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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Views expressed in this Journal are those of authors and do not necessarily reflect the views of the Pakistan Journal of Distance Education.

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EDITORIAL

STUDENT ASSIGNMENT: A VITAL COMPONENT OF CONTINUOUS ASSESSMENT IN DISTANCE EDUCATION

Continuous assessment of student achievement through home assignments occupies a great significance in distance education. The pace of a student's learning is not only accelerated by a well structured assignment but that its questions help in providing invisible tutoring to distant learners in their self-study.

Assignments form a compulsory component in distance education. The primary motive though is continuous assessment of student's achievement yet the latent spirit is self-instructional as well. The questions contained in the assignments have close bearing on the specific units of a course which make a goading on the students to study the course thoroughly. The teaching learning process in this way goes on invisibly. Home work assignments thus act as an auxilliary to achieving success in the final examinations.

Assignments fill the vacuum caused by the absence of teachers in the system of distance of distance education. Face to face tutorial support, tutor guidance through correspondence, radio and televisions programmes also supplement the course in order to facilitate distant students but tutor marked assignments provide an accountability of a student's own learning capability, understanding and performance in the course. The assignments, therefore, serve some specific objectives by providing sustained and well distributed study of correspondence material; thorough and intensive reading of the course; motivation for developing good study habits in the students; diagnosis of student's weaknesses, clues to available knowledge and skills of the course; evaluation of student's performance and eventually preparing him for the final examination.

Obviously, therefore, preparation of assignment and the various searching questions in it place a high demand on the
teachers to undergo thorough study of the system, full comprehension of the course and awareness of the latest techniques involved in its preparation.

Student's persistence in distance education is largely tied to the nature of assignment which is a critical factor in determining turn-around time. And a reduced turn-around time, according Rekkedal's study, can lower the drop-out rates to a large extent. Turn-around time, in the above study was defined as "the time from the moment the student mails in the homework assignment for a study unit until it is received by the student with the tutors corrections and comments".

Interaction of students with the tutors through homework assignments for assessment is compulsory in most distance education system institutions. The number of assignments and the timing of assignments throughout a period of study are common significant aspects of integration when viewed from a distance education perspective.

The longer the turn around time, the less effective is the feed-back a tutor's corrections provide. Research indicates a rapid fall off of the effectiveness of feed-back after fifteen days.

Tutor's comments are the main, and possibly the only feedback that the student receive while he is studying a subject or a course. The importance of rapid responses to individual academic problems, therefore, cannot be over-emphasised.

While marking the assignment it is not just the marks that should count but the motive to build teaching into the comments. The aim should be to make the responses to the assignment work as supportive as possible, thus picking out those aspects of a student's work which display his strengths and encouraging him to build on these. It also means identifying his weaknesses and suggesting ways of improvement. It does not mean building up a false sense of academic brilliance—but when brutal honesty is necessary it should incorporate proposals for developing positive points and overcoming negative ones.

Dr. Ahmed Noor Khan
Editor

(vi)
A STUDY IN PERFORMANCE AND DURATION OF INSTRUCTIONAL PROCESS OF STUDENTS IN DISTANCE EDUCATION

By

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Statistician
Directorate of Correspondence Courses
Punjab University, Chandigarh
INDIA

ABSTRACT

A student can virtually join a course through Distance Education in the first five months of an academic session. The present study is an attempt to explore, which category of students seek enrolment at an early stage, thereby get maximum study in the instructional-process. Attempts have also been made to see the impact of students' duration of stay in the 'instructional-process' on their performance in the examinations. The results of the study seem to defy the prevalent conjectures.

Key Words: Exit-Point, Instructional-Process, Performance (successful-completion/non-completion): Runs-Test

INTRODUCTION

The growing desire among the masses for enhancing their academic qualifications, the scarcity of resources and many other factors paved the way for Distance Education. Punjab University was the 7th in India, to extend the avenues for higher education through correspondence. The Directorate of Correspondence Courses, Punjab University, like its counter parts in the country, provides instruction for the prescribed course-contents (syllabus) which is to be covered in a precise duration for a specific certificate/degree. Although the syllabus, the prescribed duration of the course, the minimum prescribed qualifications, etc. for the students in D.C.C. are the same as those have been desig-
ned for the students in the regular set-up, yet there are a wide range of dissimilarities between the students in the two streams. The more important of which is the actual duration of stay of the students in the 'Instructional-Process'. The students in the regular set-up who have a definite time of entering into the system and before reaching the 'exit-point' (the examinations) they remain in the 'instructional-process', which virtually has the same duration for almost all the students in the regular set-up.

The students in Distance Education in contrast have a varying duration of stay in the 'Instructional-Process'. Since a student can join the stream of Distance Education, virtually within a span of 5 months in an academic session, nonetheless the 'exit-point' for the students in Distance Education is common with that of those in the regular set-up.

The present attempt focusses on the 'entry-phenomenon' of the students of Distance Education as also on finding the impact of students' duration of stay in the 'instructional-process' on their annual-performance in the course they joined.

OBJECTIVES

The study has been carried out with the following broad objectives in view:

i. To find out, if students belonging to any specific category (based on sex, marital-status, employment-status or age-group) exhibit any pattern towards early late admission.

ii. To find out the impact of 'duration of stay in the instructional process' as the 'performance of students in the annual examination'.

DEFINITION & SCOPE

The age-groups of the students have been dichotomised into 'lower' and 'upper' age-groups. The 'lower age-group' has been assigned to the students who have not attained the age of 23 years, in the sense that other things being equal, the students with the lower-age could have joined the regular set-up. The

---

'upper age-group' has been assigned to the students who have at least attained the age of 23 years.

The performance of the students in the annual examinations has been understood in the sense of 'successful completion' or 'non-completion' of the course.

