been greater progress in approaches to distance education in the two decades after the Second World War? One answer might be that the first universities specialising in distance education appeared in the 1950s in South Africa and the Soviet Union neither of them nations likely to appeal to the rest of the world as models of educational enlightenment, however compelling the environmental factors which was leading them to innovate. Sweden and Finland also enjoyed a long-standing reputation as countries with a sustained commitment to distance education, but the rest of the world has always been more ready to applaud the Scandanavians for innovative thinking than to imitate their examples. Canada and Australia were held back by their federal political structures, as it was notoriously difficult to secure cooperation between different states or provinces and the only integrated approach before the 1970s was taken by the national broadcasting services in both countries; however their means were limited and their were many alternative claims on their resources so that it was easy to lapse into methodological conservatism. It was especially expensive to provide television education to scattered and comparatively sparse populations, and in any case the rural districts which were still seen as the prime target of external tuition were invariably the last to get access to television.

I am still not satisfied that these explanations give the whole answer. There was still among most academics and nearly all university administrations a set of assumptions so common that they were largely unspoken. There was for instance the belief that undergraduate education was a once-only preparation for work and life. Having graduated at the age of twenty-one or twenty-three with a major in engineering or literary criticism or dentistry or economics one's training was complete and would suffice for the next half-century, regardless of technological change and innovation. This is understandable. It is threatening for experienced practioners of a profession to suspect that their skills are obsolescent. It is less easy to understand the apathy which most administrators displayed towards the recruitment of mature age students, whose needs if taken seriously might

have fostered the development of off-campus tution. Between 1945 and 1950 the universities of many countries had experienced the presence of ex-servicemen and women as an enlivening influence to whose stimulus younger students reacted beneficially. But this broadening of the undergraduate age-span was seen as an abnormal and temporary phenomenon. Normality consisted in reserving tertiary education as a rite of passage out of late adolescence.

This philsophy worked well enough in the prosperous decades of the 1950s and the 1960s when in most countries the pace of university expansion was quickening so as to draw increasing numbers of the young into the tertiary sector. Even in the 1960s however there were omens of change. The decolonization of the European overseas empires meant that in Africa, Asia and the Caribbean new nations were emerging for whose people there had never been adequate a access to advanced education. They would be looking to extend opportunities as widely as possible and would not long be satisfied with universities based faithfully on the European model, academic robes included. Meanwhile the widespread use of the contraceptive pill suggested that, at least in those Western nations who were or aspired to be in the OECD league, birth-rates would fall with important long-term consequences for future demand for places in tertiary education.

During the middle and later 1960s youth in the Western world after a period of benign apathy became unusually politicised, partly but by no means entirely as a result of the Vietnam war. Harassed university administrators who endured the sit-ins and protests of the heady years between 1967 and 1972 may have begun to question the conventional wisdom that the best students were necessarily educated on campus and aged between eighteen and twenty-two. Simultaneously the increasingly militant feminist movement reminded its hearers that women, although theoretically given the same access as men to higher education, were in fact often discouraged by a range of more or less covert social pressures. They should be given opportunities in adult life to make good these deficiencies. The stage was set for a major rethinking of the role of off-campus education.

These were the circumstances in which Britain decided to establish the Open University whose first students were enrolled in 1971. Quite apart from its success in marrying

the use of film and television with the provision of ancil-
lary materials on a scale not previously attempted, the Open
University was of considerable symbolic importance. Emerging
in a country which tended to be more conservative than most
in its attitude towards educational change the Open Univer-
sity marked acceptance of the view that off-campus education
was a legitimate academic activity. It·was a moot point
whether it could strictly be called a contribution to dis-
tance education, since its success was partly founded on
serving a heavily concentrated population with a very high
ratio of television owners. Nevertheless the quality of the
Open University's programmes and its successful confronta-
tion of complex logistic problems made it a model soon
followed by many others. It would be tedious for me to
enumerate the stages by which distance eudcation has taken
off during the past decade and a half. It is enough to
remind you that at the previous conference of this organiza-
tion at Vancouver representatives attended from fifty five
nations. Nor need I dilate upon the potentialities opening
up in distance education through the use of microcomputers,
or to conjecture that with the coming of satellite televi-
sion it will literally be a case of 'the sky's the limit'.
There must be many here better qualified to comment on these
possibilities. In the time remaining to me I wish from an
historian's perspective to comment on some of the problems
and more of the opportunities which arise from this recent
growth in distance education.

Among the most important breakthroughs of the last
twenty years I would place one which· is psychological rather
than technological: the recognition that distance from edu-
cational opportunity may be measured not only in terms of
kilometres but also as a consequence of social or economic
inequalities. We in Australia for instance have gradually
come to realise that the difficulties of attending lectures
and tutorial on campus must be no less great for an Abori-
ginal or a migrant in the inner suburbs of Sydney or a mother
of small children in a new housing area thirty kilometres
from the General Post Office as the difficulties confronting
the schoolteacher posted to a small country town. All these
people and many others can be served by the methodologies of
distance education.

Elsewhere in the world this principle can be extended
further. For many nations in Africa and Latin America it
would be (at least for the present) an unwarranted waste of

resources to divert national income into the building of many large high schools and universities on the western model. And yet there are large populations of the young and not-so-young whose demand for educational opportunity is pressing,. Among the papers presented to the Vancouver conference in 1982 few if any made more impression on me than the exposition by Joe Ansere of the challenges confronting distance education in Ghana. He showed that for many inhabitants of that nation there only hope of secondary education lay in the creation of a distance education programme. It had to be Ghana's own programme tailored to the requirements of Ghana's citizens. Overseas correspondence courses were often irrelevant in context and approach and demanding of foreign exchange. And Ansere observes in a telling comment:

> It was probably fortunate that we did not obtain foreign aid in the initial organization of the programme. (We sought but failed to obtain assistance from the Ford, Rockefeller, and Dag Hammarskjold Foundations as well as the University of Wisconsin). If we had had foreign assistance, the programme might have been organised on a scale too large to manage..... Externally aided projects may be successful at the beginning, but when external support ends the programme almost invariably turns into a white elephant for the host country.

One's admiration for the providence of the Ford Foundation and the others falters a little on learning that one quarter of those Ghanaian students who pass the secondary entrance examinations and more than half of those who qualify for university education are unable to proceed for want of sufficient places. Experience suggests that the answer lies in distance education if only because the recurrent costs are lower than those associated with on-campus education. But it may have to be distance education without hardware. According to Ansere it has not yet been possible to utilise radio and television to any marked extent in Ghana and a similar report was made at Vancouver by an Indian correspondent from a Gujrati University who argued in favour of programmed materials in the form of written texts. These are salutary reminders against succumbing too readily to the beguilements of new technology. And yet these are nations including regions of high population density which might seem capable of achieving fairly intensive radio or television coverage over relatively small distances with consequent

savings in per capita cost. The choice of appropriate technology and adaptation to local needs may thus be seen as one of the opportunities and challenges of distance education.

So far I have been speaking as if distance education should be seen as the salvation of the disadvantaged. If this were all it might still seem an educational second-best in comparison with the offerings of on-campus education. Yet perhaps the time is coming when that assumption should be challenged. Perhaps the balance of advantage is shifting away from the conventional universities and high schools. Possibly the opportunities of distance education need to be stressed more vigorously than hitherto and with different arguments.

Consider the following propositions. The lavish years of educational funding have ended in nearly every country in the world. The economic forecasters give no grounds for supposing that conditions will improve in the foreseeable future. On the contrary some governments are displaying a cannibal relish in demanding cuts from the higher education sector. In the United Kingdom speculation is frequent that at least one of the newer universities may be closed. Even the University of London, which should always be respected in a gathering of this kind for its role in postgraduate distance education, faces the task of reducing its budget by between 10 and 15 per cent over the next five years. It requires little imagination to visualise the likely results in terms of staff morale, the slowing down of research programmes, the erosion of undergraduate teaching standards, and the removing of opportunities for those aspiring for advanced education. There is, alas, no reason to suppose that stories of this kind are confined to the United Kingdom.

To such pressures various responses are possible. The policy currently favoured by the United Kingdom government seems to be, as in so much else, a reversion to the ideas of the 1930s; to the proposition that where choices must be made the opportunities of advanced education should be reserved for school leavers, and only for that elite among school leavers who because of superior intelligence or parental affluence can be expected on graduation to make some contribution to the nation's income-producing capacity. There is an ignoble heresy abroad which asserts that education is valuable only insofor as it produces entrepreneurs

capable of increasing the gross national product. This heresy is not confined to Britain. Nevertheless there are alternative answers even when all due attention is paid to the cost factor. And here it seems to me the distance educators face one of their most demanding assignments. To borrow the words of a nineteenth-century statesman: *We must educate our masters.*

Those of you who are working at the innovative edge of distance education have probably become over-familiar with the widening opportunities offering in television and computer technology. It is easy for you to forget that most senior academics and civil servants, most in short of those decision-takers who give direction to educational policy, are still products of the old conventional system which turned them out in their early twenties as complete and polished granduates in no need of further education or re-education. They are well aware of the need to talk respectfully about microcomputers. Some may even the acquainted with the world "telematic". In terms of practical experience however it can be safely assumed that few are aware of the full range of potential in the field of distance education. I speak with conviction as a member of that ignorant generation.

And you must be careful to maintain your communication skills in good order. I mention this because it sometimes seems to me — and I venture this comment with some attempt to assume the humility of the amateur — this distance education sometimes runs the risk of hiding its virtues behind a thickening veil of professional jargon. It is a natural enough reaction in a discipline which in earlier years has suffered from the neglect and disdain of traditionalists, but it may be counter-productive. Let me cite one example from one respected authority. In developing a theory of independent study he writes:

> Distance in an educational programme is a function of dialogue and structure. Structure is the extent to which the objectives, implementation procedures, and evaluation procedures of the teaching programme can be adapted to meet the specific objectives, implementation plans and evaluation methods of a particular student's learning programme. Dialogue is the extent to which interaction between learners and teachers is possible.

Would it have lost anything in translation if he had simply written: 'Effective communication in distance education requires teaching programmes which identify and meet the needs of individual students.' No doubt it could be put even more simply. My point is: if distance education is to grow and thrive as it should, educationists must remember to communicate clearly to those of us who are not educationists.

So the case for distance education can be argued on the political front on the grounds that its recurrent costs may be shown to be lower than competing modes of education. From the student's point of view it could be argued that home study is preferable to the often rather alienating atmosphere of a large urban university where lectures are given to classes of hundreds and where deteriorating resources and low staff morale may produce a cynical indifference very far from the excitement and commitment which should be generated by the learning process. It is also arguable that conventional universities and high schools are still too much dominated by the use of printed books and articles. Young people today, while not necessarily deficient in reading skills, may not be as much in the habit of reading books for pleasure as earlier generations were, so that academics who design programmes on a basis of reading set texts may be failing to keep up with the change heralded a quarter of a century ago by Marshall McLuhan. As an inveterate reader myself I am not wholly convinced by this last argument, and the testimony from India and Ghana suggests that there is still a major demand for printed material in distance education. This is an important debate, and those of us who are not distance educators need the benefit of your testimony.

To the extent that radio and television are used in distance education they must contribute to breaking down the traditional barrier between those who are formally enrolled in higher education and the rest of the community. Access to the Open University's lectures is not confined to those formally accepted for a degree courses; they are available to any listener in Southern England who is prepared to get up early in the monring and tune in to Radio 3. Those involved in home study can and in many cases probably do share their interests with their family and friends. This ease of accessibility constitutes a powerful counter against those who would confine education to vocational purposes narrowly defined.

In any case we live in an age when serious doubts are expressed about the availability of vocations or jobs for

everyone. Few would be bold enough to assert that the pre-
sent level of unemployment is a temporary phenomenon or that
it has reached its peak. Recurrent education with its twin
emphasis on re-training for new employment and education for
leisure is a concept well worth defending, if only because
the incalculable social costs of doing nothing to alleviate
the plight of those who would otherwise be without occupa-
tion. In many Western countries the proportion of middle-
aged and elderly is notably on the increase. Plato observed
that when people were past the age of working they should
set themselves to the study of wisdom and although modern
governments are too seldom given to the study of wisdom it
is surely no too much to ask that means should be provided
for those senior citizens who wish to retain a measure of
intellectual agility. Summing it up, the great argument to
be deployed in favour of support of distance education is
this: it is an admirable and relatively inexpensive instrument
for increasing access to opportunity and thus contributing
to social justice. Governments who neglect this instrument in
favour of outmodedly elitist concepts of education will find
the alternatives more burdensome.

One other consideration must be in all our minds. It is
not beyond the realms of feasibility that within the next
fifty years a large portion of the civilised world may be
devastated by a nuclear war. Any measures which can be taken
to spread the world's accumulated knowledge and culture among
greater numbers, any steps which can be taken to diffuse and
decentralise education, must increase the possibility of
preserving at least part of that heritage among the survivors.
The techniques devised in developing distance education may
play a crucial role in ensuring that all is not lost to civi-
lisation if the nations are stupid enough to embark on a third
world war.

We have come a long way from Charles James Fox but I
think he would have appreciated the point. We would have been
aware that what survived of Greek and Roman civilization in
the eighteenth century (and still more in the twentieth) was
only a fragment of its entirety. Barbarian invasions, plagues,
earthquakes, plunder by the ignorant, the casual side-effects
of local wars, all served to destory the manuscripts, works
of arts, and buildings which were the masterpieces of classi-
cal civilization. Much of what was preserved was safeguarded
over the dark centuries in the keeping of isolated provin-
cials: the monasteries of the Egyptian desert, the hermitages

of the itinerant Celtic monks of Ireland, the remote valleys of the Swiss Alps. This knowledge survived because the early Christian church had an evangelical mission to teach in every quarter of the known world.

Historical parallels are never absolute, and it would be absurd to venture far into prediction. Nevertheless in a keynote address of this nature honouring such a notable educationist as Knud Broady it is important to raise our sights from the immense detail of feedback techniques, the preparation of course materials, and the clash of rival educational theories in order to look at the broader perspective. The work of distance education is not simply a matter of philanthropy to the disadvantaged who cannot be accommodated in the academies. It may also be a vital factor in the dissemination and maintenance of civilised values.

PAKISTAN JOURNAL OF DISTANCE EDUCATION

Allama Iqbal Open University
Islamabad — Pakistan

DEVELOPMENT OF DISTANCE EDUCATION IN PAKISTAN[*]

(A case study of

Allama Iqbal Open University, Islamabad.)

by

Dr. Shaukat Ali Siddiqi

Dean, Faculty of Education

Allama Iqbal Open University, Islamabad

Introduction

The Islamic Republic of Pakistan with a population of about 98 million has got a literacy rate of 26.2 per cent. In spite of the fact that all the policies and plans promulgated eversince the independence of the country in 1947 have aspired to raise the status of literacy, the actual situation has not improved much. The literacy figures range between 47.1 per cent in urban areas and 17.3 per cent in rural areas. Similarly, the disparity in male and female literacy rates is also quite phenomenal, i.e. 35.1 per cént and 16.0 per cent respectively. The low level of literacy tells upon the overall growth and development of the individual and hence the society.

The problem of low-level of literacy in Pakistan is closely associated with extremely low rate of participation at the primary stage which is about 49 per cent of the

relevant age-group (5-9). The rate of participation at this stage goes still below 21 per cent in the case of rural female population which is quite distressing. High dropout rate further aggrevates the situation. With every new educational policy and plan, we shift the target date of universalising primary education still further with mixed hope. The rapid population growth in Pakistan results in an increased absolute number of children in school without bringing any improvement of percentage-wise coverage of the relevant age-group.

The extremely low level of participation at the primary stage has spill-over effects for participation at subsequent stages of education, viz. secondary education (grades vi-x) and higher education. At secondary education level, the participation rate was just 26% for grades vi-viii, and still lower i.e. 15% for grades ix-x in 1982-83 which has not shown any improvement even in 1986.

At the higher education level, the estimated enrolment percentage of the age-group (18-23 years) in nearly 4.5 which is not encouraging at all and is again traceable to the low level of participation rate at primary and secondary stages of education. In technical, vocational and professional education as well, there are problems of both quality and quantity, as well as low participation of female population.

The picture of education in Pakistan as depicted above is quite dismaying and in spite of our repeated avowed efforts we have not been able to improve much. We are lagging much behind as compared to other developing countries of Asia in particular and other regions in general. To sum up again, Pakistan is facing numerous formidable problems in education which are, in turn, affecting its overall socio-economic development. Problems of illiteracy, drop-outs at primary stage and low participation of female are further augmented by an alarming rate of population growth. Increasing unemployment and the resulting discontentment amongst the educated people clearly indicate the inability of the system to come up to the asiprations of the nation. Non-availability of adequately trained teachers, ill-equipped libraries and laboratories and the absence of other physical facilities in educational institutions reflect the financial constraints being experienced in Pakistan. This has intensified the commonly felt view that our exclusive dependence on the formal system of education is going to have serious repercussions for our

development in the years to come. The unprecendented popula-
tion boom takes away major chunk of our limited resources in
meeting the immediate basic needs like food and shelter, etc.
As a result, very little is left for investment in long-range
development plans in the field of education and training.

The situation as described above, justified the need
for serious experimentation with alternative approaches and
strategies to reach massess of people in the shortest pos-
sible time. The answer came in the form of the establishment
of the Allama Iqbal Open University (the then People's Open
University) in 1974. Although the concept of distance educa-
tion was mainly developed in advanced countries of the world,
particularly Great Britain and Australia, the approach seems
to suit more squarely to the conditions prevailing in developing
countries of the world which are facing extreme scarcity of
financial as well as manpower resources. The distance education
system tends to serve the relatively dispersed student popula-
tion involving a minimal reliance on, or a significant change
in the role of face to face teaching.   In this way, this approach
liberates the students from not only time and space constraints,
but also of age and financial status as well which are so rigidly
associated with the conventional approaches to education. AIOU
is the pioneer institution of distance education in Pakistan
and has proved to be highly cost-effective in the face of
acute economic constraints being faced in Pakistan. The major
objective of the establishment of AIOU was to provide educa-
tional facilities at the door-steps of those parts of popula-
tion which, for one reason or the other, could not have an
opportunity to benefit from the hard pressed formal system
of education.

Government's Policies and Plans on Distance Education

In view of the inability of the formal education insti-
tutions to meet the fast growing educational needs of the
masses, the Education Policy, 1972-80 was the first official
document to promulgate the idea of an open learning system
through distance education. To quote from the Policy:

"Open universities are being used in several countries
to provide education and training to people who cannot
leave their homes and jobs for full-time studies. A
People's Open University will, therefore, be established
to provide part-time educational facilities through

correspondence courses, tutorials, seminars, workshops, laboratories, television, radio broadcasts and other mass communication media. To begin with, the University will provide facilities in fields and subjects of immediate importance such as the training of elementary teachers and members of the National Literacy Corps, and the promotion of rural improvement and community development activities."