The present study has been confined to the sample of about 10% students who have completed the 'instructional-process' while undertaking their first year of post-graduation through the Directorate of Correspondence Courses, Punjab University, in the session 1985-86. For a student in Distance Education, the 'instructional-process' has been assumed to start with his/her joining the course.

**ANALYSIS**

The statistical analysis was carried out with the non-parametric technique of 'runs-test', with the assumption that the order of male/female; singles/marrieds; unemployed/employed and students in lower age-group/upper age-group in the queue for enrolment was random. The queue has been defined on the basis of the receipt of students' form for enrolment. The same test was also applied for the 'completion' and 'non-completion', on the basis of the dates of the enrolment of students.

The following five statistical hypothesis were tested for all the seven post-graduate courses viz. English, Hindi, Punjabi, Economics, History, Political Science and Public Administration:

- **H₀₁**: The order of 'males' and 'females' in the queue for enrolment was random.

- **H₀₂**: The order of 'single' and 'marrieds' in the queue for enrolment was random.

- **H₀₃**: The order of 'employed' and 'unemployed' in the queue for enrolment.

- **H₀₄**: The order of students' with lower-age' and with the upper age, in the queue enrolment was random.

- **H₀₅**: The order of 'completion' and 'non-completion' from the queue of enrolled was random.
Alternatively, these null-hypothesis can also be put in the terms of no-difference between males/females, singles/married, etc., in their duration of stay in the instructional-process.

In all 35 null-hypothesis were tested.

The following table gives course-wise information on the number of students in various categories and number of runs observed in the queue of enrolment. Where a run has been defined, on the basis of the order of receipt of enrolment forms from the students for a course, as succession of forms with identical characteristics (say male) which are preceded and followed by form(s) with different characteristics (i.e. female) or no form.

<table>
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<tbody>
<tr>
<td><strong>Number of Students</strong></td>
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<td></td>
</tr>
<tr>
<td>Females</td>
<td>47</td>
<td>26</td>
<td>13</td>
<td>17</td>
<td>8</td>
<td>15</td>
<td>36</td>
</tr>
<tr>
<td>Males</td>
<td>34</td>
<td>8</td>
<td>4</td>
<td>33</td>
<td>14</td>
<td>12</td>
<td>10</td>
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<td>Runs</td>
<td>31</td>
<td>14</td>
<td>5</td>
<td>22</td>
<td>11</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Singles</td>
<td>67</td>
<td>26</td>
<td>14</td>
<td>42</td>
<td>18</td>
<td>22</td>
<td>33</td>
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<tr>
<td>Marrieds</td>
<td>14</td>
<td>8</td>
<td>3</td>
<td>8</td>
<td>4</td>
<td>5</td>
<td>13</td>
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<tr>
<td>Runs</td>
<td>22</td>
<td>16</td>
<td>5</td>
<td>17</td>
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<td>Unemployed</td>
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<td>31</td>
<td>11</td>
<td>3</td>
<td>17</td>
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<td>7</td>
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<tr>
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<td>35</td>
<td>10</td>
<td>7</td>
<td>23</td>
<td>5</td>
<td>7</td>
<td>25</td>
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<td>Lower-age</td>
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<td>23</td>
<td>15</td>
<td>46</td>
<td>18</td>
<td>21</td>
<td>25</td>
</tr>
<tr>
<td>Upper-age</td>
<td>17</td>
<td>11</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>21</td>
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<td>22</td>
<td>14</td>
<td>5</td>
<td>10</td>
<td>7</td>
<td>8</td>
<td>22</td>
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<td>Completers</td>
<td>18</td>
<td>20</td>
<td>11</td>
<td>12</td>
<td>9</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>Non-completers</td>
<td>63</td>
<td>14</td>
<td>6</td>
<td>38</td>
<td>13</td>
<td>19</td>
<td>29</td>
</tr>
<tr>
<td>Runs</td>
<td>23</td>
<td>16</td>
<td>8</td>
<td>15</td>
<td>9</td>
<td>8</td>
<td>20</td>
</tr>
</tbody>
</table>
While for the small samples the number of observed runs (R) have directly been compared with the tabulated values, whereas in the case of large samples the Z scores have been calculated by the following statistics:

\[
Z = \frac{(R+\frac{1}{2}) - \text{Mean of } R \text{ under } H_0}{\text{Standard deviation of } R \text{ under } H_0}
\]

Where, under \( H_0 \), for \( n_1 \) and \( n_2 \), the number of students with two characteristics in a category,

Mean of \( R = \frac{2n_1 n_2}{n_1 + n_2} + 1 \)

and variance of \( R = \frac{2n_1 n_2 (2n_1 n_2 - n_1 - n_2)}{(n_1 + n_2)^2 (n_1 + n_2 - 1)} \)

Table No. 2 gives course-wise and categories-wise calculated values of Z score in the case of large samples:

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Sex-wise</td>
<td>2.08*</td>
<td>0.62</td>
<td>--</td>
<td>0.30</td>
<td>--</td>
<td>--</td>
<td>0.38</td>
</tr>
<tr>
<td>Marital-status</td>
<td>0.65</td>
<td>1.60</td>
<td>--</td>
<td>1.68</td>
<td>--</td>
<td>--</td>
<td>0.68</td>
</tr>
<tr>
<td>Employment status</td>
<td>0.89</td>
<td>1.75</td>
<td>--</td>
<td>0.02</td>
<td>--</td>
<td>--</td>
<td>0.51</td>
</tr>
<tr>
<td>Age-wise</td>
<td>1.80</td>
<td>0.15</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.40</td>
</tr>
<tr>
<td>Performance</td>
<td>1.79</td>
<td>0.35</td>
<td>--</td>
<td>1.48</td>
<td>--</td>
<td>--</td>
<td>0.62</td>
</tr>
</tbody>
</table>

In all the cases, except one, the statistical null-hypothesis of randomness was not rejected. It is only in the case of enrolment in the course of English that a sex-wise pattern has been observed towards an early or late admission.

*Indicate Significant Value.

*Siegel, S. Non-parametric Statistics fo Behavioural Sciences.
DISCUSSION

Notwithstanding the limitation arising out of the restricted sample space and dichotomizing the two variables viz., 'age' and 'performance', the study provides some interesting results.

The above analysis suggests that it cannot be said who among 'males' or 'females' decide to join the stream of Distance Education at an early stage or late stage in an academic session. There is, however, an evidence suggesting that for the course in English, 'female' students seem to join the Distance Education at a late stage than 'male' students in an academic session. It might be because the 'female' students after graduation 'wait and watch', for job or marital prospects, before deciding to continue with their education, late in an academic session.

A corollary to the common belief that, since Distance Education provides a second chance to those who due to domestic problems or being in-service could not pursue their education, so, the students handicapped by some compulsions, domestic or otherwise, would, otherwise be eagerly waiting for the commencement of an academic session to join some course at earliest. The study, however, provides no evidence to support the conjecture, that is, students in no category, what so ever based on marital-status, employment status or age-group, show any inclination towards an early or late admission in the course of their choice through Distance Education.

As regard the 'performance' of the students with respect to the 'duration' of their stay in the 'instructional-process' the study does not lead to the rejection of the null-hypothesis of 'randomness'. Thus, the 'successful completion' or 'non-completion' is not explainable by an early or late admission. In other words, the longer 'duration' of stay of students in the 'instructional-process' does not guarantee a 'successful completion' of the course.

The above phenomenon, regarding non-existence of any relationship between performance of students and their stay in the instructional process, besides seeking an explanation on the psychological make-up of the students, also seems to challenge the existing structural-functional aspects of the Distance Education.

It may be the quality of instructional material that is to be cared for or it may be the despatch system that requires
monitoring. In any case the study calls for a probe into the instructional-process vis-a-vis the principles of learning, which in a way has also been pointed out by Gupta (1978), Biswal (1979), Dutt (1985), Mulay (1986) etc. that the instructional-material supplied to students lack pedagogy of self-learning.

REFERENCES

1. Biswal, B.N. (1979), A Study of Correspondence Education in India. Ph.D. Dissertation, M.S. University, Baroda.


3. Gupta, M. L. (1978), Place of Correspondence Education in India Economy, M.Phil. Dissertation, University of Delhi.

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Issue No. II

Allama Iqbal Open University
Islamabad — Pakistan
ROLE OF RADIO AND T.V. IN DISTANCE EDUCATION SYSTEM OF
ALLAMA IQBAL OPEN UNIVERSITY

BY

Dr. Shaukat Ali Siddiqui,
Dean, Faculty of Education

1. Introduction

The inability of the formal system of education in providing necessary facilities to masses of our people has been widely acknowledged by the policy makers and planners. The situation has necessitated the need for serious experimentation with other approaches and strategies to find out more viable alternatives to the formal system of education. Distance education, through correspondence, radio, T.V., tutorial sessions and other innovative techniques is being considered as a possible alternative for providing educational facilities to the people, particularly the female population, disadvantaged groups and those living in the remote rural area of the country in the shortest possible time.

The distance education approach seems to suit more to the needs and conditions of developing countries of the world which are facing the resource constraint problem amidst rising aspirations of people for better education. This approach liberates the students from the constraints of not only time and space, but also of age in most of the cases, which are so rigidly associated with the conventional system. It allows reasonable flexibility in terms of timing and location of activities pertaining to their studies. Another reason for wide-scale adoption of distance education is the expanding task, the educators are now faced with. This is based on the fact that there are more people to be educated more information to be disseminated and probably far less time is available to meet the challenges. It has become evident that the conventional system of education, though very effective in an institutional set-up, is unable to cope with the complexity and magnitude of the problem. For one thing, it is too
rigid and too institutionalised. Moreover, it is undemocratic, considering the low proportion of those who can receive formal education compared to those who cannot, and it is quite expensive also. As we understand it today, a system of distance education should aim at extending the facilities of education to all individuals regardless of who and where they are; hence the use of the term 'open' for this system. It is anticipated that by the year 2000 much of the teaching in the world would be conducted through an appropriate mixture of audio-visual methodologies. In fact it would not be surprising to note that the technology of teaching/learning will entirely be based on the use of highly sophisticated media and other modes of distance education.

2. Allama Iqbal Open University

Established in 1974 (then known as People's Open University), through an Act of the Parliament as the first distance education institution of the country, the University has now assumed a crucial role in the educational development of the country. This role is widely acknowledged and appreciated both at the policy and planning levels. In the country as more and more students are seeking admission in various AIOU programmes. Presently, the University is offering around 160 courses in general, teacher, functional and advanced professional education fields to around 75,000 students in a typical Semester. With the launching of 3 M.A programme (in EPM, Pakistan Studies and Business Administration), 2 Diploma programmes (in English Language Teaching and EPM) and 3 M.Phil level programmes (in Iqbaliat, Urdu and Education), the role of AIOU in higher education system of the country has assumed new proportions. The University is also planning to extend its M.Phil level programmes to Ph.D level in various specialisations in the near future. According to the Act of the University the major functions of the University are as follow:

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 masses 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 distinc-
tions.