In pursuance of the provisions of the Education Policy 1972-80, the National Assembly passed the enabling Act in May, 1974 and thus the Allama Iqbal Open University (then named as People's Open University) came into existence in June, 1974. The main objectives of the University as enunciated in the Act may be enumerated as under:

a. To provide facilities to people who cannot leave their homes and jobs, in such manner as it may determine;

b. To provide such facilities to the massess for their educational uplift as it may determine;

c. To provide facilities for the training of teachers in such manner as it may determine;

d. To provide for instruction in such branches of learning, technology or vocation as it may deem fit, and to make provision for research and for the advancement and dissemination of knowledge in such manner as it may determine;

e. To hold examinations, and to award and confer degrees, diplomas, certificates and other academic distinctions.

Some of the functions of the University were also reiterated in the Fifth Five Year Plan, 1978-83 which reads as follows:

"During the Fifth Plan, the Allama Iqbal Open University would employ multi-media distance learning techniques to offer inservice training courses for about 20,000 primary and middle school teachers, general foundation courses for 40,000 students who will study about 180,000 course units in science, social studies and languages and functional education courses to cover 240,000 adults. The pilot foundation course for those who discontinued education after class VIII will be expanded so as to cover wider geographical areas and include more subjects."

The National Education Policy, 1979 has also referred to the functions assigned to the AIOU in promoting the cause of education in the country. These functions pertain to the training of literacy workers, organising radio/TV programmes, producing adult literacy materials and the training of teachers.

The current plan i.e. the Sixth Five Year Plan (1983-88) also mentions certain important functions pertaining to the promotion of literacy and training of teachers which are being performed by the AIOU.

The Action Plan for Educational Development 1983-88 also appreciates the role of the AIOU in running non-formal education programmes and aspires to strengthen the same.

Organization and Administration of AIOU

Headed by the Vice-Chancellor, the Allama Iqbal Open University is operating in certain academic as well as administrative units. Executive Council and the Academic Council consisting of some nominated and some ex-officio members are the supreme executive and administrative bodies of the University.

1. Academic Functions

For academic purposes, the University consists of three Faculties. Each of the Faculties is headed by a Dean who, as per provisions of the University Act, performs functions as the academic as well as administrative head of all the departments working within the Faculty. The Faculties and the relevant departments are as follows:

a. **Faculty of Basic and Applied Sciences**

This Faculty includes the Departments of (i) Agricultural Sciences; (ii) Basic Sciences; (iii) Technical and Vocational Education; and (iv) Women Education.

b. **Faculty of Social Sciences and Humanities**

This Faculty comprises the Departments of (i) Urdu; (ii) Iqbaliat (study of Iqbal, the famous philosopher poet); (iii) Business Management; (iv) Library and Information Sciences; (v) Institute of Arabic and

Islamic Studies; (vi) English; (vii) Social Sciences; (viii) Mass Communication; (ix) Population Studies; (x) Institute of Social Sciences; and (xi) Institute of Pakistani Languages.

c.   **Faculty of Education**

This Faculty consists of the Departments of (i) Educational Planning and Management; (ii) Teacher Education; (iii) Literacy, Adult and Continuing Education; (iv) Distance and Non-formal Education; (v) Population Education Project; and (vi) Special Education Project.

2.   **Administrative/Support Services Departments**

In addition to the Faculties, consisting of academic departments, there are also several other administrative, supervisory and service departments working under the Vice-Chancellor. These departments support the academic needs of the AIOU system and include the following ones:

a.   **Administrative Departments**

   i. Registrar's Departments: Comprising establishment, nominations, recruitment, transportation and telephones, admission and mailing, etc.

   ii. Treasurer's Department: Comprising sections on general matters, budgeting, purchases and foreign aids etc.

   iii. Bureau of Information Services.

   iv. Project Directorate.

b.   **Support Services Departments**

   i. Institute of Educational Technology.

   ii. Bureau of Course Production and Academic Planning.

   iii. Research & Evaluation Cell.

   iv. Examination Department.

   v. Directorate of Regional Services.

vi. Students' Advisory Cell.

vii. Print Production Unit.

viii. Database & Documentation Centre.

ix. Directorate of Planning & Development.

3.   Statutory Bodies

In addition to the above organisational set-up, there are several statutory bodies like the Selection Board and the Finance Committee etc. which function within their specific spheres.

For the development of course, there are the committees of courses at the Departments' level, and the Faculty Boards at the Faculty level. The decisions of these bodies having financial implications are sent to the Academic Planning and Development Committee and those involving media and research are sent to the Research and Technology Committee. After processing the decisions in these bodies, they are passed on to the Academic Council and the Executive Council for final approval before implementation.

4.   Regional Network

The AIOU operates through its countrywide network of 16 regional/sub-regional offices which serve as the link-points of AIOU to the individual students at the grass-roots level. These regional offices also manage about 350 study centres and ensure the delivery of tutorial services to the students throughout the country.

5.   Teaching Methodology

The AIOU is primarily a distance teaching institution using multi-media techniques.   The main components of its system are:

1.   Correspondence packages, which include self-learning printed texts and supplementary study materials.

2.   Radio and television broadcasts specially presented for distance learners.

3. Tutorial instructions through correspondence and face to face teaching at study centres where possible, with workshops, where appropriate.

4. Course assignments as an instrument of teaching and continuous assessment.

6. Production of Course Ware

Appreciating the increasing need to have an efficient system of course production, a full-fledged Directorate of Course Production has been established at the AIOU. This Directorate prepares schedules for different stages of course production like editing, inserting illustrations, proof-reading and printing, etc. No course, whatsoever, can be launched by any department unless it passes through these stages and the Directorate makes sure that the books and other allied materials are available before hand. Since the AIOU does not have its own printing press, it is for that purpose dependent upon some outside printing agencies which in certain cases tend to disturb the schedule of course offerings.

7. Media Support

AIOU is a media-based University. The printed text of the materials is supported by a number of radio and television programmes. These programmes are produced at the Institute of Educational Technology and transmitted by radio and television corporations on payment of subsidised rates. Each student receives the schedule of these programmes through his learning package. In view of the increasing role of AIOU in expanding education in the country, the President of Pakistan, who is also the Chancellor of AIOU, has desired for starting second channels on radio and television for exclusive use by the educational institutions with major chunk of time for the AIOU programmes.

8. Evaluation System

The AIOU believes in continuous assessment of students' work. Firstly, there is the evaluation of their written assignments by their tutors which is called internal assessment and then there is the evaluation of final written examination in each credit course which is known as external evaluation. In order to be successful in a course, a student must pass in both these components separately.

Programmes and Projects of Allama Iqbal Open University

The Allama Iqbal Open University is running a number of regular programmes as well as projects through its distance teaching system. Categories of clientele catered to by the AIOU include people from all over the country both male and female. A research study conducted by AIOU on a random sample of 1382 students revealed that they were mostly employed in public and private organisations, agriculture, business, house-jobs and others, etc. A further research may help in identifying some other categories as well. Brief review of the major programmes and projects of the University is given as under:

I.   Programmes of AIOU

1.   M.A./Degree Programme in Educational Planning & Management (EPM)

The M.A. level programme in Educational Planning and Management consisting of ten courses, is one of the earliest Master's level programmes of the University. In view of the dire need of the country for properly qualified educational planners and administrators, the programme was started by the AIOU in collaboration with the Unesco Regional Office, Bangkok, in 1975. Admission in the programme is accorded on nominations from the provincial and federal departments of education and other educational organisations against a limited number of seats. To start with, correspondence materials were adapted from Unesco texts, but with the passage of time more materials have been produced locally utilising findings of various research studies conducted in Pakistan.

2.   M.Sc. Pakistan Studies Programme

The programme aims at producing and training scholars on Pakistani society and its aspects in an integrated and inter-disciplinary way. All persons possessing a Bachelor's Degree or equivalent, with any social science subject are eligible for admission in the programme.

The following methodology is being used for instructions:

a. Prescribed textbooks have been classified as compulsory and suggested readings. These books are listed in the study guide.

b. Although to obtain these books will be the individual responsibility of the student, the AIOU would provide limited number of copies at Regional Centres and Book Banks established at Regional Offices.

For continuous academic guidance, supervision and assessment, the University will provide regular tutorial support to the students through its Regional Office.

3. Master in Business Administration (MBA)

The AIOU has recently started the MBA programme. This programme aims at providing the students specialised knowledge in business administration and prepares them in the field of business management and other related areas. This programme is offered in various groups of courses. Each of the groups has been designed to provide specialization to the students in that particular field.

4. Postgraduate Diploma in English Language Teaching (ELT)

Postgraduate Diploma in English Language Teaching (ELT) is one of the earliest Master's level programmes of the University. It is inservice training programme for college teachers in English who wish to improve their qualifications and competencies in teaching English as second language. With its first cycle starting in April, 1981, it has so far trained about 400 lecturers from all over the country. Group training workshops are held in major cities of the country after the conclusion of the correspondence phase.

5. B.A. Programme

B.A. programme of the AIOU is being offered under five specific groups and one Open Group. One has to

complete eight full-credit courses in order to be eligible to get B.A. degree. Some of the courses are common in all the groups whereas others are meant for specific groups only. These groups include:

   i. B.A. International Marketing

  ii. B.Com. Bachelor of Commerce

 iii. B.A. Population Studies

  iv. B.A. Language and Literature

   v. B.A. General

  vi. B.A. Open Group

6. Intermdeiate Programmes

Intermediate programme is another important programme of general education of the University. In order to be eligible for a certificate of Intermediate, one must qualify six credit courses. All matriculates with secondary school certificate (10 year schooling) are eligible for admission in the programme.

The scheme of studies for the Intermediate programme consists of two groups as under:

i. General Group

This group includes two full-credit courses, one each in English and Urdu/Sindhi and two half-credit courses, Pakistan Studies and Islamiyat (religious studies) or Ethics. Rest of the courses include Rural Development, Book-keeping and Accountancy, Electricians' course, Child Care, Economics, Gardening, Household Appliances, etc.

ii. Open group

This group includes one credit compulsory (half-credit each course in Religious Studies and Pakistan Studies). Other courses include the ones as mentioned under general group. English is not compulsory in the open group.

7. Teaching Education Programme

The University is offering a number of inservice teacher training programmes through the distance teaching techniques. A brief description of these programmes appears as below:

i. B.Ed. Programme

The Department of Teacher Education presently (end of 1986) busy in developing materials for launching the B.Ed. programme from April, 1987. The programme is meant for producing secondary level teachers in various areas of specialization. To start with, the programme will produce specialist teachers in English and Social Studies. However, Science and Mathematics will also be included in the next 2-3 years.

ii. Certificate of Teaching (CT)

C.T. is an upgraded programme for teachers at middle (junior secondary) school level. Admission is accorded to inservice teachers on their nomination from their respective employment agencies. It includes one course on Foundation of Education, two electives out of the teaching of Urdu, Social Studies, Home Economics and General Science. The programme also involves intensive workshop and teaching practice. Courses on the teaching on Mathematics, English and Islamiat at middle school level are also in the process of development.

iii. Primary Teachers' Orientation Course (PTOC)

In terms of enrolment, PTOC is AIOU's largest and one of its earliest courses, launched in 1976. It is one-semester course and its main objective is to update the knowledge of serving teachers in the content and the methodology of all the subjects included in the current national primary school curriculum. So far, it has had its thirteen presentation cycles. It has been revised and improved twice and completely rewritten once. Admission to this course is accorded on the

nomination of inservice primary teachers by their respective employing agencies. About 85,000 teachers had been enrolled in the course through their nominating agencies upto April, 1985.

iv. Primary Teacher's Certificate Course (PTC)

First presented in October, 1979, with an enrolment of 2,000 teachers nominated by the provincial education departments and the Federal Ministry of Education, this course is meant for untrained primary school teachers with a minimum of one year service. The training course comprises three parts, viz; (a) principles of teaching; (b) overall content and methodology of the primary school curriculum, and (c) a practical component of workshop plus supervised teaching practice. So far more than 10,000 teachers working in primary schools have received training through this course.

v. Arabic Teachers Orientation Course (ATOC)

This course carries full-credit at Intermediate level. Being launched by the AIOU in mutual collaboration with the Arab League and Ministry of Education, Government of Pakistan; the course comprises 12 weeks of correspondence and a six-week face to face workshop. The course contents include the following:

i. Acquisition of the knowledge of Arabic;

ii. Methods of teaching Arabic;

iii. Intensive training in language skills viz. listening, reading, speaking and writing.

Middle and secondary school teachers are admitted on nomination from their employing agencies. The course aims at orientating above 4000 working teachers in about five years time. A similar course is being planned for college teachers.

8. Basic Functional Education Programme (BFEP)

Sponsored by the ODA, FEPRA was started a research project of the University in 1982. The project

was initially meant to develop a workshop strategy for providing basic education to the rural masses in order to improve their daily life. From Ist July, 1985, it has been transformed into one of the regular programmes of AIOU and is now known as Basic Functional Education Programme (BFEP).

The BFEP is quite a novel experiment of the University. It by-passes literacy skills and is meant to reach rural masses in the shortest possible time. As for the methodology adopted in this programme, it is mainly based upon the use of audio cassettes, flip charts, group discussions, etc. The group leader operates the cassette which explains the flip chart and instructs him to shift to the next one. In this way, the cassette and the charts go together. There are also inbuilt discussion intervals provided to the learners. As guided by the cassette, the group leader conducts the discussions. The course include child care, poultry keeping at home, livestock management, electricity in the village, agricultural credits, etc. In this way, the programme aims at developing skills of daily use among the rural adults, both male and female, without dependency on literacy skills.

II. Projects of AIOU

1. The Integrated Functional Literacy (IFL) Project

The IFL Project is basically designed to provide literacy to the females. In the first phase, it envisages an 18-month pilot programme for covering five year primary education of the formal system. It also includes skill training in such handicarfts which are locally saleable. It also contains a provision of continuous followup and guidance so that the learners are able to continue study upto higher level through formal or non-formal system.

2. The Civic Education Project

The Civic Education Project at the AIOU is being sponsored by the Ministry of Local Government and Rural Development of the Government of Pakistan. Through a series of radio and television programmes and some

printed materials, the Project aims at providing orientation to the local councillors and adults in a variety of areas including the following: (i) rights and duties of local representatives, (ii) their role in democratic local institutions, (iii) rural development; (iv) community participation; (v) local resources; (vi) poultry keeping; and (vii) child and mother care. The course is supported by a multi-media package including television, radio programmes, charts, audio cassettes and booklets, etc.

3. Special Education Project

This project is being undertaken by the AIOU in collaboration with the Directorate of Special Education of the Ministry of Health. The major objective of the project is to produce 200 Master trainers and 5000 trained teachers through the distance education system of the AIOU for teaching the visually handicapped children by October, 1989. The target teachers will be provided orientation in latest techniques of teaching the handicapped children. They will also undergo practical workshops and intensive teaching practice during the training. Presently, five credit courses (four in theory and one in practical) are being developed and other allied activities are being accomplished by the AIOU staff under its distance education system.

4. RICE Project

The RICE (Regional Institute for Complimentary Education) Project is another recent addition to the AIOU projects. Its total cost is to be met through contribution by the Government of Pakistan and the member countries of the OIC (Organisation of Islamic Countries), the Islamic Solidarity Fund and the World Federation of Arabic Islamic International School.

The RICE, through the distance teaching system of the AIOU, plans to conceive, organise, extend and follow-up educational training and research programmes with a coverage of the entire Muslim population in the South Asian Region. This population is estimated to be around 500 million. The target clientele would consist of: (i) students of Islamic educational institutions; (ii)

out-of-school adult Muslim population; and (iii) teachers of the Islamic educational institutions.

The RICE is planning to start a number of courses for the target clientele. These courses include, inter alia, Geography of the Muslim World, Muslim Philosophy, General Science, Home Economics, Psychology, Women and National Development, Research Techniques, etc. The first courses under this project are scheduled to be launched by October, 1987.

5. Population Education Project

The Population Education Project is being implemented by the University under sponsorship from the Population Welfare Division of the Ministry of Planning and Development and the World Bank with the major objective of providing orientation to 20,000 teachers (12,000 middle and 8,000 secondary school teachers) in Population Education and other allied concepts. The project is based on the well founded assumption that the teachers, through their classroom teaching and general contact with the students and community can play a vital role in popularising the pupulation education concepts among the students and the community at large.

In addition to the printed text, the project courses are also being supplemented through radio/TV programmes and study centres. Students' performance is evaluated on the basis of their assignments and the final examination.

6. Women Education Project

The Allama Iqbal Open University has launched the Women Education Project (Matric level) under sponsorship from the Netherlands Government through a bilateral agreement with the Women's Division of the Government of Pakistan.

The project aims at providing education to females through distance teaching techniques without disturbing their routine life. The estimated cumulative enrolment of women during the three-year project period is estimated to be around 12,000.

The courses of studies leading to the aware of certificate of matriculation (10-year schooling) for females are being offered to 300 students in the pilot phase. These courses are skill oriented and respond to the needs, interests and problems of the female population. The project is being implemented in three phases and after the phase III is over, the project will be converted into a regular programme of AIOU.

Financing and Cost-effectiveness of AIOU Courses

The AIOU is at present offering nearly 90 different courses falling in broad categories as functional (non-credit as well as credit) courses, general education courses, teacher education and also courses under special projects which may fall in any of the above categories. As for the on-going courses falling under the regular programmes of the AIOU, they are obviously being run by the AIOU with its own funds received from the Government or the income from fees and other charges, etc. The AIOU programmes, being its own liability, are reflected in yearly budgets for each of the departments. As for the courses offered under special projects, they are supported from the funds received from outside agencies under special contracts for launching such courses with specific objectives in view. A brief account both under regular programmes as well as special projects, is given as below.

One of the first attempts to determine the cost-effectiveness of the AIOU programmes was made in January/February, 1979, when an Evaluation Mission from the UK Overseas Development Administration visited the AIOU in connection with the phasing of further assistance to the AIOU. The Mission's report, after discussing the potential effect of the AIOU in helping to solve some of Pakistan's problems of skilled manpower, identified the major contribution the University could make to the national economy by training technicians and discussed specific courses (e.g. Electrical Wiring and the Electricians' course). The Report further pointed out that several courses in the General Education Programme have a strong in-service or employment-related bias, citing the B.A. Business English, B.A. Accountancy, Intermediate Book-keeping and Accountancy, and the Arabic, Urdu and English courses. In this way, by launching such skill-oriented courses, the AIOU can help a lot in accelerating the pace of development in the country.

Whereas it would have been interesting to have a full comparison of the cost-effectiveness of the AIOU Intermediate and B.A. courses, with corresponding costs in the country's conventional system, but it was not possible at that time, nor was it feasible to carry out a cost-benefit analysis, e.g. by forecasting graduates' potential earnings. However, taking into account amortization of capital costs, salaries and other recurrent expenditure together with student numbers, the AIOU would progressively show considerable cost advantages over other conventional institutions. The Report stresses that, in conventional education, costs (e.g. classrooms, teachers) increase pro-rata to increase in student numbers. By contrast, AIOU per capita costs decrease as student numbers grow, in that capital and recurrent costs (e.g. salaries, broadcasts) remain virtually the same irrespective of student numbers.

The Report also makes two important additional points as under:

1. AIOU courses can result in more efficient and more intensive use of existing educational buildings and facilities in the country.

2. Foregone earnings, if possible to calculate, would be an important factor in any comparison. It was certainly the case that, in the Functional/Teacher Education and General Education Programmes, students were able to take courses directly relevant to their work performance and personal prospects while still continuing with their jobs, without loss of earnings and without their employers losing their services (especially in teaching).

Another analysis of the cost-effectiveness of AIOU programmes was undertaken by the joint GOP/ODA Review of the University in March, 1983. This concluded that the AIOU could provide graduate-level education more cheaply than "conventional universities in Pakistan provided that enrolments were sufficiently high". The basis of calculation was the same as the previous appraisal i.e. the fixed costs of establishing a media-based educational system like that provided by AIOU are high, but the variable costs are low, in contrast to conventional universities where relative costs are the other way round. Consequently, if enrolments remain low, the average cost per student at the AIOU will be higher than at conventional universities, but if enrolments are high, it will be considerably lower.

Both the above assessments have been proved to be correct by subsequent analysis which have indicated that with an enrolment of 50,000, the average student costs are approximately 30% of the cost of educating a graduate at a conventional university. With a higher enrolment, the costs obviously drop proportionately.

As a cost-conscious institution, the University has itself attempted to monitor both the overall and the component cost of each of its study programmes. This is indeed a difficult exercise to undertake and one on which few other institutions provide data. Using what information does exist, however, an interesting comparison emerges. Based on projected intakes for 1987-88 extrapolated from current enrolments, the costs for two levels of award are as follows:

	AIOU	Conventional Institutions*	Difference
Intermediate	Rs.3930/-	Rs.5688/-	44.72%
B.A.	Rs.5240/-	Rs.7250/-	38.35%

The AIOU figures assess an intake of 105,000 students and take into account the following amortized capital and recurring costs, from which student fee income has been deducted:

a.	Building	60-75 years
b.	Equipment	10-15 years
c.	Furniture/fittings	5-10 years
d.	Vehicles	5 years
e.	Media production	10 years
f.	Consultants/experts/staff training	15 years
g.	Library books	7-10 years
h.	Recurring capitalised (77-88) (after allowing for income)	20 years

Clearly, as with conventional institutions, costs will vary from course to course, but these figures underline the fact that, in financial terms, the University is a sound investment from a Government standpoint and that further investment is likely to provide similar, if not even greater, returns.

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*Based on estimated 1978 figures given in the 5th Five-year Plan: Table-2, Page 301, corrected for inflation by (a cautious) 25%.

No doubt that some courses could be more cheaply provided at other institutions, particularly those involving a substantial element of face to face instruction (e.g. technical courses). It may be stated here, however, that such courses are either not being provided (for some reason) or cannot be provided: alternatively, if they are available many people cannot enrol for them, because of long distance from their home towns. This may also be because of non-availability of transport facilities, time and cost. It may be for social reasons; for example, many women may not be able to leave their homes for tutorials because of domestic commitments or for cultural reasons.

Accessibility to educational facilities through non-conventional methods is another point that is relevant here. Even if some courses were more expensive, therefore, they could be justified on grounds of educational access, particularly for remoter areas, or on grounds of social benefit. In the event, most courses are in fact far less expensive, even where there is a significant face to face element, mainly because of the particular combinations of methodology adopted for different courses developed say, at the Basic Functional level, where very large number of learners can be served by a relatively small force of full and part-time field workers.

Much further analysis is obviously needed on the question of costs, difficult as it is to undertaken. From the studies already made, however, there is no doubt that the University's programmes can be, and largely are, viable financial additions to the country's educational provision and, in many cases, they are the only provision accessible to those whose needs are greatest.

Scope of Further Expansion of
Distance Education in Pakistan

This section discusses the scope of distance education in Pakistan under the following headings:

i. Formal Education and Staff Development

Though an institution of non-formal and distance education, the AIOU has tremendous potential to support the formal system of education as well. Through its

Primary Teachers' Orientation Course, it has so far trained more than 85,000 teachers working in primary schools. Work is also afoot for the in-service training of secondary school teachers already employed in the formal schools.

In addition to above, the AIOU materials are also now being extensively used by the teachers and students of the formal system for extra studies. Through its regular general education programmes (Intermediate, B.A., M.A., etc.) AIOU is providing facilities equivalent to more than 100 colleges of relevant level in the country.

ii. Non-formal Education

AIOU itself is a novel experiment of non-formal education in Pakistan which has turned out to be a great success from any standard of evaluation. As the continuously increasing enrolment of different categories of clientele indicates, the AIOU has really emerged as a viable answer to the educational problems of out-of-school population. As the population of Pakistn is increasing at an alarming rate of 3.1 per cent annually, there is a very vast scope of starting different types of non-formal education programmes by the AIOU to reach the maximum number of people in a variety of ways.

iii. Women Education

Though the AIOU is offering its courses to the male and female population without any discrimination, it has established a Department of Women Education which takes care of specialised courses for women exclusively. In addition to Home Economics, Food and Nutrition, etc., it has recently started a project for providing education at Matriculation-level for out-of-school women which would be extended to the whole of Pakistan in aphased manner, and then converted into a regular programme of the AIOU.

In addition to the above, the Department of Literacy, Adult and Continuing Education is also embarking upon the task of Integrated Functional Education Programme for the 10 + age-group of female. Since the participation rate of female at primary and subsequent stages is already very low, there is a bright scope of

launching courses designed for women education in the
near future. Since the AIOU system does not require the
personal attendance unlike the formal classroom situa-
tion, it provides a practicable answer to the restric-
tions imposed on female education by socio-cultural
traditions in a convention-ridden society like Pakistan.

iv. Technical and Vocational Education

The Departments of Industrial Education and Busi-
ness Management are offering a number of skill-oriented
courses like Electrical Wiring, Maintenance of House-
hold Appliances, Shorthand and Typing, etc. These func-
tional courses of AIOU have proved to be highly rele-
vant and useful as far as the market requirements are
concerned. In some cases, the students of these func-
tional courses of AIOU have been offered job even before
the actual completion of the courses. This clearly shows
that the AIOU is meeting the real needs of the society
which promises a very bright scope not only for these
courses but also for others of similar type likely to
be launched in the near future. Cost-effectiveness of
such courses of AIOU as compared to other technical and
vocational institutions of the country further ensures
a promising scope for it in the years to come.

v. Population Education

The AIOU is already offering a B.A. level course in
Population Education under sponsorship from the Popula-
tion Welfare Division of the Government of Pakistan.
Another course under the same Project is likely to be
offered in January, 1987. The AIOU has on its list the
names of a considerable number of teacher educator who
have already received necessary orientation in this field
and can serve as tutors of these courses. The middle
and secondary school teachers who would receive training
through the above two courses, has been estimated to be
around 20,000 which is hardly six per cent of the total
number of teachers at these stages. Since the public at
large has yet to be approached and convinced of the
hazardous population situation, there is still a lot of
room for further inputs in this important area. The AIOU
and its country-wide network of regional offices can
render a lot of useful services provided that sufficient
funds are made available to the programme.

vi. **Agricultural Education**

Pakistan is basically an agrarian country. Since there is a gradual shift over to mechanised means of farming the gap between the actual and the potential yield is still very great. Through the radio/TV programmes, AIOU has the potential to reach the millions of illiterate farmers in the shortest time. Alongwith developing some more courses of functional nature in agriculture, AIOU does need to further strengthen its Basic Functional Education Programme which provides an ultra literacy approach for reaching the masses. The scope of the Project needs to be gradually expanded to the whole of the country with a variety of new courses added in the learning package.

vii. **Health Education**

The health status of people in Pakistan is not generally enviable. The position is still more dismaying in the rural circles where about 70 per cent of the population lives. This state of affairs leaves a very wide scope for the AIOU to reach such under-privileged people through a variety of methods especially through the ultra-literacy approach and create in masses an awareness of the problem and help them improve their health conditions.

viii. **Rural and Under-privileged Population**

The under-privileged populations in Pakistan generally comprises the following categories of poeple:

a. Rural population in general, and those living in farflung areas in particular.

b. Females in general and those living in rural settings in particular.

c. Illiterate people.

d. Physically and mentally handicapped persons.

There is still a lot of room for AIOU to reach these categories of people in an effective manner. A lot of reasearch work needs to be undertaken about the needs,

interests and problems of these people for designing the teaching strategies best suited to them. Here AIOU cannot depend solely on its distance teaching technique which requires a minimum level of literacy. The Ultra literacy Approach (ULA) needs more serious conditions ,n this context.

PAKISTAN JOURNAL OF DISTANCE EDUCATION

DISTANCE EDUCATION IN PORTUGAL

by

Prof. Dr. M.E.R. Marques

Portuguese Institute of Distance Teaching

It was in England at the beginning of the sixties that the idea of a "University of the Air" was introduced for the first time. Correspondence teaching was already current practice in some countries. A complete innovation, though, was to teach by written texts, radio and television, also using as a complement all the media considered useful in a teaching/learning situation. However, the designation University of the Air was replaced by "Open University", since it strongly suggested the idea of transmission by radio and/or television whenever the model aimed at the production of integrated courses in the form of multi-media blocks in which the written text would have a considerable importance. "Open" appears here in two senses: on the one hand, the access would be open to an adult public, even without educational qualifications; on the other hand, the transmission would be broadcast and received by anyone who wanted to follow it, even without enrolment in the University.

Thus, the first distance teaching university in the world appeared in 1969, the Open University, that is, after the defeat of scepticism and hostility that the concept of distance teaching through mass media had immediately provoked and this not only in the most conservative minds.

Yet, in a very short time the Open University proved that type of teaching was the only possible way of offering all those who, for some reason, did not have access to a post-secondary teaching, the possibility of continuing an education without abandoning their professional and/or family responsibilities. From 1969 onwards, the number of candidates

to attend the OU courses and the number of courses themselves have increased at a tremendous rate.

In the last few years, distance teaching institutes have multiplied not only in Europe but also in the whole world reaching significant numbers of students, as example, we can mention the Fernuniversitat in Hagen and DIFF — Deutsches Institute fur Fernstudien in Tubingen in the Federal Republic of Germany: the "tele-enseignement networks and the audio-visual universities in France: UNED - Universidad Nacional de Educacion a Distancia, in Madrid: the Dutch TELEAC: the Norsk Fjernundervisnig, in Oslo: TELUQ - Television Universitaire du Quebec; the Universidad Estatal a Distancia in Costa Rica; the Correspondence and Open Studies Unit of the University of Lagos, Nigeria; the Allama Iqbal Open University, in Islamabad, Pakistan and, also, CRTVU — Central Radio and Television University in Peking — which is linked through television and radio with twenty-eight dependent universities in the provinces, municipalities and autonomous regions of the People's Republic of China.

At the beginning of the seventies even the idea of the creation of an European distance teaching university was considered by the Council of Europe, but it was abandoned and replaced by the creation of a "European institute for the promotion of distance teaching" which would function as a centre of documentation, exchange of experiences, technical support and a meeting point; however, this project has not been put into practice yet.

Great technological advance in the last two years has un-mistakably contributed to this "outbreak" of distance teaching institutes. Once applied to the educational area, technology has revealed not yet totally explored potentialities. In fact, television by cable and satellite, the new electronic processes of mail delivery, the computers (macro and micro), and so on, progressively offer their services to education, opening perspectives not even dreamed of a few years ago.

On the other hand, for an adult public, the recognition of the advantages of distance teaching, when compared to the traditional direct teaching, has not also been absent from the decision to promote and institutionalize such a form of learning. Thus, learning based on, firstly, a hypothesis of reception/assimilation of contents; secondly, on simulated dialogue in a direct situation in which the student must

necessarily submit to fixed rules and timetables; thirdly, on totally or parcially unfavourable school/social locations, correspondents to a distance teaching which aims predominantly at self-learning using mostly individual work, the study of didactic multi-media blocks [texts, audio-cassettes, images, and so on] completed within a timetable and in a place chosen by the student. At fixed times, compatible with professional activity, the student will have television or radio transmissions when the nature of the subject to be taught requires it or when it becomes necessary to pace the rhythm at which the student should learn. Apart from the use of different types of tutors with adequate training, the student may speak to the central services whenever he wants, he will be able to make frequent self-evaluation, which will show what has already been done and/or is to be done, enabling individual revision. In the majority of cases the adult student would not go back to school, either because it has left in him feelings of inadequacy or frustration, or because he would feel inferior by doing so. The traditional school is thus replaced by an open system comprising a population which is notable for its great mixture of ages, socio-professional and cultural levels with diverse motivations, from which the continuation of education stands out clearly.

Created in December, 1979, IPED appears as a result of the Propaedeutic Year, which, for three years, offered an enriching experience in the area of distance teaching, aimed at a vast and diversified public [30,000 students per year, levels achieved in the various subjects, profiles of regional distribution and so on], in spite of it all being integrated in the same level of teaching, that is to say the end of secondary school, the pre-university year. The teaching staff was made up of about one hundred tutors who taught eighteen subjects with the support of a collection of "Pre-university Texts" [sixty-five different titles, one and a half million copies]. The lessons were transmitted by television thirty hours a week and the students had a network of seventy-five study centres with a total two thousand television sets at their disposal. IPED has been able to profit greatly from this experience, since some of its staff already belonged to the teams of the Propaedeutic Year. However, the Institute is at the moment predominantly occupied with the theoretical training of tutors and technicians, offering them courses, seminars, congresses, visits to distance teaching institutes, and so on: all these to prepare them to be a part of the future Open University. Through the Departments of Pedagogical

and Technological Studies, IPED has been carrying out research projects in the generic area of distance teaching.

The Department of Pedagogical Studies has been working on, among others, the specific pedagogy of each subject, the psychopedagogy of adult teaching in permanent education, the student's autonomy, that is to say, self-learning, control and evaluation. While, the Department of Technological Studies, whose objectives involve a theory of didactic information and communication, as well as a methodology based on the use of mass-media, has been dealing with taxonomies of multi-media messages, selection and adequacy of channels and supports through the messages to be conveyed and the profiles of the target population, coordination of the various means of communication among themselves, preparation of multi-media blocks, and so on.

IPED, established only since June 1983 in its own building, the Ceia Palace, which was built after the earthquake in 1755 and now undergoing restoration, has already temporary radio and television studios, set up, equipped and organized by the Operational Services department which has also been training its own staff. All the programmes, all the audio and video material for the Open University will be produced in those studios.

Once past this initial stage of staff training of theoretical, practical and field research of experimenting, IPED, created only as the percussor, will give place to the Open University.

The specific qualities and scope of the two institutes were partially defined in the legal document which formalized them [1]. A priority stands out, namely the finishing or reconversion of the teacher's qualifications, who, in the majority of cases, teach in secondary schools far from University Centres and do not have any other way of completing their courses. Post-secondary courses will also be intended for the training or as a complement to the training of Local Administration staff. Updating, recycling and specialization of knowledge will also be the aim of courses for graduates

[1] Statute Law No. 519-VI/79 (29th December):
    Statute Law No. 375/80 (12th September): official document No. 469/83 (20th April).

from traditional universities. Besides these courses at a university level, courses at terminal secondary level will also be offered to adult students who intend to enter a university. As far as permanent education for adult is concerned, courses for familiarization and dissimination of knowledge will be given, with special emphasis on Portuguese language and culture. Also within the scope of IPED and the Open University lies support to Portuguese Communities and Centres of Culture spread throughout the world.

The introduction of a distance teaching university in our country responds, on the one hand, to the needs of a whole adult population to whom, for various reasons, such as professional, personal and even geographical, the continuation of university studies has been denied until now; on the other hand, it responds to the wish for updating that many feel as pressing in a world dominated by innovation and renewal, in whcih the rhythm of acquisition of knowledge will have to be faster and faster and more frequent.

In fact, apart from being the most convenient and efficient alternative for carrying out training, extension and updating, either formal or informal, for adults who are actually working, distance teaching shows itself, from the economic point of view, the most advantageous course since it allows a greater return from educational resources, requiring only adequate technical equipment and a relatively low number of qualified teachers, whatever University they belong to.

The distance teaching University will contribute in a decisive way to the democratization of teaching and, as a consequence, of Portuguese society, extending learning to everyone without interrupting professional activities and attempting to provide equal opportunities to all.

PAKISTAN JOURNAL OF DISTANCE EDUCATION

Volume III 1986 Issue No. II

USE OF EDUCATIONAL TECHNOLOGIES IN DISTANCE LEARNING SYSTEM

Perspectives of Financial Allocations

by

M M Ansari[*]

Introduction

Educational systems everywhere are under great stress; in part because of the lack of adequate resources and in part because of the lack of relevance, a failure to change and adapt. In India, a considerable amount of time and efforts have been devoted to increase the responsiveness of education system to the socio-economic needs of the country. In this respect, the role of the Five Year Plans has been particularly noteworthy. For speedy development of education the approach in the plans has been two-fold. One is to create additional facilities at every level of education, and other is to correct the deficiencies in respects of teaching methods and facilities like buildings and equipment required by educational institutions. The successful implementation of this approach has, however, been fraught with several difficulties; the resources constraints being the major one. As a result, the development of education has suffered a setback, as it reflected from increasing number of illiterates, deteriorating quality of education and growing number of educated unemployed persons. These, in turn, have adversely affected the national development which is contingent upon the quality of human efforts in accelerating the pace of economic and social progress.

In order to increase the effectiveness of educational system and to widen the network of educational programmes, the Sixth Five Year Plan (1980-85), for the first time, spelt out the need for modifying the prevailing approach and laid emphasis on the utilisation o` recent advances in educational

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Project Director, Research Cell, Economics of Education, Association of Indian Universities, AIU House, 16 Kotla Marg, New De i 110 002.

technologies such as radio, television, video and computer. To quote; "the importance of educational technology has to be adequately provided for greater efficiency and effectiveness and wider reach of educational programmes. The possibility of using modern technology to take education, especially at the elementary stage, to all sections of population in a shorter frame of time has to be capitalized for achieving minimum basic education of all people within a decade." Likewise, the approach to Seventh Five Year Plan (1985-90) has also recognised that "mere expansion of existing structures, models, methodologies and institutions will not best serve the country's needs" and has, therefore, stressed on the need for applying latest teaching methods. It says, the "recent advances in information and communication technology will need to be used to reach out to cover large numbers at minimum costs. These capabilities can be used fully for upgrading the quality of education and for giving it a much wider reach". The realisation of these objectives in the foreseeable future is desirable indeed and the approach of employing educational technologies in laudable as well. However, the execution of this policy approach is fraught with many socio-economic difficulties which we shall discuss in the present paper.

This paper is divided into two parts. Part-I discusses the treatment given to the education sector under the Five Year Plans and also examines whether the additional finances required for utilizing the advances in communication technology is in the offing. The limitations *vis-a-vis* the prospects for the application of educational technologies in the country are examined in Part-II, with a view to gaining an idea of the extent to which such technologies can contribute to educational development especially in the context of distance-learning system.