3 Teaching System, Methods and Media

The Allama Iqbal Open University being a distance education
institution relies on all varieties of available media to reach
its students in an effective manner. The main components of its
multi media package are the following:-

a. Correspondence materials including self-learning study
units and supplementary study materials,

b. Radio and television broadcasts generally related to
the study materials of the package,

c. Non broadcast media including slides, audio cassettes,
fillip charts, and leaflets (for basic functional and
literacy level courses),

d. Periodical tutorial instruction through contact ses-
sions and guidance at study centres,

e. Group training workshops for advanced level courses/
programmes, generally at M.A./M.Phil and Diploma le-
vels,

f. Course assignments as an instruments of regular ins-
truction, continuous assessment and general guidance.

4. Role of Radio & Television in AIOU Distance Education
System.

Selection of appropriate media for a learning package is a
complex decision influenced by a variety of considerations, such
as the specific learning objectives of the unit, the nature of
subject matter, learner's background and experiences and the
general characteristics of the target group, as well as practical
constraints including availability of infrastructure and finan-
cial resources. Like any other developing country, media experts
in Pakistan are exploring the use of radio and television in
education through careful planning and experimentation. The radio coverage in Pakistan is almost around 100% while T.V. coverage is in the vicinity of about 75% and it is expanding at a very fast rate. The availability of access to T.V. is, however, not beyond 20% (according to most optimistic estimates in 1986), as most of the people do not possess a T.V. set and an institutionalised system of community viewing centres has not been created at a massive level. This restricts the use of television at large scale. Many experiments are underway to use radio and television to supplement both formal and non formal educational programmes in the country. The dispersal of student groups of AIOU in about 30 regions, and sub-regions and remote, far flung areas of the country has necessitated use of radio and television media to reach around 75,000 students (in a typical semester) in the shortest possible time. During the last 10 years, the University has produced the following programmes:

### Television

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<tr>
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<tr>
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<td>Television Programmes</td>
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<tr>
<td>2</td>
<td>Video Programmes (Non-broadcast)</td>
<td>25</td>
</tr>
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<td></td>
<td><strong>Total:</strong></td>
<td><strong>251</strong></td>
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### Radio

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</tr>
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<tr>
<td>3</td>
<td>Radio Programmes</td>
<td>1372</td>
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<tr>
<td>4</td>
<td>Non-Broadcast Audio Cassette Programmes</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td><strong>Total:</strong></td>
<td><strong>1504</strong></td>
</tr>
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### Other Audio Visual Programmes

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During the Spring Semester of 1988, AIOU transmitted 520 radio programmes and 66 T.V. programmes. The television programmes are transmitted at the national network from all the stations while the radio programmes are transmitted from the selected stations.

To conceive, plan, produce and implement the media support
for AIOU programmes, the Institute of Educational Technology (IET) was established in 1974. The Institute has its own building, fully equipped radio and television studios and trained professional and technical staff.

Following are the main functions of the Institute:-

a. To develop and produce radio and television programmes for various courses of the University,

b. To develop audio-cassettes and illustrated audiovisual books for University students as an aid in learning,

c. To assist the University's regional offices and study centres in proper utilisation and maintenance of their audio-visual equipment,

d. To guide and advise other governmental and non-governmental agencies in the development of their broadcast and non-broadcast educational materials,

e. To enter into contract with other relevant agencies for the development and production of such materials; and

f. To initiate and conduct research in the area of Educational Technology.

The Allama Iqbal Open University does not any more depend upon P.B.C. (Pakistan Broadcasting Corporation) and P.T.C. (Pakistan Television Corporation) facilities for the production of its programmes, as it has its own fully equipped radio and television studios. The quality of these programmes is fully comparable with the relevant programmes of P.B.C and P.T.C. However, AIOU has to coordinate its activities with PBC and PTC, for effective scheduling of its transmission programmes. This results in a new set of problems which, at times, create very difficult position for the University as convenient timings are not made available to the University keeping in view the differential needs of its target groups. It is hoped that with the creation of second channel of television in the country, the burden on the present channel will be reduced substantially and AIOU would be in a position to obtain proper time schedule on the new channel. It is likely to be operative from 1990.
5. EVALUATION

In order to evaluate the effectiveness of its radio and television programmes, AIOU through its Research and Statistical Centre, conducted a comprehensive study in 1984. Data for the study was collected from 1382 students of AIOU enrolled during four Semesters between April, 1982 to October, 1983. Majority of the student respondent (58%) belonged to rural areas of the country. The study showed that majority of the students enrolled with AIOU belonged to rural areas, 1/3rd of its students comprised female population and 2/3rd of its students were employed in various government and non-government organizations/agencies.

Following were the specific findings of the study about the radio and television programmes of AIOU:-

About Radio

1. Radio sets were available to more than 80% of the total participants but only 45% found it effective and helpful in the study. Nearly 40% could not listen the programmes because of the unsuitable time schedule and 22% could not listen due to disturbing transmission. Also 14% did not have access to radio sets.

2. Radio programmes were rated as good by 40%. 52% considered them suitable and only 3% observed that they were not suitable.

3. Radio programmes were found easy to understand by 79% while 21% found it difficult.

4. The respondents identified some significant problems in the use of radio programme, the most frequent being a) unsuitable time schedule, b) lesson presentation without question answer session, c) lesson presentation without giving some slow pause, enabling the viewers to make notes.

5. The students offered a good number of suggestions, the most frequent were a) the radio programmes should be broadcast in greater detail and the language used should be easy to understand, b) programmes should be on the "air" from all radio stations of the country on medium and short wave, c) the teacher should speak with slow pause to help students take down notes.
About Television

1. Television sets were not available to 55% students while 45% students had their own T.V. sets. Of the total respondents who had no T.V. sets, 38% watched on their friend's T.V.

2. The T.V. programmes, presented by AIOU were appreciated by 90% of them said that the voice of the teacher was good and effective. 89% said that the style of the teacher was interesting and lessons were full of information.