PART-I

In the thesis that the application of educational technologies would minimise the cost of education at every level, it is asserted in certain quarters that introduction of educational programmes on TV on a larger scale would minimise the requirements of teacher which would consequently reduce the expenditure on salaries since it constitutes major component of the total expenditure on education. But, this argument needs close scrutiny. Though the coverage as well as effectiveness of educational programmes on TV could be

increased, then potentials have to be examined against the backdrop of the plan treatment given to the education sector by way of earmarking financial resources for its development. This is imperative in view of the fact that the cost aspects of relevant technologies, including the cost of supporting organisational set up, would determine the extent of their utilization in the socio-cultural and economic conditions prevailing in the country.

The specific aim of human resource development through literacy and training programmes has been duly emphasised by all the Five Year Plans. However, to fulfil this objective, the developmental outlays on education sector under the plans has not been stepped up to the desirable extent. The Education Commission (1966) suggested that the proportion of educational expenditure to national income should be raised at least to 6 per cent by the year 1985. As against this, the proportion has not exceeded even 4 per cent till date. The pattern of plan allocation, moreover, indicates that the share of education sector in the total plan outlays has gradually declined to 2.6 per cent in the Sixth Plan as against 7.2 per cent in the First Plan. The sectoral distri- butions *inter-se* show a declining trend in allocation of resources for higher education which plays a crucial role in producing teaching and learning materials. While the share of university sector increased from 9 per cent in the Forth Plan, the proportion has come down to 18 per cent in the Sixth Plan. The allocation for technical education has simi- larly declined during the period under study. (See Table-1).

The University Grants Commission has already made a beginning in the recent times to utilize INSAT-IB and TV facilities for promoting as well as widening the reach of higher education, the above evidences show that the additional funds for adequately financing the requirements of the new programmes would be difficult. This is more so because the evidences presented elsewhere(1) revealed that the propor- tionate increase in educational expenditure due to corres- ponding rise in income has come down indicating thereby, a declining educational efforts. For instance, during the period

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(1) See author's "Educational Expenditure, Inflation and Economic Growth: An Empirical Analysis" *Perspectives in Education*, Vol. 1, No. 2, 1985.
   In the current Seventh Five Year Plan, this proportion has come down to 1.6 per cent.

TABLE-1

Sector Outlay/Expenditure in the Five Year Plans — Education & Total Plan

Rs. in crores

S. No.	Sector	First Plan 1951-56	Second Plan 1956-61	Third Plan 1961-66	Plan Inter-regnum	Fourth Plan 1969-74	Fifth Plan 1974-79	Sixth Plan 1980-85
					EXPENDITURE			
1.	Elementary Edn.	85 (56)	95 (35)	201 (34)	75 (23)	239 (30)	410 (32)	905 (36)
2.	Secondary Edn.	20 (13)	51 (19)	103 (18)	52 (16)	140 (18)	250 (19)	420 (17)
3.	University Edn.	14 (9)	48 (18)	87 (15)	77 (24)	195 (25)	292 (23)	486 (19)
4.	Adult Edn.	5 (3)	4 (1)	2 (Neg)	3 (1)	4.5 (1)	18 (1.4)	128 (5)
5.	Other Programmes	9 (6)	23 (8)	64 (11)	30 (10)	89.5 (11)	122 (9.5)	223 (9)
6.	Total General Edn.	133 (87)	221 (81)	457 (78)	237 (74)	686 (85)	1092 (85)	2162 (86)
7.	Art & Culture	-	3 (1)	7 (1)	4 (1)	12 (2)	37 (2.9)	84 (3)
8.	Technical Edn.	20 (13)	49 (18)	125 (21)	81 (25)	106 (13)	156 (12.1)	278 (11)
9.	Total Edn.	153 (100)	273 (100)	589 (100)	322 (100)	786 (100)	1285 (100)	2524 (100)
10.	Total Plan	1946	4680	8572	-	15724	39322	97500
11.	Edn. as % of Total Plan	7.6	5.8	6.8	-	5.0	3.2	2.6

(Figures within parentheses indicate percentages) Source: Adopted from 'Financial Resources: Dimensions and Dilemmas' by S.N. Saraf, University News, May 16, 1985.

1951-60, the income elasticity of educational expenditure is estimated to be as high as 2.28 whereas for the subsequent periods, i.e. 1961-70 and 1971-82, the elasticity co-efficients emerged out to be 1.14 and 1.07 respectively, which indicate declining trend in allocation of funds for educational development. The additional resources for developmental outlays are, thus, found invariably inadequate to provide for essential infrastructural facilities for the development of education. The maintenance of existing facilities is similarly affected, as we shall discuss below.

As a major proportion (87 per cent as per the year (1984-85) of the total educational finance is devoted to meet the increased liability of non-plan expenditure, the problem of financing education in general and the infrastructure for utilizing educational technologies in perticular has to be viewd against the background of the overall resources management in the country especially within the frame of the Centre-state financial relations. Under the existing federal arrangement, the major responsibility for the development and maintenance of education falls under the purview of the states. The utilization of the capabilities of new technologies would, therefore, obviously depend upon the capacity of the states of mobilise additional resources for the purpose, because the revenue mobilization efforts of the states are limited as compared to the centre which has access to wide internal and external revenue bases owing to more statutory powers.(2) Moreover, whereas the financial requirements of the states on account of increasing non-plan expenditure liability has grown considerably, the share of the states in the central pool of resources has declined. As a result, the facilities that have already been created are gradually deteriorating. The surplus on revenue account, furthermore, are not adequate enough that can permit to undertake the new schemes like the development of infrastructural facilities for information and communication technologies.

Needless to say, in a resources dificient economy where the competing claims of various sectors of development are duly high, the schemes which have long gestation period and comparatively low rate of returns in the short run, get naturally low priority in financial allocation. It is precisely for this reason that a high magnitude of investment on education has

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(2) See author's "A Critique of the Developments in Indian Fiscal Federalism", *Margin*, October, 1984.

not been made during the plan periods. As there has been no significant improvement in the quality of life of people over the last three decades,(3) it is likely that the magnitude of investment on education cannot be stepped up to a reasonably high level. This is ascertained from the trend in financial allocations as discussed above.

Another impedement which has been adversely affecting the development of education may be described as under: The states' plans are financed in part by the states' own resources and in part by the central assistance. The proportion of central assistance to the total plan expenditure has declined from 61 per cent in the First Plan to 25 per cent in the Sixth Plan.(4) Inter-state variations in the extent of financial support provided by the centre are found to be considerable and indicate high dependence ratio for the backward states. Moreover, since a major proportion of central assistance is generally linked with the development of certain programmes, it cannot be expected that a substantial amount would be earmarked or diverted from other programmes by the centre for extending the educational infrastructure which may be necessary for making the educational schemes, based on new technologies, a success. This is more so because the pressing needs of various programmes aimed at amelioration of poverty are already high.

At the states' level, the relative efforts for the development of education sector, as compared to other socio-economic sectors, have been unduly inadequate which is reflected from the declining proportion of educational expenditure to the total states' plan expenditure. As most of the ongoing schemes are not receiving adequate maintenance grants, it is difficult to visualise as to how the new teaching methods which have considerable economic costs due to high capital inputs (including the cost of organisational set up) could be successfully launched and implemented. For the reason of inadequacy of resources, it has not been possible to maintain the per student expenditure to the level attained in the past. As a consequence, the tide of numbers (enrolments) has impoverished the quality of education. Student-teacher ratios

(3) This is reflected from the growth of consumption expenditure which has recorded an increase of only 1.1. per cent per annum over the last three decades i.e. 1950-51 to 1980-81.

(4) See author's "Financing of the States Plans", *Economic and Political Weekly*, December 3, 1983.

have suffered, the expenditure per student in real monetary terms has declined".(5) An AIU study, in progress has clearly brought out that per pupil real expenditure on each type of educational facilities like institutional buildings, teaching aids and equipment and libraries, etc. has been declining over time, which is a pointer to the fact that the necessary funds for financing capital intensive programmes based on educational technologies would be a difficult task in the foreseeable future.(6) The implication of these trends would be considerable on the development of course materials because "the present position is that our college and university-teachers who are to play a crucial role in producing suitable programmes have no acquintance with the new TV or radio medium, and in the university system there are very limited facilities available for doing so."(7) On the other side, the extent of coverage by the communication media is presently so low that the pattern of financing education as discussed above, gives no indication to the effect that a reasonable amount of money could be earmarked for utilising the new teaching capabilities. In the following section we shall indicate the broad dimensions of resource requirements.

PART-II

As we know, the basic approach to development of information and communication facilities has largely been guided by commercial viability of the relevant projects. The utilization of the advancement in information technology is, therefore, dependent on the capacity of the nation to finance the cost of the necessary infrastructure including organisational set up as well as to sell the services profitably in the internal market so as to generate additional revenues that can be ploughed back for reinvestment. In the Indian conditions, the prospects for the above seems limited owing to the pressing needs for the development of certain other activities which, in the short run, make a direct assault on the deep rooted poverty. More importantly, the low paying capacity

(5) See Rais Ahmed, "INSAT-IB and Higher Education" in *New Frontiers in Education*, 1984.

(6) See 'Financing of non-plan expenditure on university sector' (Forthcoming) AIU, New Delhi.

(7) Same as in footnote 5.

of people hamper the initiation of such activities at a massive scale since the response from the community may not be desirably high due to income constraints.

The promotion of electronic industry in India by both the public and private sectors has substantially stepped up the production of radios, televisions, computers and other equipment which are used for educational purposes especially under the distance learning system. However, despite the fact that these items are easily accessible to all, a very small proportion of people have been able to take advantage of the services extended through radio and TV because of income constraints or because of less than desired level of such.

As on 1st April, 1984, Doordarshan programmes covered only 16.8 per cent of the total area of the country encompassing 29.0 per cent of the total population (Table-2). The breakups for the urban and rural population indicate that Doordarshan facilities were availed of by 47.09 per cent and 23.49 per cent of the respective urban and rural population. The centre-wise breakup of coverage however indicate wide variations. These facts clearly demonstrate that a wide gap in coverage still persists.

Another dimension of the problem may also be borne in mind. Inter-state variations in the availability of radio and TV sets are considerably large (Table-3). While in 1982-83, the average number of persons per radio was 56 for all India, the region-wise comparisons indicate that the lowest average was for Delhi (i.e. persons per radio) and the highest the North-east Region (i.e. 645 persons per radio). The states/ regions which have high population/radio ratio as compared to the average for all India are those which have also been categorised by the Planning Commission as backward states/ regions. While the States in this category are Bihar, Andhra Pradesh, Jammu & Kashmir, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh, the North-eastern region as a whole appears to have been at the bottom of this category.

The disparity in population/TV is even more glaring across the states/regions, as may be seen in Table-3. As may be expected, the ratio for the economically advanced states/ regions is very low whereas the same is high for the backward states/regions. The average for the country is 215 persons per TV set. While the ratio for Delhi is 20, the same for a backward region like the North-east and a backward state like

Bihar turn out to be 20269 and 19368 respectively, which clearly indicate glaring disparities that are prevailing the state/region in respect of population TV ratio. Table-3 also indicates that a very small number of people, especially from relatively more developed states/regions, have generally benefited more from information technology than the rest. It follows that the degree of availability and utilisation of services provided by the information media is by and large positively related to the stage of economic development of the individual states/regions.

TABLE-2

TV Coverage of Doordarshan as on 1 April, 1984

Name of the Centre	Area covered in thousand Sq. Kms	Population covered in Lakhs		
		Urban	Rural	Total
1	2	3	4	5

High Power Transmitter

1. Delhi	32.80	88.52	108.82	197.34
2. Bombay	18.90	99.37	33.63	133.00
3. Srinagar	15.70	8.27	23.06	31.33
4. Amritsar	12.60	13.10	32.62	45.72
5. Pune	21.94	21.09	23.04	53.13
6. Calcutta	36.50	108.49	187.91	296.40
7. Madras	21.60	56.66	49.16	105.82
8. Lucknow	24.90	18.50	91.02	109.52
9. Mussoorie	35.10	36.46	104.42	140.88
10. Kanpur	32.20	27.32	95.61	122.93
11. Jalandhar	23.10	21.57	57.53	79.10
12. Pij	9.75	4.23	22.77	27.00
13. Jaipur	50.30	24.71	65.94	90.65
14. Raipur	11.30	9.01	14.82	23.83
15. Gulbarga	11.30	4.29	12.27	16.56
16. Hyderabad	45.20	45.87	64.23	110.10
17. Sambalpur	11.30	3.08	13.48	16.56
18. Muzzaffarpur	11.30	5.12	77.28	82.40
19. Bangalore	6.30	30.65	13.82	44.47
20. Nagpur	6.30	13.86	7.14	21.00
21. Panaji	2.60	2.60	4.66	7.26
22. Allahabad	3.10	6.56	12.85	19.41
23. Ahmedabad	1.20	26.95	3.00	29.95
24. Asansol	2.80	7.31	10.46	17.77

Name of the Centre	Area covered in thousand Sq. Kms	Population covered in Lakhs		
		Urban	Rural	Total
1	2	3	4	5

Low Power Transmitter

25. Vijaywada	6.40	12.38	14.40	26.78
26. Jammu	1.80	2.32	3.78	6.10
27. Shimla	2.00	0.70	1.65	2.35
28. Deoria	2.00	0.55	11.42	11.97
29. Suratgarh	2.00	0.29	1.60	1.89
30. Gauhati	2.00	2.00	5.10	7.10
31. Itanagar	2.00	0.24	0.84	1.08
32. Gangtok	1.80	0.37	0.66	1.03
33. Shillong	2.00	1.73	1.09	2.82
34. Kohima	2.00	0.36	0.80	1.16
35. Imbal	2.00	1.55	1.03	2.58
36. Aizwal	2.00	0.76	0.36	1.12
37. Agartala	1.15	1.31	2.00	3.31
38. Malda	1.80	0.94	9.49	10.43
39. Patna	2.00	10.34	13.61	23.95
40. Bhubaneswar	2.00	2.19	4.95	7.14
41. Port-Blair	0.90	0.50	0.03	0.53
42. Kakinada	1.40	3.40	3.74	7.14
43. Trivandrum	1.30	5.91	11.61	17.52
44. Indore	2.00	8.27	4.24	12.51
45. Bhopal	2.00	6.72	1.56	8.28
46. Gwalior	2.00	5.73	2.00	7.73
Total:	492.64	796.70	1234.44	2031.14

Some vital statistics

1. Percentage of area covered by Doordarshan centres to the total area of the country: 16.8%

2. Percentage of population covered by Doordarshan centres to total population of the country: 29.0%

3. Percentage of urban population covered by Doordarshan centres to total urban population of the country: 47.1%

4. Percentage of rural population covered by Doordarshan centres to total rural population of the country: 23.5%

Source: Calculated on the basis of data available in:

    a. Mass Media in India 1984, Ministry of Informa-
       tion & Broadcasting, Government of India, New
       Delhi, June 1985; and

    b. Census of India 1981, Series-I, Part-II-A (i)
       (General Population Tables).

TABLE-3

Mass Media Facilities in India — 1982-83

Name of circle	Radio sets	Population per radio	Television sets	Population per TV
Andhra Pradesh	4,52,922	188	45,973	1,162
Bihar	3,37,698	207	3,605	19,368
Delhi	4,58,653	14	3,07,303	20
Gujrat	9,67,108	35	24,447	1,389
Jammu & Kashmir	43,406	138	20,896	286
Kerala	7,42,511	34	4,505	5,639
Karnataka	8,43,878	44	1,30,813	283
Maharashtra	13,91,840	47	5,55,441	113
Madhya Pradesh	2,38,085	219	8,885	5,867
North-East+	41,231	645	1,313	20,269
North-West++	6,84,000	50	3,36,065	102
Orissa	1,67,945	156	4,873	5,391
Rajasthan	2,67,800	127	1,18,374	288
Tamilnadu	12,43,684	39	2,09,429	231
Uttar Pradesh	16,21,562	68	5,15,570	180
West Bengal	26,48,740	21	7,91,049	69
Army Postal Service	49,662	–	6,441	–
Total	1,22,00,725	56	31,84,982	217

+   North-East includes Assam, Meghalaya, Nagaland, Tripura, Arunachal Pradesh and Mizoram.

++   North-West includes Haryana, Punjab, Himachal Pradesh and Chandigarh.

Source: Calculated on the basis of data provided in:

a. Mass Media in India 1984, Ministry of Information & Broadcasting, Government of India, New Delhi, June 1985; and

b. Census of India 1981 Series-I (Provisional Population Tables).

While exploring the possibilities of using modern technology to take education, especially at elementary stage to all sections of population in a shorter timeframe as the Sixth Plan has stressed, the influence of several factors ought to be reckoned in proper perspective the Forth Educational Survey, conducted in 1982, discovered that of our total primary schools, 53 per cent lacked 'pucca' buildings, about a third had no mats, benches or chairs for children, 40 per cent no blackboards, 53 per cent no play grounds and games equipment, 71 per cent no children's books and 85 per cent no lavatories. The position of secondary schools was not much better. In such situations where the basic facilities are lacking, it is inconceivable as to how the primary and the secondary schools system can afford to have radio and TV facilities, the maintenance of which is infalliably costlier than the traditional teaching methods.

As the university system is somewhat better equipped in physical resources like buildings and trained personnel, the utilization and management of the educational technologies would accordingly be high; provided, of course, necessary organisational set up is suitably build up. The number of beneficiaries would, however, remain low for the following reasons. In 1980-81, for instance the gross enrolment ratio for the university level students in the age-group of 17 to 23 years, was only 6.81 per cent(8), which was much less than in most of the less developed countries of the world. Of the total population of the country, only less than one per cent has been able to take advantage of higher education. While in such situations it is justifiable to make use of information technologies for spreading education and diffusing knowledge, the meagre resources available at the disposal of colleges and universities(9) would hardly allow them to undertake the

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(8) See author's "Education and Economic Development". Perspectives for Policy Planning (mimeo) AIU, 1986.

(9) This is reflecting from declining per pupil expenditure on higher education.

programmes based on modern technologies to a desirable extent. A reasonably higher magnitude of resources for this purpose is obviously not in the offing, as can be understood from both the declining trend in the allocation of funds to university sector as well as the cost implications of the relevant technologies. Moreover, as mentioned above, our college and university-teachers do not have adequate acquaintance with TV and radio medium of teaching. The training and development of course materials would obviously multiply the resource requirements.

The cause of adult education might suffer the same way because the communication media is yet to cover a large proportion of the total population in urban as well as rural areas. The problems of rural areas, where a majority of country's illiterate population is concentrated, are incredibly beyond control. Not more than a quarter of Indian villages have 'pucca' houses, the implication of which is that electric wiring of 'jhuggis' and 'kachha' house is not only a stupendous task but also fraught with serious difficulties. Moreover, less than two-thirds of Indian villages are electrified and only a small proportion of the households is presently availing of the power facility. The supply of electricity in most of the states especially in rural areas, is awfully inadequate which is a known fact. The purpose of the foregoing discussion is to demonstrate that the launching of programmes based on new educational technologies involved insurmountable difficulties in the prevailing socio-economic conditions of the country.

Indian society is characterised by multi-racial and multi-lingual population. While making provisions for their education, utmost care has to be exercised for encompassing all the sections of the society under the educational programmes so as to ensure social justice to each group of people in order to promote national integration. Needless to say, the multi-linguistic character of our society would entail preparation of educational materials in all the major Indian languages and that in respect of various courses of study. The financial requirements would, therefore, be manifold. In the context of language, it may be pointed out that the educational programmes launched through the help of INSAT-IB by the UGC are largely in English and Hindi languages, while the programmes in other regional languages are yet to be developed satisfactorily. Obviously, only a small proportion of Indian population is benefited from such programmes. What emerges from the foregoing discussion is the fact that while

the emphasis on improvement of quality of higher education through educational TV should not be unduly underated, the question of quantity as well as equity in providing education across various socio-economic groups should not be ignored, lest the existing social and economic inequalities should get aggravated. This is a major challenge which ought to be tackled effectively through the use of educational technologies and well conceived plans for promoting distance-learning system.

PAKISTAN JOURNAL OF DISTANCE EDUCATION

REFORM AND INNOVATION IN HIGHER EDUCATION[*]

by

Philip G. Altabach

University reform and innovation are processes related to planned change in higher education. The term *reform* usually applies to change of a basic structural nature; smaller alterations in the curriculum or in the means of instruction are more properly called *innovations*. In order to discuss the massive changes that higher education has undergone since the early 1960s and since the end of the Second World War, the notion of reform and innovation is limiting. Many post-war developments in higher education did not arise from purposeful reform or planned change but from accretion — the addition of functions, institutes or curricula without any previously articulated plan — or simply from expansion.

Reform and innovation will be considered in their broadest aspects. A number of the more important innovations of the past several decades will be indicated in this essay. Examples of massive institutional or even national change are included, as are innovations in teaching processes at single institutions.

Reforms and innovation is a double-edged concept. What is reform to an educational planner may be a regressive step to a student or professor; what is a dramatic innovation in one country may be established practice in another.

The concern here, however, is not with evaluating the merits of specific reforms but with examining the process of planned change, regardless of the sentiments of various segments of the university community.

Universities are notably conservative institutions and have a long historical tradition — a tradition which is respected by members of the academic communicy. As a result, academic institutions have resisted change and the process of reform and innovation is inevitably a complicated one. Yet, the period since the Second World War has been marked by dramatic alterations in higher education in most countries. Historically, virtually all the world's universities stem from the European model, and can be traced to the universities of Paris (organized by the faculty) or Bologno (developed by the students). Oxford and Cambridge, later developments of the mediaeval models, were the prototypes for North American institutions, while the nineteenth century German university served as a model for graduate education in the United States, Japan and the rest of Europe. The modern American university, as well as the institutions of the colonizing powers of Europe, have been models for the universities of the Third World.

The original definition of the university did not include research, graduate training or the myriad functions now accepted as integral to an academic institution. The early university was largely a professional school for law, religion and medicine, with an overlay of what has come to be known as the liberal arts. Early universities reflected the feudal cultures of which they were a part and were seen as transmitters of an existing culture rather than as creators of new knowledge. But as societies changed, so did the universities. The addition of the research function, the participation of universities in advanced training for a range of specialities and the gradual expansion of higher education to serve larger segments of the population were all part of this historical evolution.

As social needs for new technologies increased, the role of the university became more central to industrializing nations. The university became a place for training in many professional and scientific careers rather than an enclave for the humanities. Universities also became screening institutions for those who were judged to be "able", those who would, by training, attain key positions in society. These changes were not planned, but, by altering the role of the

university in society, they made the modern university a central social institution. Because of this change, many groups were then eager to exert pressure for reform to achieve their own ends and goals.

As universities moved more to the centre of their societies, government authorities have taken a greater interest in them, demanding accountability as well as pressing them to accept new programmes. University budgets have multiplied, while along with added resources have come added responsibilities. Governments and other public authorities — the agencies funding higher education in most countries — have naturally demanded more accountability as universities have become more crucial to national life and as they have required larger amounts of money. Public authorities have increasingly taken a greater role in setting institutional goals and policies, and have often requested reforms which they feel appropriate.

Students have been a key pressure group for reform and change in higher education; although in many cases their role is difficult to evaluate fully. In Latin America, where since 1918 students have had considerable institutional power, their role is clear. The role of students in changing the nature of universities is more vague and less direct in most other areas. The student activism of the 1960s was a stimulus for some reforms, and in nations like France, the Federal Republic of Germany, Japan and to a lesser extent the United States, students initiated broad discussions of university reform. In the Federal Republic of Germany, the power of the senior faculty was reduced and students gained a share of governance. In few other countries, however, did students articulate clear reform programmes which were even partially adopted. Nevertheless, students initiated criticism and the general unease of the 1960s did stimulate discussion of reform in many nations.

The demands for new technologies and for an increase in the numbers of highly skilled individuals, and similar pressures, have placed strains on the traditional curriculum. Students and others have demanded that the curriculum be changed to include more vocational and scientific subjects. Universities have responded by adding to the curriculum, by cutting obligatory courses and subjects, by upgrading technological institutions to university status and by other means.

The most critical contemporary force pressing on universities is what Martin Trow has called the shift from elite to mass and, finally, to universal higher education. The United States, and to some extent Japan, are more dramatically at the stage of "universal" higher education, with about half of the relevant age group attending post-secondary educational institutions. A number of European countries are approaching the "mass" stage of higher education, with large numbers attending universities and with post-secondary institutions also expanding rapidly. India and the Philippines are the best examples of Third World nations which have seen rapid expansion of university systems, and which have subsequently been faced with special problems of the widespread unemployment of graduates and the misallocation of resources. The phenomenon of rapid growth is world-wide, and few countries have escaped its effects.

The implications of rapid expansion on institutions of higher education are dramatic. Not only do student numbers increase, but the social class base from which university students are traditionally drawn also expands, and the consensus which existed concerning the nature and purpose of higher education for a small elite disappears. The academic profession grows rapidly, and many faculty members, particularly the younger ones, no longer share a common view of higher education. Institutional governance becomes more difficult as institutions grow to 30,000 and even 50,000 students. Facilities, such as libraries, laboratories and dormitories are taxed beyond capacity. In sum, the traditional concept of the nature of the university has been challenged by expansion.

While the impetus for reform comes largely from external sources, the process of reform itself must necessarily be handled for the most part by the universities. Only those directly involved in the academic enterprise can translate social demands into educational programmes and administrative forms. Even the various government-appointed commissions which have examined higher education and outlined broad programmes for reform have included a significant number of academics of their ranks. Indeed, it is often the process of implementation that causes the greatest problems. It is also true that the academic community generally seeks to keep change within the parameters of the traditional roles of universities, perhaps tempering the zeal of public authorities to solve social problems quickly without regard to the broader functions and traditions of higher education.

Obstacles to reform and innovation

With all of the powerful forces outlined above pressing for reform and change in higher education, one might ask why universities have changed so little! The answer may lie in the very organization and tradition of the university. Both the traditional function of the university as custodian of culture and the jealously guarded autonomy of the faculty make change difficult. Reform may also be hindered if there is no continuity in pressure from outside forces. There are, then, a number of reasons why reform in higher education is such a difficult and time-consuming process.

As noted earlier, universities are often old and inherently conservative institutions. A key element of their traditional role has been to conserve the "high culture" and transmit this culture to small groups of individuals. It is only in very recent years that universities have come to be seen as significant stimulators of technological development. The faculty are key defenders of the traditions of the university and, as a result, are often an important conservative element. As a result of their particular academic roles which (at least at the senior levels) accord them considerable power and prestige, the faculty has not been anxious to innovate. Professors often see reforms as a threat to their own power — and they are often correct in this assumption. Their traditional image of the university as a place for scholarly inquiry and reflection differs from more recent concepts of the role of higher education. The faculty feels most strongly about university autonomy or the ability of the university to function, to set its own policy without outside interference, and reform proposals are often seen as a threat to this autonomy. Autonomy is also seen to be related to prestige and professionalism. As autonomy is "threatened", many of the academic community feel that one of the first casualties will be their self-image of professionalism. Thus, for a combination of reasons — academic, professional and status — the professoriate is seldom enthusiastic about major changes in higher education.

Reform is often costly. Innovative programmes tend to require not only alternations in the curriculum but also additional staff, better laboratory equipment, new books and the like. Major reforms, such as the establishment of new universities, require the expenditure of very large sums of money. As a result of financial problems, well-developed

reform programmes are often curtailed or limited. Clearly, funding is a key variable in the reform equation.

Subsequential change is almost inevitably controversial. And controversy breeds resistance, debate and, in many cases, eventual compromise. Not only may the faculty oppose elements of the proposals and government officials find them to be too costly, but the reforms may be politically inexpendient. Ministries of Education, for example, may feel that their power would be eroded by reforms which permitted increased local control. Government officials may be reluctant to all substantial student participation in governance because of possible "radicalism" among student representatives. Administrators within universities may not wish to lose their own power or prerogatives in a reform programme. Governments may feel that reforms do not allow sufficient accountability from the universities, while faculty members may feel that the same reforms erode traditional concepts of university autonomy and perhaps even academic freedom.

Goals and reform of innovation

There are many goals which have been sought by reformers and innovators in various countries. They range from massive transformations of the academic system, as occurred in Sweden during the 1968 reforms, to modest innovations in curricula in particular fields of study. The following listing is by no means complete, but it will provide an indication of the scope of reforms and innovations.

Comprehensive universities

A number of European countries, most notably the Federal Republic of Germany, have begun to restructure their post-secondary education system in order to give technological institutions, teacher training colleges and other institutions university status, and to provide a range of different kinds of programmes in university-level institutions. The United Kingdom has also moved in this direction not only by "upgrading" technical institutes but by setting up the Council for National Academic Awards, which has power to grant degrees.

Open universities

Led by the United Kingdom's Open University, a number of nations, including India, Japan and the United States,

have attempted to establish new institutions which provide higher training and degrees in established universities. Open University structures are meant to provide increased access to higher education, as well as new academic structures which can provide higher education at lower cost to a wider cross-section of the population. The British Open University uses television and radio, films and traditional teaching methods to dispense higher education. There is no "campus" in the usual sense.

Interdisciplinarity

There has been considerable criticism of traditional academic disciplines as stumbling blocks to advancing knowledge in a period of rapid technological change. Criticism focuses on the organization of universities into traditional and conservative departments. In an effort to force changes in the traditional disciplines and faculty organization, interdisciplinary structures and orientations have been created. The Federal Republic of Germany and France have been leading exponents of interdisciplinarity, although some universities in the United States have also tried to break down the traditional departmental structures. It remains to be seen whether these, and other, efforts will meet with success.

Accountability

Under the broad heading of accountability, one can list a number of efforts to make higher education more accountable to public authority and to coordinate it with national policies and needs. There is no doubt that accountability is one of the most dramatic efforts of governments in the area of change in higher education. Part of the effort for accountability is increased concern with coordination and planning in higher education, and the creation of more rational management techniques. The opposite side of the accountability argument is autonomy — the traditional concept that universities should have considerable control over their own affairs. A few countries, such as Yugoslavia, have attempted to give universities accountability. Accountability does not necessarily means centralization, but in most cases it has resulted in increased government involvement in academic affairs. Accountability for funds almost inevitably means accountability for programmes as well. The new French approach to system-wide university reform stresses accountability for funds and for broad policy matters, but allows decentralization of local

academic decision making. The clear world-wide trend is in the direction of public authorities demanding that higher education be accountable for the very large amounts of money spent and also for broad policy and curriculum matters. Even such mechanisms as the British University Grants Committee, which has traditionally insulated the universities from government interference, the under criticism.

Administrative rationality

Related to the question of accountability in higher education has been a trend to streamline academic administrative structures to make them more "efficient" and "rational". Modern management techniques have increasingly been incorporated into the universities to replace a very anarchic and often unwieldly administrative structure which has served universities for centuries. These reforms take many directions. Budgeting systems like PPBS (programme-planning-budgeting system) are aimed at making units of the university accountable for the expenditure of funds and to develop priorities for their own budgets. The increased size and expense of universities has greatly stimulated the growing bureaucratization of academic institutions. Administrators have assumed increased power over the direction of universities in many countries, and the trend is very much in the direction of increased administrative control in order to assume a more "rational" operation of what have become modern bureaucratic structures rather than communities of scholars separated to some extent from the mainstream of society.

The curriculum

Almost everywhere, the traditional concept of liberal education in the university curriculum is under attack. Demands to make the curriculum more "relevant" mean different things. Radical students define "relevance" as knowledge which will help topple the established social order, while government officials and manpower experts see relevance as training that will fit university graduates for jobs in a technological society. The faculty, which is the key element defending the traditional curriculum, has not put up a spirited defence, and in most countries the trend is toward an increasingly vocational curriculum. Many of the "required" courses or subjects were dropped from the curriculum during the 1960s in the spirit of the period. While

there has been no reintroduction of such obligatory courses, the vocational and technical aspects of curricular offerings have expanded significantly.

Democratization and participation

The 1960s brought a world-wide protest against the academic aristocracy — the "academic mandarins" — who have traditionally controlled the internal working of the universities. These protests by students and some younger staff fitted neatly into the plans of government authorities to mould higher education to the demands of technological societies, since in many cases wider participation breaks down the traditional aloofness of the university. As a result, there were changes in a number of countries which provided increased democratization and participation by the various elements of the academic community in the affairs of the universities. This trend has perhaps gone farthest in the Federal Republic of Germany, where the concept of *Drittelparitat* has included students and other university employees in the governance process alongwith the professors. France and Sweden have also provided opportunities for some participation by non-professional staff in governance. The United Kingdom and the United States, despite some pressure, have not moved significantly toward increased democratization of the universities. It might be added that "democratization" may come into conflict with notions of efficiency.

The professoriate

Without question, the professoriate has been under attack in most countries. Trends toward democratization have weakened the traditional power of the faculty, and accountability has further eroded its influence. Rapid expansion increased and at the same time diminished its sense of cohesion. The faculty has lost some of its power over the governance of the institution, and has probably suffered some decline in social prestige. In few countries, however, has the status, working conditions or orientation of the faculty changed fundamentally. There have been some improvements in terms of autonomy, income and status for junior staff, and a corresponding decline in the power of the senior professors.

Miscellaneous innovations

A large number of somewhat unclassifiable reforms have

occurred in universities in various countries which have altered to some extent the nature of the academic enterprise. Rearranging the interlinkage of academic degree programmes has been attempted in many countries. "Sandwich courses", which alternate academic work and on-the-job experience, have proved successful in the United Kingdom. The Chinese practice of combining academic work with practical training is another trend in this direction. In the United States, the Carnegie Commission has recommended that degree programmes be shortened and that students be permitted to "stop out" for varying periods of time. New, two-year degree programmes in community colleges in the United States and short-cycle, higher education in various European countries are another effort to provide post-secondary alternatives to the traditional universities.

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These are some of the major trends in reform around the world. While this is by no means a complete list, it is possible to see that many of these innovations are a result of the kinds of pressures on higher education which were outlined earlier. Some of these reforms have been more successful than others, and countries may have adopted some and rejected others. The cross-cultural trend, however, seems to be in the direction of these kinds of changes in post-secondary education.

The legacy of the 1960s

The period of the 1960s and 1970s was one of major turmoil and considerable change and innovation in higher education. From the perspective of the mid-1980s, it is possible to assess both the successes and failures of some of the major reforms. Not since the German university triumphed as a world-wide academic norm in the 1870s has there been so much ferment. Pressures for expansion, technological development, student unrest, new instructional methods and accountability have all caused changes in universities that have only been mentioned in passing in this discussion. The 1960s saw problems created by growth and expansion, as well as by political unrest in a number of countries. The 1970s, on the contrary, at least in the industrialized nations, caused difficulties because of demographic trends (mainly a slowing down of the birth rate) and fiscal constraints. The combination of growth and then contraction placed academic

institutions in a particularly difficult situation. Despite all of these challenges, the traditional model of the university has shown remarkable resilience, and the professoriate, while contributing relatively little to the debate over the direction of change, has helped to maintain considerable stability in many academic systems. It is likely that, in the long run, major changes will occur, but it is also likely that universities will retain their traditional identities and modes of operation.

It may be useful to indicate the situation in a number of nations to illustrate the variety of results brought about by the pressures of the past two decades in terms of reform and innovation in higher education.

In China a complete alteration in the political direction of society created a new thrust in higher education. After being virtually abolished during the Cultural Revolution in the early 1960s, the universities were given major emphasis as one of the key elements of China's modernization policies. Research was stressed, the old emphasis on academic study as opposed to a politicized work-study arrangement of the previous period was restored, and in general the Chinese universities have moved toward a more "Western" academic orientation at the same time as enrolments are being expanded.

In the United States, the turmoil of the 1960s had relatively little impact on the structure and governance of higher education although the traditional curriculum was weakened and replaced, in many institutions, by an elective system. In response to the fiscal problems of the 1970s, state governments stressed the need for accountability and they assumed more control over many aspects of the financing of higher education, and in some cases began to control the main lines of study programmes as well. Student demand for technological and management training led to rapid changes in curricular choices, causing problems within the institutions. Later, the faculty, realizing that the core of the liberal arts curriculum was almost lost, began to give more attention to general education which restored many of the requirements common in earlier years. During all this turmoil, the basic structure of the academic system did not change.

In the Federal Republic of Germany and in the Netherlands, there was stress on democratizing the governance of academic institutions and in expanding enrolments. In the

Federal Republic of Germany, legal challenges by the senior professors and a lack of support by students and younger staff brought "democratization" to a halt, while a court decision reinstated the basic authority of the senior professors. In both countries, fiscal problems and enrolment declines brought an end to the reforms and caused serious problems. In the Netherlands, for example, a government decision to cut expenses has forced a reduction in the academic staff and a major reorganization of academic institutions.

In the United Kingdom, except for the major innovation of the Open University, there has been little change in the British post-secondary education system. However, fiscal problems in the 1970s have caused continuing crises in higher education, with resulting staff cuts, institutional closures, lack of research funding and morale problems. The British higher education system saw a period of expansion and then one of contraction, but relatively little major reform or innovation. The changes that did take place, such as the Open University and the Council on National Academic Awards, which controls the academic standards of the polytechnics, were outside the traditional university system.

In Southeast Asia, where there have been tremendous pressures for expansion, the traditional academic institutions have not been basically altered, although a number of new institutions have been added and enrolments in existing universities have grown. In Thialand and Indonesia, the open university concept is now being implemented. Large number of Malaysian students are sent overseas to study on government scholarships. In Singapore, the university has been expanded not only in terms of enrolment but also in function and scope. In the region generally, there has been few problems resulting from financial shortages. On the contrary, expenditures for post-secondary education have grown dramatically.