3. The viewers identified certain problems in television programmes which were presented according to predistributed schedule, the most frequent being non-availability of T.V. sets and unsuitable time for viewing the programmes.

4. Most of the viewers expressed their opinion that the T.V. programmes should be presented on Fridays between 2 to 7 P.M.

6. Training Needs of AIOU

With the rapid increase of role of radio and television programmes in the distance teaching system of AIOU, the need for providing pre-service and inservice training to professional, para professional and technical staff of the University has increased manifold. These training needs are met both through the internal and external resources available to the University. But these resources are hardly sufficient to meet these needs as more and more new staff is joining the University both on the academic and technical sides.

Since the Allama Iqbal Open University is a media-based distance education institution, it has got a considerably large variety of personnel engaged in different types of activities related to its distance education programme.

The major categories of personnel involved in different processes at various levels may be enumerated as follows:-

a. Policy makers, planners and administrators,
b. Curriculum planners and subject specialistic etc.,
c. Course Coordinators,
d. Tutors/Study Centre Coordinators,
e. Material writers and reviewers,
f. Editors,
g. Educational technologists,
h. Educational radio and T.V. Producers,
i. Non-broadcast media Producers,
j. Presenters,
k. Script writers,
l. Designers and illustrators,
m. Engineers and maintenance staff,
n. Paper setters and examiners,
o. Researchers-programme evaluators,
p. Group leaders/resource persons.

The level of training required for various categories of personnel would be different in scope and extent. The policy makers, planners and senior administrators of the University hierarchy would require training in media only at appreciation and awareness levels, while the radio/TV producers and technical staff would require training at more intensive levels. Unfortunately the academic staff placed in various faculties of the University is least exposed to the techniques of integrating effective use of media as part of their learning packages. It has, therefore, resulted in a communication gap between the academic staff which restricts its activities to the preparation of written course materials and depends heavily on the professional producers for media production and the IET administration which desires that the academic staff should be in a position to present an outline of their media programmes which could lead to the production of a technical script. It seems to be of utmost importance that the course coordinators, unit writers, members of course teams and other academic staff of the University should be regularly exposed to the potential use of media and provided training at adequate level. It is apprehended that lack of training in media for the academic staff can widen gap of communication between the two groups, who have common objective in view.

It is necessary to involve both the groups in i.e. the 'academics' and the 'producers' in workshops and forums to resolve the situation. Such workshops would certainly enable both the groups to appreciate the viewpoints and limitations of each other and help them to work out a common strategy to promote the use of media in a more effective and efficient manner.
7. Major Problems and Issues

1. **Coordination:** Effective use of media requires close collaboration of University with the relevant Ministries (e.g. Education and Information) and broadcasting agencies, such as Radio and Television Corporations. At times, it creates problems as different agencies are accountable to their own lines of authorities and there is no agency which could effectively coordinate the autonomous organizations at the national level.

2. **Scheduling:** Generally at the time of establishment of a media organization, three major functions are assigned in the charter. These functions are Information, Education and Recreation. With the passage of time, however, recreation occupies prime position and education is relegated to lowest priority. Moreover, the perception of media agencies about "educational" programmes widely differs from the University. A very broad definition of "education" is adopted and a host of common interest programmes are broadcast/telecast while "instructional" component is reduced to bare minimum in actual operation. A straight teaching programme related to an instructional unit is considered "dreary" and is shifted to odd hours so that schedule of popular recreational programmes remains undisturbed. Urgent need has been felt to have separate channels of radio/TV exclusively for educational programmes with independent authorities comprising media and educational organizations on their governing boards.

3. **Lack of Communication between academic and Media Staff**
Because of their difference of background and training, the academic and production staff differ in their perception about role of media in education. Sometimes this affects their working relationships and results in communication gap. Need has, therefore, been felt to institutionalise the concept of course team involving both the academic and media personnel right from the conception of course through various stages of development, production, implementation and evaluation. The academic staff needs to be trained in basic media techniques so as to enable them to appreciate the potentials and limitations of media in their proper perspective.
4. **Updating and maintenance of equipment:** Generally the developing countries receive advanced technological equipment through some international assistance programme. This is considered to be a one-shot operation through which equipment is imported and installed according to the Project requirements. There is hardly any provision for bringing in new equipment as and when the need arises. The agencies tend to withdraw mid way and made the operational/maintenance aspects as the responsibility of the recipient countries. Unfortunately, these countries do not possess adequate financial resources (in foreign exchange) to update and modernize their equipment keeping in view the technological developments which are fast taking place in the modern world. There are many examples of equipment worth millions of dollars lying unused because of proper updating and maintenance.

5. **Continuous inservice training:** Technology is developing very fast in the modern world. Unfortunately, the developing countries depend very heavily on the developed countries for training their staff in media techniques. This training is provided to a "minimum critical staff" at the time of launching the Project. It is assumed that the staff trained in new technological devices will multiply their training skills through apprenticeship training to other staff engaged by the organization. Whereas this may happen in a few exceptional situations, generally the senior staff is so heavily pre-occupied in their multifarious assignments that they cannot attend to the training requirements of the newly recruited staff. The senior staff also needs opportunities for inservice training at regular intervals. The training system needs to be institutionalised as an ongoing component of the media projects. Facilities for inservice training need to be created within the developing countries at regional or sub-regional levels so as to being in self sufficiency in training requirements within the region.

It is indeed beartening to note that the Asian Open Universities have recently formed an Association of Asian Open Universities (A.A.O.U.) with its regional centre located at the Sukhothai Thamathirat Open University in Bangkok. It is hoped that the above association through its regional centre would be in a position to resolve many of the media problems faced by the member Universities.
NIGERIA'S FIRST DISTANCE EDUCATION PROGRAMME: AN ENTERPRISE FOR THE FORGOTTEN TEACHER

BY

Adjai N.D. Robinson

Ahmadu Bello University, right from its inception on October 4, 1982 has always paid attention to serve the people and meet the need to produce high level manpower to man the country's administration and explore its vast resources. Administration meets the needs of both government and business in Nigeria.

The Institute of Education was established in 1965 and it has always acted in an advisory and consultative capacity to Ministries of Education of the Northern States. It is also concerned with the preparation of teachers at various levels. Apart from running two colleges of education, the Institute started off by running short courses for teachers specially Vocation courses for pass on to practising teachers any innovations relevant and worthy of adaptation in schools. (A. Babs Fefunwa et al 1973 195.) Three years after this venture, the Institute of Education started what eventually came to be the first distance education teacher training programme in Nigeria. It should be pointed out that the Institute of Education had earlier started the Teacher In-service Education Programme (TISEP) to help unqualified teachers to pass the Grade-II Teachers' Examination (which is now the least qualification for a primary school teacher in Nigeria) and the Primary Education Improvement Project (PEIP) which was also supported to train Mobile Teacher Trainers who were in turn expected to help practising teachers to perform more effectively in the primary school.

Primary School Population Explosion

Figures available to us show that with the introduction of the Universal Free Primary Education(UPE) Scheme in 1976, the enrolment of primary school pupils rose from two million to 11.5
million in 1980, and the total number of primary school teacher was 130,000 with only about 230 teacher training institutions in the country. 53% of this teaching force was untrained and 80% unqualified and even if they desired the training, the teacher training institutions simply could not cope with the number of applicants. To make matters worse it was estimated then that by 1980, 235,000 teachers rising to 290,000 by 1982 would have been needed to cope with Nigeria's primary school population expansion. This is beside the fact that an additional 8,000 teacher educators were needed to undertake the training. This was enough reason for institutions of higher learning to help in whatever way they could to alleviate the dearth of trained teachers that faced the nation. The 70's therefore saw the inception of the National Teachers' Institute (1974) and the Ahmadu Bello University Institute of Education's Nigeria Certificate in Education by Correspondence (NCE/cc) programme 1976.

Institutions of Teacher Education, University Institutes of Education and Faculties of Education were called to examine the current demand on education and provide a curriculum relevant and functional within the current trends of development. In addition to providing a feasible curriculum, the Institute of Education picked up the challenge but the impact was not felt until 1981 when the very first Nigeria Certificate in Education (NCE) students graduated from the NCE/cc programme.

A Brief History of the Nigeria Certificate in Education by Correspondence.

As far back as 1960s, Sir Eric Ashby had stated that 'We cannot but, condemn a system which leaves the grade-II teacher with little opportunity for further formal study' (Ashby 1960. 16). The grade-II teacher, important as he/she been to the education of Nigerian Primary School children was compelled to enjoy no other fruits of his labours but his salary and fringe benefits. They had long been neglected to the extent that they mar- ted the case made for them by Sir Eric Ashby in 1960 and the Institute of Education, in 1975 set up a committee to find ways and means to alleviate the situation.

Nigeria had just gone through a period of Civil Was Students as well as pupils were not only displaced but quite a number of teachers had to lay down their chalk and duster to take up arms to defend whichever side they belonged. A few years after the end of the War came the Universal Free Primary Education Scheme. These and a few other factors culminated in the mass
importation of foreign teachers and the number of untrained Nigerian teachers rose to 65,000 or 60% as compared with 1,827 in Gabon and 40% in Ghana (ECA Report 1968.12). The Institute of Education thus came up with the programme of training primary school teachers on the job, thus avoiding worsening the situation further by removing the teachers from their classrooms. This then was the beginning of the first formal distance education programme in teacher training in Nigeria. It started in July, 1976 with ninety-three students and its primary objective was to train and upgrade Grade-II teachers who were fully engaged in teaching. This broad objective had been expanded upon by Robinson (1981.12) in a paper presented to the Third NCE English Conference. In detail the objectives can be stated as follows:

i. To make academic and professional training available to a large number of primary school teachers.

ii. To bring together teachers and high level educators for time to time in an academic atmosphere.

iii. To improve the skills in teaching of primary school teachers and consequently increase their capacity for good teaching.

iv. To increase the confidence level in primary school teachers.

v. To equip primary school teachers for any further training in Primary Education.

It should be obvious that these objectives could not be met effectively through short in-service courses alone, so the in-service nature was made richer by the addition of correspondence education methods. The NCE/cc programme, apart from being in tune and in spirit with the current developments in education in Nigeria, it meet all the requirements of an in-service teacher education which leads to certificate attainment, further advancement and professional competence (Agboola 1986. 15).

In addition, the NCE/cc as an in-service programme apart from offering activities that were geared towards helping teachers to remedy their various deficiencies arising from technological, social and cultural changes, helped them grow on the job as they performed their roles of educating the children in their care.
From a mere ninety-three students in 1976 there are in the space of ten years, an approximate 1,600.

The mode of teaching in the NCE/cc programme is by face-to-face teaching during the Contact Session when all the students are brought together in some of Ahmadu Bello University's campuses. Teaching during the correspondence sessions is by means of instructional materials termed study guides which are written by experts in the various subjects in the Institute of Education's full-time NCE programmes.

At this point it should be made clear that the NCE/cc programme is not a basic teacher training programme. The candidates for admission must be teaching and should hope to be doing so throughout the duration of their training. Personnel in fields related to teaching and who had obtained the Grade-II Teachers Certificate are qualified to apply. It is also required of those who apply to have had at least three years' continuous teaching experience, and they must have had a credit, or merit in the major subject subject they elect to study. In spite of these, and in order not to shut out teachers who may have been performing well in the classroom but were unfortunate not to have acquired a credit or merit but who managed to pass the Grade-II Examination, some consideration is given to candidates who may have been deemed to have a great commitment to teaching but who may have had absolutely no hope to improve on their qualifications. This kind of candidate thus belongs to one category of the forgotten teacher who is catered for by the NCE/cc.