These brief overviews are intended to provide a sense of the variety of experiences in may nations with regard to change and reform. The past two decades have brought tremendous change to higher education world-wide, and considerable reform as well. But the basic academic system has remained unaltered, and some trends in the past few years have in fact strengthened the traditional model. Nations have responded differently to widely divergent pressures on their academic institutions.

Conclusion

Virtually every aspect of university reform is complex and difficult to predict, plan or implement. For one thing, the analytical tools of the planner are as yet at a fairly early stage of development. Manpower forecasting, for example, is by no means foolproof. Yet the state of the art has improved considerably and major reform efforts, such as those of the Robbins Committee in the United Kingdom, the Carnegie Commission in the United States and the 1968 Educational Commission in Sweden indicate that careful research and analysis can contribute to significant change. The greatest problems arise in gaining agreement from the numerous (and often conflicting) interest groups for a particular courses of action. Compromises are often necessary; frequently, what begins as a radical reform varies little from established practice when it emerges in its final form. Once a reform has been implemented, it is necessary to evaluate it. carefully; unfortunately, the evaluation process is often left out of the planning and implementation of a course of action.

Change inevitably occur in dynamic institutions that are key elements in modern society. Indeed, it has only been when universities have become a backwater of societies that they have remained virtually unchanged over long periods of time. The question is not whether higher education will undergo change, but how this change is to take place and for what ends it is intended. This is where the process of purposeful reform — the process of planned change — enters.

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PAKISTAN JOURNAL OF DISTANCE EDUCATION

Volume III 1986 Issue No. II

ACADEMIC STUDY FOR PEOPLE WORKING FOR A LIVING

by

Otto Peter

Fernuniversitat in Hagen

Federal Republic of Germany

I should like to inform you about a research project which is remarkable, if not unique, in several ways: it is — compared to others — a large project consisting of 15 subprojects, it attracted the interest and support of the Federal and State government, together they provided a grant of 3,5 million German marks for it, and its philosophy and its fundamental assumptions, its hypotheses and its results transcend the traditional way of teaching and studying at the university. The new forms of teaching designed here will be of great interest to experts in distance study.

By reporting about this project, I hope to be able to deal with one of the most important consequences of the introduction of techniques of distance teaching into system of higher education in advanced industrialized countries. This may motivate you to think ahead of the present development of distance teaching and foresee alternative futures of our systems of higher learning. Some of you might think that such thinking is futile, others might be convinced that the projection of future models does influence our everyday thinking and action in the direction of such a model, especially if is worked out, elaborated on the basis of research, as in this particular case.

As you know, most distant teaching university started in a climate of disdain and hostility. If such a university, however, has worked in a consolidated and successful way for

a decade or so many experts and also parts of the public do not only get used to the new techniques of teaching but they also become aware of the unique advantages and possibilities of them. And it occurs to them that reform ideas discussed for decades by now will get a new chance to become realized. Some of these ideas are: the establishment of high quality academic continuing education, a closer correlation between university teaching and research and vocational and professional work in industry, life-long learning for people working for a living, more even: the continuation of the process of general education into adulthood in order to enable people to develop their personalities judging and acting with a higher degree of independence. In most countries, I think, the traditional universities do not lend themselves easily to realizing these reform goals. Small wonder that now here and there the structural characteristics of distance teaching are looked upon as instrumental for achieving them. The project I am going to report about, deals exactly with these issues.

In 1976 a group of educational researchers met several times in Hannover in the Federal Republic in order to bring the idea of an "academic study for people working for a living" to the attention of the professional public. Most of them were no "friends" of distance study—but by the example of the Fernuniversitat they could see the great advantages and possibilities of mediated teaching. Under the chairmanship of Friedrich Edding, a very well-reputed educational economist, the group worked out a plan to provide a "second way" to the university degree. They suggested that this way should be laid out and paved for people who have been successful in the working world and wish either to gain more competence in their vocation or profession or to continue their education at a university. Everybody who is at least 25 years old and has been in vocational training and employment—including housewives—should be admitted. The usual university entrance qualifications should not be required. Here, the fundamental assumption was that there are definite educational processes going on also in the working world and the quite often gifted and well-trained workers who actively took part in continuing education and are highly motivated for theoretical work, can be ready for university study of certain subjects in a similar way as secondary school leavers. Their ability to undergo an academic study can be tested in the very process of studying. The curricula designed for these students should, however, be oriented to their job in the working world and, hence, highly individualized ones. Technical media should be employed to

transport the teaching material to the student enabling him to study at home. On the whole the "second way" should be different and yet — as to scientific standards — equal to traditional teaching programmes and lead to the same examinations and degrees.

The group recommended that the whole new area should be explored by research and presented a research plan which was published in 1977.

2

You will easily see that the project I am reporting about, is aiming at a far reaching reform and might be even called revolutionary in the sense that carefully guarded privileges will be at stake if it could be realized. And yet this project aroused great interest and has been supported by many individuals and institutions. Let us reflect about their possible motivations for doing so.

Professional educators have become aware of a lasting and ardent desire among working people to study problems in the scientific way, a desire to get a university education. Without a new organization of the teaching and learning process on the tertiary level this desire can not be satisfied. Now, if professional educators do not limit themselves to empirical fact finding but feel also a responsibility for people, I think they should speak up and see to it that such a new organization of teaching and learning takes place for the benefit of those people. I think it is a profound ethical obligation of their profession which induces them to become active in this matter.

Politicians dealing with education are interested in the project because it suggests another way towards more equality of educational and hence social opportunity. If the constitution of a state guarantees the free development of the personality of each citizen, as it does in the Federal Republic, it can be easily argued that a great proportion of the people is simply denied such a development. A politician would neglect his duty if he or she would not make university study available to them.

The planners of education may consider the new type of university study for working people as a very interesting

alternative to traditional university study which can estab-
lish closer relations between practical work in industry and
university teaching and thus help to reform the curriculum
of university study. They also see that such a system of
university study may become a vehicle for the development of
scientific continuing education geared to problems of prac-
tical work in industry and will enlarge the possibilities
for life-long learning. They appreciate how flexible this
new system of teaching and learning can be and how easily it
can be adapted to individual requirements of persons working
under unusual conditions.

For researchers specializing in the methods of teaching
and learning, the project "Academic Study for Students Working
for a Living" is a rural challenge. The task ahead of them
is to create a system of teaching and learning which not
only facilitates the access to higher education for working
people — this has been achieved quite often — but which
enables them to take part in higher learning degree programmes.
This calls for another arrangement of this times and places of
study than the traditional one: evening study, weekend study,
summer schools, conferences, decentralized instruction in
study centres, self-study and distance study including the use
of technical media as audiotape, videotape and computer may be
some of the elements of it. The new system will lend itself
more easily to the use of some of the more sophisticated
communication techniques emerging just now than traditional
universities. The most important and most difficult task,
however, will be to develop individual curricula for the
student working for a living in a given area of industry as
this calls for entirely new approaches and for the development
of student's counselling in the form of curricular counselling.
Here new curricular models will have to be developed.

Experts in distance study, finally, should be highly
motivated to observe and support a project of this kind as
there are so many structural similarities. In fact, distance
study as, for instance, developed by open universities can
be seen as a special forms of this new type of university
tuition. Here, we can see a possible integration of distance
study into the broader scenario of the methodology of ter-
tiary education — after having been, isolated for about a
hundred years. This indicates a new period in its development.
Experts in distance study begin to see these developments
and become aware of the new chances for their craft, their
particular system of teaching and its methodology.

3

In order to give a first idea about the nature of the research project, I should like to show you a catalogue of its 15 research themes:

UNIVERSITY STUDY FOR PEOPLE WORKING FOR A LIVING: Sub-projects:

1. Similar system already in operation in the Federal Republic and abroad;

2. The demand for this kind of study;

3. Models for the information of people who intend to enrol;

4. The attitude of employers' organisations;

5. Learning and working for a living. Theoretical and research perspectives;

6. The attitude of university teachers;

7. The problem of individualization;

8. The orientation period;

9. The differentiation of the teaching in the initial phase of the programme;

10. Distance teaching in a university study for people working for a living;

11. Certificates and degrees;

12. Legal problems;

13. Financing problems;

14. A curricular model: Data analysis;

15. A didactic model: contract learning.

It is, of course, impossible to deal with all these research projects at great length in a detailed way. You may, however, be interested in some remarks about the outcomes of some of these research activities.

1. In the first project a catalogue of eighteen experiments in continuing education at our universities aiming at persons working for a living was established. In most cases these projects specialize in one subject only, and quite often it is a very specialized one.

    In the second part of this study more developed programmes in Belgium (Faculte ouverte of the Universite Libre de Bruxelles and the "special candidature"—programme for adults at the Universite de Mons), France (University Paris, Vincennes), Italy (University Turin), Canada (University of Laval (Quebec) and the Netherlands (Erasmus Universitat Rotterdam) were described.

2. Is there really a demand for such a new type of university study? Yes, indeed. In our second study, being a representative survey of the population of the Federal Republic older than 24 years, 80 per cent welcomed the idea to establish it. And 250,000 people were ready and determined to take the opportunity and to enrol in such a type of academic study, if it were established today.

    Furthermore, the survey suggests that academic study for workers would reduce the selectivity of our universities and tend towards a higher degree of social justice. Traditionally, at our universities only 14 per cent of the students come from workers' familiers. In this project, however, there could be 47 per cent students of this type. Likewise, the percentage of women would rise from 35.2 per cent to 54 per cent. Obviously, more equality of educational opportunity could be achieved.

    Another result is that these people, interested in academic study, are usually and typically persons highly motivated for continuing education. As a rule they have already undergone additional training courses. They have accumulated more experiences in learning and studying than others. This is a good argument for defending open access to the academic study we intend to establish.

    There is also a very interesting correlation between the status of the worker and his or her desire or motivation to enrol in academic study. Generally, those workers interested in the project were markedly higher in the hierarchy of their companies than other workers.

The workers, interested in the project, do not want to study because they dislike their working conditions. To the contrary, 90 per cent of them are "very content" or "rather content" with their present jobs.

3. Analysing the situation of a person working for a living and evaluating the experiences of the Fernuniversitat with drop outs on account of lack of information what university study really means and due to the fact that for legal reasons it is possible to take in the students for probation before formally enrolling them—the third research projects recommends a computerized counselling of every applicant. The highly differentiated programme can be able to react to the self-characterization of the applicant and furnish him or her with selected relevant pieces of information which are to the point in each individual case and can help them to decide whether they should or rather should not begin this kind of study. The programme does not want to discourage applicants. Rather, it tries to prevent them from making disappointing and frustrating experiences, if they can be foreseen by themselves. This procedure seems to be especially necessary when you have provided for open access to this kind of university study.

4. What do the employers' associations and the trade unions think about the project of academic study for working people? The fourth project found that the employers differ in their opinions according to the size of their companies. Big organizations tend to rely on continuing education programmes of their own. The big sector of public administration has formalized the procedures for qualifying its personnel. In this area academic competition by the universities is not desired at all. On the other hand, smaller industrial organizations quite often accept the idea as they quite often cannot afford these additional training courses for their workers. Sometimes, they even believe to become more attractive to good experts if they are ready to help them to study at the university in their free time.

The researchers diagnosed also a sceptical attitude of the employers with regard to the new type of study. Even when they were ready to accept the general scheme, they quite often incline to the opinion that the universities will *never* be able to offer curricula which are

really practice-oriented. The trade unions, on the other hand, are very much in favour of the project. They hope that the dual system which provides the worker with the opportunity to acquire university entrance qualification and which helps many working people to rise into the middle management—can be carried over into the tertiary sector so that they may obtain also a change to be placed in the top management of the company.

5.   Another detailed study deals with the theoretical implications of academic study for people working for a living and opens up perspectives for further research in this area.

6.   Will professors and other university teachers be willing and able to adjust to the new tasks in curricular work and to the requirement of counselling; will they be ready to redefine their teaching and relate it to problems of vocational and professional practice? Are they not primarily engaged in research and do they not typically evade or even shun their obligations in the field of continuing education although they are prescribed by-laws and regulations as for instance in our country?

If the new type of study is to be developed by the university — there are also suggestions that other institutions should perform this task — this question is of utmost importance. The sixth project dealt with it at great length and depth. In a survey and in a series of individual and group interview, university teachers experienced in continuing education were asked to express their views on this matter. The general outcome: there is already a minority of university teachers finding the new kind of teaching adults working for a living interesting and satisfactory. They also have developed a respect for the new type of student, are ready to prepare themselves more extensively and intensively for the new kind of teaching and thereby even to transgress the bounderies of their own limited specialized discipline. They also found ways to compensate for their lack of practical experience. This readiness and ability of the university teachers does not vary on account of different traditions in the various departments of the university or other institutions of higher learning but rather as a function of their growing sensibility to didactical problems and interactions. This shows how important it will be in

the new system that the professors and the teaching staff will remain in a permanent process of didactical reflection and training.

7. The seventh project analysed the necessity and the possibilities of individualized instruction in a new system for university tuition for working people. In an experiment with adults working for a living enrolled in a continuing education programme at the Teacher Training University of Landau, three students were asked to organize their learning activities by learning contracts developed after a modified model of the Empire State College. This experiment revealed some of the institutional and didactical difficulties which necessarily are in the way when an entirely new element is implanted in a traditional setting of teaching and learning. However, the students liked this didactical instrument. By using it the instruction could be differentiated considerably, the learning outcomes could be documented more successfully and the counselling and supporting functions could be organized and performed more easily.

8. In the eighth project, a concept for an orientation period for working people enrolled in a university study was developed and tested. The concept provides nine learning situations: (1) getting acquainted in the group; (2) introductory information; (3) counselling; (4) information about the department; (5) introduction in the students' self-government; (6) learning in groups; (7) problems of vocational pradice; (8) orientation in the subject to be studied. The experiences of four one-day-orientation periods were evaluated. Recommendations for organizers of these orientations periods were formulated.

9. The project "Continuing Education in Industrial Training" at Landau was analyzed in order to explore the feasibility of concepts for the differentation of instruction. It was not possible to differentiate with regard to the vocational experiences of the students, it was not advisable to differentiate with regard to the various levels of general education thay had achieved. Also a number of further possible criteria for differentiation had to be neglected. However, a differentiation with regard to didactical approaches and to learning methods was possible and was carefully analysed and tested. The study shows how the students reacted to

the didactical approaches. The key problem of a university study for students working for a living was how to be learner — orientated and systematic at the sametime and how to be practice-oriented and scientific at the same time. In both cases the two in a way conflicting attitudes of the teachers were expected by the students.

10. The role of distance study in a given system of university study for people working for a living was analyzed in a study of the project "Continuing Education for Industrial Trainers" at the Teachers' Training University at Landau. In this project, distance study is the main medium of instruction supplemented by twelve seminars of two and a half days each. Some of the results are: (1) there were no differences in achievement between students with and without university entrance qualifications; (2) although the students differed considerably with regard to their level of formal education, they were similar with regard to their activity in going through additional learning activities; and (3) the project demonstrates the advantages of a close interrelation of professional practice and academic teaching. Therefore, the research findings cannot easily be generalized and applied to other forms of academic study for working people. Very interesting data about the students of such a system of academic study were established (age, educational background, motivation, attitudes, study conditions, etc.).

11. The problems of certificates and degrees were analyzed in the eleventh project. The status of certificates earned by working people in programmes of continuing university education was discussed. The authors found that breaking up such programmes into units and the development of a corresponding credit system woule be helpful. They also found that students could not benefit directly from presenting their certificates to their employers as the employers are still uncertain about their value. It will be most difficult to establish a diploma or a master degree growing out of a sequence of certificates and gain the recognition of the university and of the working world. A key problem: should the degree be patterned after a traditional diploma or should it be alternative and especially designed for this clientele? If the access is open, the standards of the final examinations to be passed must be clear and definite in

order to secure the value of the degree. This is neces-
sary in order to meet the interests of the students of
the universities taking part in the programme as well
as the expectations of the tax-payers and the employers.
The authors recommend the M.A. degree as it is the most
flexible one.

12. Naturally, the form of university study will also have
to face legal problems. They were analyzed in the twelfth
project. Some of these problems will be in the way simply
because the idea of a university study developed for
working people is so new and unusual. It will take
decades before the public will change certain patterns
of thinking in this area. This explains why the written
and unwritten regulations of some universities and many
companies rule out the combination of university study
and employment for a living. The proposed open access
calls for legal standardization. Also the status of the
working student must be defined carefully. At my uni-
versity, for instance, it is a real issue, whether
students taking part in continuing education can parti-
cipate in the self-government of the university or not.

13. As to the costs of a university study for persons working
for a living and the ways in which it can be financed the
experts found in the thirteenth project that such a new
type of study will differ from traditional university
study considerably in so far as it will be considerably
cheaper. The reasons are that here students pay taxes,
pay their premium for their social security and contribute
to the gross national product. This amounts to an average
of 36 254 German marks per student and year. The direct
average costs of a student are 17 German marks per year.

It is easy to see that these indirect costs need
not be covered in an academic study for persons working
for a living. Furthermore, the experts recommend that
some sort of tuition fee should be raised in spite of
the fact that, in our country, all university education
is free. The survey in our second project reveals that
the potential participants in this kind of academic
study are not only willing but also able to pay such a
fee and to cover additional personal costs for books,
travelling to study centres, etc. In the light of these
two facts the problem of financing university study for
working people will not be unsolvable.

Which will be the next steps? The final report—carrying the results of these 15 studies—will be published next year. In the meantime we shall try to get more professional and political support for this project. Small projects fitting into the framework of university study for people working for a living might be prepared at some universities. We are interested in similar research work and similar experiences in your country. Please contact us, if you know of them. If the project university study for people working for a living will be adopted by universities—lack of students might induce them to do so—we might have to deal with two kinds of universities in the future—or rather with two different organizational schemes of the same university: a traditional one for students before they go into employment—and a new one for students who are already in employment. Such a university can satisfy also new educational needs which have changed so drastically during the last decades in our industrialized society.

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PAKISTAN JOURNAL OF DISTANCE EDUCATION

DEFINING OBJECTIVES OF EDUCATIONAL MEDIA

by

Dr. Muhammad Anwar Hassan

Media Adviser

International Islamic University

Islamabad (Pakistan)

Introduction

> "Getting an education is like travelling — if you
> don't have a destination in mind and a map to guide
> you, you may end up no place in particular and
> wondering how you got there!"
>
> (Erickson, Curl, 1972, p.47.)

The basic consideration in any type of educational
planning or the use of educational technology is that of
"educational objectives which properly involve the channel
of communication between educators and the leaders". (Gagne,
1969, p.94.) This is true whether planning is concerned with
relatively broad matters such as organizing an educational
compaign using a variety of media, or something as limited
and specific as what one individual teacher plans to do in a
given class on a particular topic.

The task of identifying the basic purposes of education
is being tackled on a continuous basis by a number of agen-
cies. These range from conferences at national and interna-
tional levels to individual educationists. Some of the sta-
tements drawn up in this way are so precise as to enable us
to know what a pupil is able to do after he has made a given
learning experience. Some statements are referred to as spe-
cific educational objectives. Others which describe educational

purposes in broader and general terms are called aims. Normally a rough distinction is made between aims and objectives. Davies (1976) for example describes this difference as:

"An aim or goal is a general statement of intent. As such it has little precision or direction. It is not especially helpful to the classroom teacher as it does not assist him to decide which teaching strategy should be used or what form any evaluation should take." (P.72)

"An objective is very much more specific and precise. It provides both the teacher and the students with a very great deal of concrete help and direction. Indeed it has, sometimes, been argued that an objective will give both teacher and student some direction with regard to both the subject *content* and mental *process* which the student is expected to develop." (P.72)

No doubt, broadly stated aims have some value in philosophical discussions but have little value to teachers as they plan and organize teaching and learning activities. Rowntree (1974) describes aims as "abstract statements of intent — too vague and ambiguous to be of much help in planning actual learning experiences". (P.21) An objective, on the other hand, has been defined as a "description of performance you want learners to be able to exhibit before you consider them competent". (Mager, 1975, P.5.) Objectives, therefore, are such clear cut statements as describe the specific performance of a learner that we expect him to achieve as the result of instructional process.

Agruments against defining objectives

There are arguments for and against defining objectives clearly. Those who speak against describing objectives say that by giving a list of specific objectives, we limit the approach of the teacher and the thinking of the student. This, they consider particularly true in the case of creative subjects like art, poetry and music. David (1976) makes this point in these words:

"When objectives are defined, all too often they appear to be hideous carecatures of the feelings that you have about what you want to happen. Creative curriculum development and good teaching do not necessarily begin with a blue print. The constantly evolving richness,

the intricate subtleties, the never-ending succession
of refinements — all of which lie at the very heart of
the creative process — can sometimes be lost in the
apparent materialization of objectives." (P.66).

Eisner (1975) is one of the strong critics who believe
that specified objectives are harmful for progressive educa-
tion. In arguing against having defined objectives he points
out four weaknesses. First, he says that it is very difficult
to predict instructional outcome with accuracy. Secondly, he
argues that by specifying objectives we have to organize our
teaching activities in such a way that will help us to achieve
our precise objectives. However, some subjects do not fit in
this treatment. Particularly in art and literature, the beha-
viour that is to be developed cannot easily be identified.
Thirdly, he mentions that in some situations objectives can
only be used as the criterian of judgement, but attempts are
made to use them as standards of measurement. Fourthly, he
says, logically it is right to state educational objectives
before we formulate the curriculum, but psychologically it
is not necessarily an efficient way to proceed.

Critics of formulation of objectives ask various ques-
tions like "Where do they come from and how are they deriv-
ed?" "Can objectives be used as standards for achievements
and for judgements?" Many teachers express doubt whether it
is possible to know and readily identify the educational
objectives for which they strive. Objectives have also been
criticised "as ineduquate and restrictive to the educational
function of school" while they have also been decsribed as
'blinkers of educators'. (Davies, 1976. P.65-69.)

Another opponent (Atkin, 1968) states four reasons for
his opposition to specifying objectives. Firstly, he belie-
ves that in certain learning situations there may be some
unforeseen but important elements which we may not have
included in our specification of objectives. These elements
may not get proper emphasis in our teaching activity and may
disappear. Secondly, he feels that in this way we will take
up only such activities as are testable and overlook some
other worthwhile learning activities. Thirdly, he says that
specification of objectives may resist the further develop-
ment of curriculum. Fourthly, he shows his concern that by
specifying only measurable objectives, we may not do full
justice to the true spirit of education.

It is said that previously defined objectives put a control on all the teaching activities and limit the scope of awareness for learner. Moreover, in teaching there is always the likelihood of achieving many more results than the predicted ones.

Arguments in favour of defining objectives

Popham (1969), while arguing on the reasons given in opposition to precise instructional objectives, agrees that there is some element of truth in the criticism, but suggests:

> "Any risk we run by moving to behavioural goals are miniscule in contrast with our current state of confusion regarding instruction intentions.. To secure a dramatic increase in instructional effectiveness we must abandon our customary practices of goal stating and turn to a framework of precision." (P.123)

He believes that to discourage our educators from precisely explicating their instructional objectives is to encourage our education to lead towards confused thinking. He is of the opinion that really important outcomes of instruction can never be overlooked in any way. This point is always kept in mind while formulating objectives.

Davies (1976) takes objectives not as obstructions but as commitments, the basis as well as one of the sources of learning for achievements and growth. According to him, the objectives:

> "Can help not only to concentrate our resources and efforts but to allocate our priorities... can serve as a very stimulus to clear thinking, as well as means of allowing teachers to communicate with each other in a relatively precise and unambiguous manner... can serve as guides to curriculum developers busily engaged in designing new curriculum materials ... can serve as guides to teaching, focusing the many activities involved in planning a team's work or even individual lessons.... can also serve as an *aide-memoire* during the very process of instruction itself....can also be used as rational guides in assessment of evaluation enabling developers, teachers and students to determine what has been accomplished and what still remains to be achieved." (PP. 73-74).

He further suggests that in order to formulate instructional objectives we can breakdown aims or even subject matter itself into more manageable and interlocking elements, "ensuring that the topic is not only consistent but also internally coherent". (P.74) This sequence by topics can help us in designing teaching sequence and preparing measuring instruments.

Gagne (1967) emphasizing the importance of educational objectives says:

"Possibily the most fundamental reason of all for the central importance of defining educational objectives is that such definition makes possible the basic distinction between contents and methods. It is the defining of objectives that brings an esential clarity into the area of curriculum design and enables educational planners and researchers to bring their practical knowledge to bear on the matter." (P.21)

Unless objectives are clear and areas of curriculum are defined, a teacher cannot plan his teaching and a student will not know what he is supposed to learn and may get confused and misled. In discussing the specification of objectives, Bloom and his colleagues (1972) emphasise:

"It is important that major objectives of the school or unit of instruction be clearly identified if time and efforts are not to be wasted on less important things and if the work of school is to be guided by some plan." (P.6)

Tyler (1971) considers it necessary to state the objectives in specific and definite terms so that they can serve as a guide in making the test items or examination questions. In his opinion:

"These educational objectives become the criteria by which materials are selected, context is outlined, instructional procedures are developed and test and examinations are prepared." (P.3)

Objectives, as suggested by Kemp (1975), focus on the needs and interests of students, hence shifting the emphasis from the teacher and the subject-centred instruction to the learner's learning. Once objectives are established, it is

much easier for the teacher to plan his lesson and select the suitable media and experiences for instruction.

Behavioural objectives

Most educationists such as Ralph Tyler (1971), Robert Mager (1975), James Popham and Baker (1970), Robert Kilber, Barker and Miles (1970) suggest that objectives must be stated in "behavioural objectives are an extremely important part of the educational process". (P.23). Popham (1969) stressing the behavioural aspect of objectives, says:

"A satisfactory instructional objective must describe an observable behaviour of the learner or the product which is a consequence of learner's behaviour." (P.35)

Mager (1975), discussing the characteristics of useful objectives, suggests:

i. "An instructional objective describes an intended outcome of instruction, rather than an instructional procedure."

ii. "An objective always states a performance, describing what the learner will be doing, when demonstrating mastery of the objective or the achievement of the objective." (P.48)

The most useful form for stating objectives according to Tyler (1971) is "...... to express them in terms which identify both the kinds of behaviour to be developed in the student and the content or areas of life in which this behaviour is to operate." (PP.45-47)

Discussing the need for and importance of behavioural and content aspects in the formulation of objectives, he argues that by defining these desired educational results as clearly as possible, we provide a useful set of criteria to curriculum makers "for selecting content, for suggesting learning activities, for deciding on the kind of teaching procedures to follow, in fact to carry on all the further steps of curriculum plannings". (P.62) Describing the difference between cognitive approach and behavioural approach, Erikson (1972) make it clear that it is only behaviourally stated objectives which can provide us with a criteria of measuring the performance and achievement of students after the learning has taken place. As suggested by Popham and

Baker (1970), even the behaviourally stated objectives not only "make it easy for the teacher to select suitable learning activities for the class, but make it possible for him to evaluate instruction on the basis of whether the students accomplish the intended objectives". (PP.37-38)

Role of objectives in the use of media

Objectives have a key role in designing the instructional materials and learning activities. To plan a lesson and organize audio-visual activities and other learning experiences, it is necessary to know what must be learned. Mager (1975), emphasizing this point, says:

"When clearly defined objectives are lacking, there is not sound basis for the selection or designing of instructional materials, content or methods. If you don't know where you're going, it is difficult to select a suitable means for getting there." (P.5)

While thinking of the use of media for educational purposes "formulating the objectives is considered the first prerequisite in order to ensure that the programme is going in the right direction". (Hassan, 1981, P.2) In the opinion of Lumsdaine (1964) as educational media deals with the application of principles of instructions and presentation of instructions, this factor emphasizes objectives and performance in the sense that the teacher commits himself to be previously specified behaviours up to a previously specified level. Furthermore, these behaviours are concrete rather than abstract, are measurable and observable and consist of knowledge and skills actually desired by the teacher.

The use of educational media also has the greatest potential of waste if the objectives for which it is used are not rigorously clarified and defined. Sehramm at el. (1967) in this respect reminds us:

"All of us in education are well aware of the greatest wastes of energy and of the misunderstanding that can result when there is lack of clarity of objectives." (P.63)

The effectiveness of the use of educational media depends to a large extent on the adequate and prior planning and definition of the objectives that we intent to achieve. This becomes even more true in the case of developing countries

where waste constitutes an even starker tragedy by consideration of the much more limited resources.

Objectives help us not even to plan our approach and evaluate or achievements, but to obtain the best possible results from the media we are using. The importance of objectives, as suggested by De Cecco (1964), is vividly demonstrated in programmed instruction and instructional technology. Defining objectives is a tengible and useful way of planning and deciding techniques and methods and how to make a successful approach. Unless objectives are described, it is impossible for a programmer or a media teacher to know where to begin and where to end his programme. He has no way of judging the success of his programme, nor any basis for it revision.

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PAKISTAN JOURNAL OF DISTANCE EDUCATION

NOTES ON RECENT TRENDS IN
DISTANCE EDUCATION RESEARCH

by

Jocelyn Calvert

Open Learning Institute

The 1984 meeting of this group was at the forefront of a trend to a more analytical approach to distance education. It is not surprising that the headlong rush to establish new distance teaching institutions and distance programmes in campus-based institutions should eventually have given rise to a degree of reflection on the process. Those few people who have been chronicling the development of distance education over the last fifteen years, have been joined in this decade by a throng of newcomers who promise to widen the scope of analysis and research. This research may continue to be hampered by lack of time and institutional commitment, but there are signs that it is finding a place in our universities.

The development of research network

The Asian Distance Education Research Group illustrates very well the rationale for developing regional networks to communicate about research. Distance educators are even more scattered and separated from colleagues with similar interests than are academic researchers; every university in a country may have a biology or an economics department but distance education may be centralised in one or a few. In addition, distance educators are still at an early stage in defining topics and methods of research and can benefit greatly from contact with others facing the same issues.

In Canada we find two types of network now contributing to the encouragement of research. The first comprises interested individuals joined through the newly established Canadian Association for Distance Education (CADE). CADE has established a Research and Publications Committee that is organising a journal, a database and a series of research seminars by teleconference. The second type of network exists through the direction of regional governments who are anxious to improve efficiency through collaboration. Institutions engaged in distance education are required to pariticpate in committees and address questions concerning the administration of distance education. Although this type of direction might be expected to result in resistance, it has already led to a substantial increase in collaboration and to some research on important issues.

Databases

The development of research databases in distance education is another very recent trend. In the last year researchers have discovered the computer and plans are afoot around the world to provide computer access to bibliographic information. An interest group was organized at the ICDE meeting in Melbourne last August. The current dream is to appoint regional clearinghouses to collect and disseminate information and to communicate with one another via the International Centre for Distance Learning in the United Kingdom.

Broad access to the distance education literature is difficult in most, if not all, countries. Library holdings of even the most important periodicals are usually very limited. Normally, no attempt is made to collect and catalogue the conference papers, reports and institutional publications that constitute the bulk of the literature. To give an example, graduate students at the University of British Columbia, whose library is rated among the top twenty in North America, learn by word of mouth that if they wish to read comprehensively about distance education they must come to the Open Learning Institute during weekday office hours. The establishment of an international database will illustrate the scope and provide access to the body of information available, and this will inevitably stimulate research.

New periodicals

The *Pakistan Journal of Distance Education* provides a new voice for communicating about distance education. Within a year the Canadian Association for Distance Education will enter the market with its *Journal of Distance Education*. Both aspire to international representation and it will be interesting to watch their progress. *Distance Education*, which is just five years old, has achieved an international favour and there are rumblings of complaint about the length of time required for publication of an article.

Teaching at a Distance, which was primarily a house organ debating issues of concern to the United Kingdom Open University, has been replaced by *Open Learning*, commercially published by Longmans. Judging from the first issue, its scope is intended to be less parochial than that of its predecessor. Its eye is cast beyond the University and beyond the United Kingdom.

Trends in the published literature

Much of the published literature on distance education continues to be descriptive. Reports on uses of new technology and on broadening markets for distance education (e.g. professional education, technical training) are most notable. Published research and systematic analysis continues to deal with a range of topics, but most commonly in an isolated fashion. In general, more integration is required (or alternatively, an analysis of why integration is impractical).

One trend that is distinctive is the movement from demographic and behaviouristically-derived research on students and their motives to more in-depth study. Analyses using concepts from cognitive psychology and instructional science are appearing more frequently. We can expect that these will be followed by reports of research applying these concepts to the design of instructional materials and systems.

CONCEPTUAL FRAMEWORK FOR
DISTANCE EDUCATION RESEARCH

INPUT VARIABLES	PROCESS VARIABLES	OUTCOME VARIABLES
Student	Development	Student
Educational background	Curriculum	Enrolment
Perceived needs	Development model	Academic progress
Motivation	Design of instruction	Academic performance
Learning style	Media	Use of materials and services
Study environment	Course workload	Dropout
Access to technology	Assessment methods	Student satisfaction
System	Pacing	System
National requirements	Production procedures	Development efficiency
Institutional policy	Delivery	Cost effectiveness
Financial resources	Recruitment methods	Acceptance in the system
Technological resources	Academic support	
Human resources Geography	Formal feedback	

PAKISTAN JOURNAL OF DISTANCE EDUCATION

Volume III   **1986**   **Issue No. II**

NEWS AND VIEWS

by

Talat Anwar
Lecturer
Department of Economics

The Allama Iqbal Open University, in its second half of 1986, witnessed many changes. Some eventful changes of this period were nomination of three new members to the Executive Council by the Chancellor; introduction of master degree programmes in Pakistan Studies and Business Administration and Introduction of Women's Matric Education Programme for the first time in AIOU's history. The visit of prominent delegations and consultants to the University and departure of academic and other staff members remained a usual feature of this period.

New appointments in the Executive Council

- Professor Javed Iqbal Syed who was previously elected as member of the Executive Council from the Professor's seat was appointed as member of the Executive Council from the Dean's seat.

- Mr. Ejaz Ahmed Naik was appointed as a member being an eminent person in place of Mr. Jamil Nishter who died due to heart attack.

- Mr. Agha Nasir, Managing Director, PTV, was also appointed as *ex-officio* member of the Executive Council in place of Mr. Anwar Zahid.

University events

- Professor A. H. Rathor, Chairman, Department of Social Sciences, retired in September, 1986. His meritorious services were recognised by the academics and scholars in and outside the AIOU.

- Dr. Aslam Asghar, Chairman, Department of Vocational Education, proceeded on *ex*-Pakistan leave and Mrs. Nadira Khan, Associate Professor of Department of Basic Sciences, replaced him as Chairperson.

- Dr. Abdul Ghafoor Chaudhry, Associate Professor, was selected as Professor of Chemistry in the Department of Basic Sciences.

- Dr. Ata Ullah Shirazi, Acting Chairman of the Department of Agricultural Sciences, was selected as Associate Professor in the Department of Agricultural Sciences.

OVERSEAS DEVELOPMENT AUTHORITY PROGRAMME

ODA assistance envisaged under Phase-III 1986-89 programme, includes equipment of varied nature, i.e. Data Processing (computer), Printing, Mailing and Services, Audiovisual, Vehicles (Landrovers and Motor Cycles) for Regional Services. During the period of July-December, 1986, specifications of Data Processing equipment was finalized and accordingly purchase order for the supply of ICL ME 29 model 45 was placed by the ODA in the last week of December, 1986. Specification of Printing and Mailing equipment also remained under consideration when the ODA consultant visited AIOU during this period.

Master Degree Programme

In July, 1986 the University launched two new programmes of master degree level, one in the field of Business Administration and the other in the field of Pakistan Studies.

M.B.A. Programme

The M.B.A. programme requires three years for its successful completion for a regular student. The programme

carries 24 half-credit courses including a project report to fulfil the master degree requirements. The programme has been designed to train professional journalist, managerial skilful staff for leadership positions in business and industrial areas. The programm will equip students with skills of a highly vocational character and enhance employment opportunities in the labour market.

M.Sc. (Pakistan Studies) Programme

The M.Sc. (Pakistan Studies) programme requires 10 credit course/research work within a minimum period of 5 semesters (2½ years course/research work) for its successful completion for a regular student. The programme aims at producing and training scholars in understanding Pakistani society and its related problems in an integrated and inter-disciplinary way while drawing upon scientific knowledge and the techniques of analysis widely employed in subjects, like Sociology, Economics, Political Science, History, Anthropology, Geography and Psychology.

Teaching Methodology

In order to teach master degree programmes, a study guide is provided to students specially designed as instructional book for each course, such a guide contains complete information about the course work and the way to complete it. Prescribed textbooks classified as compulsory and suggested readings are also listed in the study guide alongwith the way the reading material should be used. For continuous academic guidance, supervision and assessment, the University provides tutorial support to the students through its Regional Offices, once in a fortnight.

Women Education Programme

The Department of Women Education offered the first phase of Women's Education Programme in October, 1986. The first phase of the programme was initially launched in district Attock. Two more phases of the programme will be launched during 1987 to 1989, which will gradually cover the various districts of the Punjab, Sind, NWFP, Baluchistan and Azad Jammu and Kashmir.

The main objective of the programme is to increase and diversify the opportunities of girls in national development

through distance education and functional skills. However, the short term objective is to raise the number of women with matric education through development of the appropriate distance learning courses. The programme is launched through highly illustrative course material supplemented by audio cassettes, supported by vision books. The programme contains a total of 8 credit course work. Initially, two courses, Pakistan Studies and Urdu for daily use were offered in the first semester. Gradually six more courses will be offered during forthcoming semesters.