Because of the entry requirements of the NCE/cc programme and for the fact that the programme offers on-the-job training, most of the students belong to the 30-35 age group. A few others are above 45 years (Giwu 1980, Ayeni 1983). Over 80% of NCE/cc students are married and quite a number have to cope with the demand of the extended family. Although to some extent families are supportive of their members when they are undergoing the course, about 20% of female students are like abandoned by their husbands who may not want them to acquire any further education or who may not want to shoulder the responsibility of looking after the children when their wives are away for the ten-week Contact Session.

The distance education student is 'the lonely' student. For the greater part of his training he is remote from his lectures, his fellow students, and instructional institutions like the library or educational resource centres, education broadcasts may
be at the time of day when he is in school teaching and so is deprived of the opportunity of listening or watching the programmes on the air.

Mitigating the Unhealthy Feeling

For learning to take place in any programme, conditions must be favourable. It has therefore been one of the major tasks of the Nigeria Certificate in Education by Correspondence programme to give a full scale orientation to its new students during the first week of their first Contact Session. As this particular distance education programme does not have a complete teaching staff of its own, time is taken to brief all teaching staff in a general forum which is reinforced by briefings in subject departmental meetings. To put the students further at ease, the whole of the first Contact Session is generally regarded as an introductory term and therefore the intensity of study which is expected in a ten-week Contact Session does not usually start until the second Contact Session.

The student's career in distance education starts with the first Contact Session. The programme therefore sees to it that contact with instructional materials, and is encouraged informally to join small study groups. A climax to the orientation exercise is that new students are given two books that are valuable to them in their new venture. The books are How to Study and How to Write Correspondence Assignments.

Although it is not the policy of the programme to interfere in family affairs, there have been cases where NCE/cc staff have had to counsel husbands so as to enable them appreciate the enormous responsibility their wives carry when studying as distance education students. In not a few cases letters have had to be written to Local Education Authorities to support their teachers who are in the programme. It is very reassuring to student when their lecturers go out into the field during Correspondence Session to supervise and assess them. Added to this is the fact that many a time when lecturers go out to supervise they have had to make contact with the headmaster, the education secretary and key members of the community to help the students get things done. For instance, the lecturer may have to talk to the headmaster to provide certain instructional materials; he may even have to meet the education secretary on this very issue.

The bulk of the NCE/cc students teach in the rural areas where there are no telephones but there are postal services
however skeletal. Student's assignments are returned to them through the post and it is necessary for markers comments, criticisms, etc. to be clear enough to hold some meaning for the students. Prompt response to students letters also helps in reducing their feeling of loneliness and abandonment.

A Rejenevating Curriculum

Sears in the Journal of Curriculum Theorizing states:

A vision of a better social order and a commitment to pursue pedagogical, organizational, and curriculum strategies directed towards the realization of that vision ought to be the hallmark of that course of study. If we are genuinely committed to the construction of a more equitable and human social structure, then schooling and teaching training must be reconceptualized conjointly at the philosophical and practical levels (Summer 1985.30).

From the way the NCE/cc curriculum has been made to function, Sears description fits the modus operandi of the NCE/cc programmes training quite well. It is likely that the Institute of Education had a vision of a better social order for teachers in 1975 and that brought about the conception of the idea of training technique.

The curricular strategies were designed so as to upgrade the teacher on the job without actually removing him from the classroom which becomes his laboratory during the process of his training.

A tuning to the expanding needs of education in a developing country with a growing economy, the curriculum has been changed from time to time to keep in step with current developments. There have been marked improvements in the range of subjects in the curriculum from what they were at the inception. The following constituted the entire curriculum then:

a. General Education (Major)
b. Practical Teaching (Major)
c. Major Subject-I (Primary Education)
d. Major Subject-II (Elective)
e. General English (minor)
f. Pre-adolescent Psychology (Minor)
The first improvement on that curriculum came in 1979 when General English was considered a compulsory minor subject for every student. Both General English and Creative Arts occupied only the first two years of the student's training. The major subject curriculum was also expanded to cover the following with Education and Primary Education as compulsory majors:

- English (Language and Literature);
- Geography;
- History;
- Mathematics;
- Physical and Health Education;
- Religious Knowledge (Christian);
- Religious Knowledge (Islamic).

In 1981 Basic Physical and Health Education was added as a minor subject to be followed by the addition of Library Science in 1984. Primary Education was also changed in name and status to Primary Education studies.

Each major subject has a methodology component, apart from the emphasis placed on the academic element. This means that the affective as well as the cognitive domain is taken care of within each major subject. In addition, however, Primary Education Studies, which comprises of sub-components in Language Arts, Primary Mathematics, Primary Science and social Studies pay great attention to the teaching aspects of the key subjects in primary schools. An important expansion of the curriculum came in 1982 when Science Education was introduced into the curriculum. The Nigerian nation had been crying for the development of Science and Technology. In answer to this, the Institute of Education realizing that this should start at the primary school, gave primary school teachers the opportunity to train in Science so as to prepare children for further studies in Science and Technology. The most recent expansion of the NCE/cc curriculum is in the area of Languages and Mathematics. Hitherto, the sole language in the curriculum had been English; no Nigerian language was offered. As of 1985, Hausa, the predominant language of the North is now being taught to a small batch of students numbering twelve. Students did not find it easy with the various Science Education components. This was because their foundation in Mathematics was weak. A few actually attempted to drop out but were counselled and encouraged to go on. To encourage more students to study Science Education, Mathematics for Science was introduced into the programme of studies last year (1985).