Special Education Project

Allama Iqbal Open University, in collaboration with the Directorate of Special Education, is planning to offer a training programme of teachers for specialization — for the visually handicapped as a pilot project. The training cour- ses will be offered at M.Ed. level for B.A., B.Sc. and B.Ed. entrants with five full credits and Diploma in Special Education for M.A., M.Sc. and M.Ed. entrants with four full credits. The programme will be follwed by training of teachers and master trainers in other disciplines, i.e. hearing impaired, mentally retarded and physically handicap- ped. Initially 50 master trainers and 1000 special education teachers for the visually handicapped will be trained as a pilot project starting in January, 1987.

WORKSHOPS/SEMINARS

Workshops form an integral part of Allama Iqbal Open University education system. Such activities are organized throughout the year for different programmes.

National Workshop on Special Education and Distance Learning

A National Workshop on Special Education and Distance Learning, in collaboration with the Directorate General of Special Education, Ministry of Health, Special Education & Social Welfare, Government of Pakistan, was organized from November 10-16, 1986. The purpose of the workshop was to pretest the Special Education Programme and to streamline the procedure for the courses planned for offering in the first semester. The course team members, unit writers and potential master trainers were identified. Thirty participants

were benefited by the experts from the various international/ national agencies, which have the expertise in this field.

UNESCO National Seminar on Rural Development

A national seminar for the training of educational personnel "forming multi-disciplinary networks for rural development in Pakistan" was organized on behalf of the UNESCO from November 27, 1986 to January 4, 1987. The main objective of the seminar was to motivate those agencies which participate in the rural development programme for cooperation and collaboration with each other for effective and valid development in the rural areas. The strategies and viable procedures for such cooperation were visualized and suggested. Some collaborated sample projects were also formulated along-with the multi-disciplinary arrangements. Twenty five participants from various organizations like Allama Iqbal Open University, Agricultural Departments, Agricultural Development Bank of Pakistan, National Agricultural Research Council, National Centre for Rural Development, Women Division, Ministry of Rural Development and Science Education Project attended the seminar.

Workshop on M.A. Educational Planning and Management

M.A. Educational Planning and Management degree course is a regular programme which provides specialization in the field of educational planning and management. At the end of semester April 1986 two workshops on EPM-509 (term paper) and EMP-510 (thesis) were held from December 2-6, 1986. Thirty participants from all over the country attended the workshop. The participants are taught how to prepare a research design. These workshops are organized by the Department of Educational Planning and Management.

Workshop on Diploma in English Language Teaching

During July, 1986 two workshops were organized by the Department of English. These workshops are mandatory components of the course on Postgraduate Diploma in English Language Teaching. The first workshop was held at the University Campus from July 05-16, 1986 for students of Rawalpindi and Northern Areas. The second workshop held from July 12 - 24, 1986 was for the students of Punjab Region at Government College, Lahore. Such workshops are organized to familiarise the students with the latest techniques of English Language Teaching through distance learning.

STAFF TRAINING ABROAD/SEMINAR PARTICIPATION

- Mr. Mahmood Ali, T.V. Engineer, IET, participated in training of the Audio-visual Technology for Technical Cooperation Projects sponsored by Japan International Cooperation Agency held in Japan from June 26, 1986 to December 26, 1986.

- Dr. Mohammad Riaz, Chairman, Department of Iqbaliat, participated in an International Seminar sponsored by the Government of Iran held from June 18, 1986 for one week in Tehran.

- Professor Javed Iqbal Syed, Dean, Faculty of Social Sciences and Humanities, and Mr. Abid Hussain Khawaja, Senior Producer, IET, participated in a Conference on Export Promotion Development sponsored by Export Promotion Development Project held from June 23 to July 4, 1986 at the British Open University, U.K.

- Dr. Ahmed Noor Khan, Director, Research and Evaluation Centre, participated in the Fifth Triennial World Conference on Education sponsored by the World Council for Curriculum and Instruction held from July 26 to August 7, 1986 in Hiroshima, Japan.

  He presented a paper on "Providing Skills for Multi-level Needs in a Developing Country through Distance Education". He also chaired the third plenary session on Peace, Human Rights and Global Development. The speaker was Ohtori Kurino, Former President, Peace Studies Association of Japan and Japanese Ambassador to Syria and Kampuchea.

- Mr. Shahid Kaleem Siddiqui, Lecturer, Department of English, proceeded for training to UK under the British Colombo Plan Technical Assistance Programme sponsored by British ODA from August, 1986 for a period of one year.

- Dr. M. Siddique Khan Shibli, Registrar, AIOU, participated in a "Study Group Meeting on Distance Learning Project under APEID" sponsored by UNESCO held from August 16 to August 25, 1986 at Nanjing, China.

- Mrs. Razia Abbas, Chairperson, Department of Literacy, Adult and Continuing Education, participated in a seminar

on "Communication Revolution in Asia" sponsored by Asian Mass Communication Research and Information Centre held from August 21-23, 1986 at New Delhi, India.

- Mrs. Anees Bano Khan, Chairperson, Department of English, proceeded for training in the field of English Language Teaching in UK on British scholarship in English Language Teaching sponsored by the British Government from September 24, 1986 for three months.

- Professor Javed Iqbal Syed, Dean, Faculty of Social Sciences and Humanities, participated in the "Regional Cooperative Programme in Higher Education for Development in Asia and Pacific" sponsored by UNESCO from October 14-24, 1986 in China.

- Dr. Azhar Hameed, Director, Regional Services, participated in the "ISECO Meeting of History and Geography of Palestine" from October 14-15, 1986 at Jeddah, Saudi Arabia.

- Dr. Shaukat Ali Siddiqui, Dean, Faculty of Education, participated in Regional Seminar sponsored by UNESCO on "Distance Education" from November 26 to December 3, 1986 at Bangkok, Thailand. He presented a paper on "Distance Education in Pakistan" as a resource person.

- Dr. Mrs. Musarrat Anwar, a faculty member of AIOU, returned from USA in September, 1986 after completing her Ph.D. degree in Adult Education from Indiana University, Bloomington. Her research thesis was on computer-assisted instruction: "A Model to Predict Success of Illiterate Adults in Learning to Read".

Vice-Chancellor's visit abroad

- Dr. G.A. Allana, Vice-Chancellor, Allama Iqbal Open University, attended a symposium arranged by the Rabata Alam-e-Islam on "Tarbiah (Training) of Youth and Role of Universities" held on August 3, 1986 at Jeddah. He also performed Haj on this occasion.

- In another seminar on "Higher Education at a Distance with emphasis on the proposed Arabian Gulf Open University" held from November 2-6, 1986 at Bahrain, he

presented a paper on "Establishing an Open University in the Gulf Region".

–   He also participated in a Regional Seminar sponsored by the UNESCO on "Distance Education" held from November 26 to December 3, 1986 at Bangkok, Thailand.

–   In another workshop on "High Level Management Develop-ment Workshop" sponsored by UNESCO on Evaluation of Educational Programme and Institutions held from October 20-30, 1986 at Seul, Republic of Korea, he presented a paper on "Distance Education in Pakistan".

OVERSEAS DELEGATIONS TO AIOU

The following delegations visited the University during July - December, 1986.

Mr. Christopher Patten, MP and the UK Minister for Overseas Development visited the University on November 20, 1986. This was his first visit to Pakistan and to the Allama Iqbal Open University which was the only educational insti-tution visited by him during his tour. The Minister visited different departments/institutes of the University and showed his interest in its teaching system. The Minister later visited one of the University's village literacy projects, spending some time watching the group at work and talking, through an interpreter, to local councillors and villagers. Before his departure he indicated that the University should submit a proposal for specific and separate funding support for this area of activity.

Mr. A Sherlicker and Mr. R Rhodes, Birmingham Local Education Authority, visited the University in July 1986 for two days to obtain background information on special educa-tion in Pakistan.

Dr. Dean Nielsen, Regional Representative, IDRC (Inter-national Development Research Centre), Singapore Office, visited the Research and Statistical Centre of the Allama Iqbal open University in August, 1986 to discuss the AIOU research project on "Student Droup-outs".

Dr. Thomas Smith, of University of Wisconsin, visited the University on August 20, 1986 to discuss possible AIOU

involvement in "Energy Conservation Programme" being planned by the Government of Pakistan.

A delegation from Strathclyde Regional Council, Scotland, visited the University on September 22, 1986 to discuss possible provisions of cultural/educational material by the university for Pakistani emigrants living in Strathclyde, Scotland.

Dr. David Porter and Mr. William Richardson, from West Scotland Health Board, visited the University on November 5, 1986 to discuss the possible use of the University's technical courses in technician and laboratory-worker training.

Mr. Richard Stevens, Senior Lecturer in Social Psychology, UK Open University, visited the University as part of a study tour from November 10-19, 1986. He gave a public lecture on Freud and held several seminars with AIOU staff and at other institutions in Islamabad.

Mr. Francis Aprahamian, former Senior Editor at the UK Open University, visited the AIOU on November 10 - 14, 1986 after participating in Government of Pakistan Workshop in Lahore on textbook production.

Mr. George Arney, BBC Radio Correspondent for Pakistan, visited the University on November 19, 1986 to make a short radio feature about the AIOU for the BBC Overseas Programme.

Mr. Richard Ironmonger, Education Specialist, Canadian International Development Agency, visited the University on November 20, 1986 to enquire about possible CIDA assistance to the AIOU.

Mr. Jeremy Greenland and Mr. Abdul Karim, from the Aga Khan Foundation, visited the AIOU on December 1-2, 1986 to discuss possible assistance to the University's science teaching programmes.

Mr. Brian Frazer, Lecturer, School of Education, University of Birmingham, visited the University in November, 1986 to confer with the Department of Special Education on the production of distance learning courses for teachers of deaf children.

CONSULTANTS

Mr. T P Keilthy, Chief Examinations Officer, UK Open University, visited the University from June 23 to July 17, 1986. He submitted a report on the University's overall examination and assessment system.

Mr. John Brown, ODA Printing Consultant and *Mr. Robert Smith*, Crown Agents, visited the University from August 30 to November 11, 1986 to review the University's printing needs and make recommendations to the UK/ODA regrading the provision of equipment.

Miss Jane Thomas, Lecturer, Department of Food Sciences and Nutrition, King's College, London University, visited the University from August 1 to September 6, 1986 to advise on evaluation scheme for Women's SSC (Matric) Project being funded by the Netherlands Government.

Mr. Hywel Jones, Adviser under KELT Scheme (Key English Language Teaching) arrived on October 13, 1986 to work in the Department of English for two years with a special concern for the University's new M.A. in English Language Teaching. A second adviser is due in January, 1987.

Mr. Alan Woodley, Senior Research Fellow, UK Open University, paid a visit to the Research and Evaluation Centre of the University for four weeks — November 23 to December 22, 1986. He advised the Research and Evaluation Centre on institutional research, including surveys, evaluation and the setting up of a data bank, and submitted a report on the working of the Centre and its future plan.
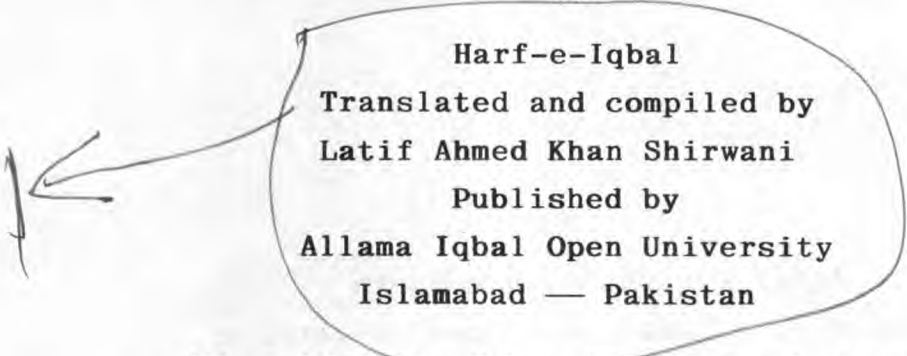
BOOK REVIEW

Iqbal for Children & Youth
Published by Allama Iqbal Open University
Islamabad — Pakistan

A large quantity of books are being published in our country, but only a few could be called as standard publications. In such condition, it is really commendable to publish some standard books for children. In a calendar year "Iqbal for Children and Youth" has been published by Allama Iqbal Open University, keeping in view the abovementioned need. One of the aims of Open University is to propagate the message of Iqbal and this book is another step towards the fulfilment of this aim.

The book is divided into three parts. The first contains Urdu poems of Iqbal published in his first collection "Bang-i-Dara" and are meant for children. A worthwhile attempt has been made in such a way that the central idea of each poem has been given in a sentence alongwith the meanings of the difficult words. The stories which were included in the Urdu and Persian books of Allama Iqbal have been inluded in the second part of the book. These stories have been written by Dr. Kh. Hamid Yazdani, Dr. Rafi-ud-Din Hashmi, Dr. Muhammad Riaz and Rahim Bux Shaheen. These stories are important in a way that they reveal the background of the poems. Therefore, these poems enhance the informative knowledge of both the children and the youth. In the third part of the book the easy translation of the last poem of "Javeed Nama" entitled "Khatab Bei Javed" has been given.

The price of the book is Rs.15/- which, in view of its beautiful get up, is reasonable. It contains 124 pages.

Dr. Nisar Ahmed Qureshi
Assistant Professor
Department of Urdu

Harf-e-Iqbal

Translated and compiled by

Latif Ahmed Khan Shirwani

Published by

Allama Iqbal Open University

Islamabad — Pakistan

Allama Iqbal Open University is the only institution of Pakistan that is catering to the needs of the students living in the farflung areas of the country. The University has prepared a number of coursebooks. Besides, the Iqbaliat Department of the University is involved in publishing books of permanent significance on Iqbal. *Harf-e-Iqbal* is the second book of this special publications series.

Allama Iqbal is a great national poet and thinker. His poetry and prose acted as a potent tradition in our art and literature. Iqbal's art and philosophy became a favourite topic of critics even in his life... So many books have been written on Iqbal and now he has become a part of our psyche. But this large number of books on Iqbal, at the same time, arouses a concern that the readers might not consult the actual writings of Iqbal and might just go through the explanatory books. This makes it obligatory to persuade people to the writings of Iqbal. Many institutions have done a commendable job in this regard, but we have still to do a lot. *Harf-e-Iqbal* published by Iqbaliat Department is in fact a national service.

Harf-e-Iqbal is a collection of Iqbal's speeches, statements and writings. The book was first published in 1945 at Lahore. In the same year the content of the book were published in English entitled *Speechs and Statements of Iqbal*, but the compiler used his pen name 'Shamlo'. Many research papers and books owe to Harf-e-Iqbal for their references.

Keeping in view its significance, the Allama Iqbal Open University has published this book. The book is quite helpful to comprehend the thought of Iqbal.

The contents of the book reveal the Iqbal's concept of the ideology of Pakistan and his deep love with Muslim nation and especially his concern for the social and economic

freedom of Muslim masses. He, quite realistically, suggested a way of solution to the Muslim. The articles like presidential speech at the Annual Meeting of All India Muslim League (1930), Qadiani and Jamhur Musalman and the replies to Jawahar Lal Nehru help removing quite a few misunderstandings. The articles also revel that Iqbal's interpretation of the ideology of Pakistan was different from one being presented by some of the so-called scholars of Iqbal. The efforts of the Vice-Chancellor of AIOU and Iqbaliat Department regarding publication of the series are appreciable.

The book is worth Rs.40/- which, in view of its beautiful get up, is reasonable. Every Pakistani is suggested to read this book.

Shahid Kaleem
Assistant Professor
Department of English

DATA BANK
STATISTICAL GLIMPSES
OF
ALLAMA IQBAL OPEN UNIVERSITY
by
Waqar Ahmed Siddiqi
Research & Statistical Centre
Allama Iqbal Open University
Islamabad — Pakistan

Established: 1974

Course enrolment from 1975 to October 1986 semester: 612,711

Courses offered from 1975 to October 1986 semester: ~~116~~ 116

GLIMPSES OF OCTOBER, 1986 SEMESTER

		Male	Female
Courses offered:		95	
Course enrolement:	65 811	~~55,500~~ 58 373	
Student enrolment:	Ap: 39509	~~30,393~~ 31 378	
Course enrolment: Overseas:		389	
Student enrolment: Overseas:		176	
Increase/decrease in course enrolment:		(−) 16% 11.30%	
Increase/decrease in student enrolment:		(−) 23% 20.58%	
Course participation ratio:		64%	36%
Student participation ratio:		63%	37%

Occupation ratio
Age

Field of Study	Enrolment	Full Credit	Half Credit	Total Courses
I Functional Courses (Non-credit)				
1. Agricultural courses	396	–	–	3
2. Elementary Arabic	564	–	–	1
3. Daftri Urdu for Federal Government Officers	567	–	–	1
II Functional Courses (Credit)				
1. Intermediate	3794	2	8	10
2. B.A.	4669	7	5	12
3. Secretarial Courses	572	–	8	8
III General Education				
1. Intermediate	19525	10	4	14
2. B.A.	11351	12	10	22
IV M.A. Educational Planning and Management	355	6	–	6
V Master of Business Administration	549	–	4	4
VI M.Sc. Pakistan Studies M.A. TEFL	560	–	4	4
VII Teacher Education				?
1. Primary Teaching Certificate (PTC-I)	7259	1	–	1
2. Primary Teaching Certificate (PTC-II)	2762	1	–	1
3. Certificate of Teaching (CT)	2123	–	5	5
4. Postgraduate Diploma in English Language Teaching	40	1	–	1
5. ATTC	?			
VIII Matric Courses	414 ✓	2	–	2

BASIC FUNCTIONAL EDUCATION PROGRAMME (BFEP)

Year	Cycle	Group	Learners	
			Male	Female
1986-87	VI	35	~~340~~ 38	~~300~~ 33
1986-87	VII	38	~~294~~ 444	~~362~~ 398
			634	662

1296

IX   IFL

MEDIA SUPPORT

NBC

1. Radio programmes presented upto Oct. 1986 semester: ~~5162~~ 5603
2. T.V. programmes presented upto Oct. 1986 semester: ~~880~~ 971
3. Radio programmes presented in Oct. 1986 semester: ~~434~~ 414
4. T.V. programmes presented in Oct. 1986 semester: 58 / 58

REGIONAL SERVICES

1. Regional Offices: ~~13~~ 13
2. Sub-regional Offices: 4 3
3. Study Centres: ~~356~~ 329
4. Model Study Centres: 64
5. Tutors: 1608
6. Regional Coordinating Offices: 4
7. ~~Regional Coordinators:~~ 4
8. Regional Libraries: 15

9. RCRCs
10. Open Learning Centres
11. VEET
12. On Book Corners

ALLAMA IQBAL OPEN UNIVERSITY

SPECIAL PUBLICATIONS

▪ Iqbal Bachchon Aur Nojawanon Kay Liye		
	(Urdu)	Rs.17.50
▪ Harf-e-Iqbal	(Urdu)	Rs.40.00
▪ Role of Distance Teaching System in Rural Development with special reference to AIOU		
	(English)	Rs.30.00
▪ Taqaareer Bayad-e-Iqbal	(Urdu)	Rs.18.00
▪ Tasheel-e-Khutbaat-e-Iqbal	(Urdu)	Rs.31.00
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