The development of the NCE/cc curriculum over the year shows that indeed, not only is the NCE/cc programme adjusting to the needs and development of the society, it is catering in an ever increasing manner for the wide range of teachers who would
have had no hope of improving their lot and thus contribute more efficiently to the training and development of Nigeria's children.

CONCLUSION

I will like to conclude this paper by stating that in all developing countries in Africa in general, and in Nigeria in particular, there is always a need to bring a renaissance to teacher education to make education keep pace with the rapid developments that take place in other spheres of our lives. The teaching profession has been at its lowest ebb for quite some time and there is a need for it to be rejuvenated to make it live up to expectation and thus contribute effectively to the onward march of progress. To be able to achieve this, the World Council for Curriculum and Instruction can, among other things, do the following:

1. Make a study of Distance Teacher Education Programmes in order to co-ordinate the effects of its member organizations and give advice when necessary.

ii. Help member organizations to determine the utility of courses offered as they relate to the on-the-job trainee, the distance education teacher trainer, and in general the education system of the various countries.

iii. Start exploring the possibility of creating an international standardization and monitoring organ for distance education curricula.

Finally, let me state that it is our fervent hope that the time is at hand when it can be said without any shade of doubt that pedagogical strategies around the free world are bringing a renaissance to humanity.

REFERENCES


OCCUPATIONAL BENEFITS OF
OPEN UNIVERSITY EDUCATION

By

Preecha Kampimpakora

INTRODUCTION

1. Background

Sukhothai Thammathirat Open University was established by Royal Decree, under the Sukhothai Thammathirat University Act, on 5 September, 1978. It was the first university in the Asia Pacific Region to offer distance education through the use of integrated media. There are many major factors in the establishment of the University. The first was to provide an economical and efficient way of responding to the needs of higher education. The second was to provide an alternative for those who did not have the opportunity to study at the tertiary level and to expand educational opportunities for working people by allowing them enrollment without having to give up their work or separate their work from their studies. By this means, the range of democracy in education was broadened. The third factor was to introduce and apply the concept of life-long education because admission to the university places no restrictions on sex, profession or age. Anybody possessing the required pre-requisites can apply for admission to the university. From these three factors it can be seen that University's main target groups are rural dwellers rather than city or urban dwellers, and in particular, working people wishing to upgrade personal and professional knowledge.

The law has stipulated that the University will not have its own classrooms, but will rely on regional and provincial centres. Cooperation has been received and universities, teachers' colleges and secondary schools act as Educational Service Centres for students of the University. The University provides instruction through the distance teaching/learning system and
uses integrated media comprising printed media, which is the main media, radio and television broadcasts, video and cassette tapes containing course materials, and tutorials. The University offers instruction at both degree level and the certificate level and at present has 10 Schools of Studies. These are the School of Educational Studies, School of Liberal Arts, School of Management Science, School of Law, School of Health Science, School of Economics, School of Home Economics, School of Political Sciences, School of Agricultural Extentions and Cooperatives and the School of Communication Arts. In the year 1985 there were a total number of 300,000 students registered at the University. As a state university, Sukhothai Thammathirat Open University must operate in the same way as conventional universities. It is under the jurisdiction of the Ministry of University Affairs and has the same rights and privileges as other universities in that it administers academic work and offers degrees.

2.1 The Point of Issue

Sukhothai Thammathirat Open University received its first batch of students in December, 1980. These students studied under a continuing education program, B.A. level, in the School of Educational Studies and the School of Management Science. Some of the students from this batch completed their studies, according to schedule, in 1982.

It was stipulated that persons applying for admission to these two schools had to be working people and in the event that the nature of their work corresponded with the field of their studies the studies had to be focussed on upgrading their professional knowledge and skills. In the event that the programme of studies did not correspond with the nature of their employment, graduates of these programmes would be able to use the knowledge gained to change their employment after completing their studies. Furthermore, Sukhothai Thammathirat Open University employs the distance learning system with emphasis on students studying on their own without having to enter a conventional classroom. As a result of the aforementioned requirements certain problems arose, such as the expectations of the students studying in these programs and the degree to which the programmes responded to their expectations, the degree to which they were able to apply the knowledge gained from studying at STOU to their profession, changes in the nature and place of employment of the graduates and certificate graduates and if transfers to rural and city areas were experienced. The answers to these problems were obtained by conducting follow-up research on persons completing
their studies at Sukhothai Thammathirat Open University and related persons.

RESEARCH METHOD

2.1 Problems

Graduates for the academic year 1982 and 1983, including graduates from the School of Educational Studies at both the degree and certificate levels, students majoring in Elementary Education, Secondary Education and Education Administration, certificate graduates of the Certificate in Teaching Profession Programme, certificate graduates of the Construction Management Programme the School of Management Science, and Certificate graduates of the Local Administration, Programme School of Political Science, were all working people. Consequently, many interesting questions arose. These include:

1. Did each course reach its objectives and respond to the needs of the students?

2. Have the students been able to apply the knowledge which they gained from their studies to the work?

3. Have the students experienced any changes in their employment, with regards to both place of employment and nature of their duties?

4. Should any changes be made to the courses or programs under which the students studied? If so, in which way and to what extent?

2.2 Objectives of the Research

2.2.1 General Objectives

i. To evaluate the degree of success of the objectives of courses for each program producing graduates.

ii. To assess the occupational benefits received by graduates and certificate graduates of each programme.

iii. To study recommendations and suggestions for upgrading and improving each programme of study and the manner in which it is administered.
2.2.2 **Specific Objectives**

This study of graduates and certificate graduates of each programme of study had the following specific objectives:

i. To analyse basic data on graduates of each programme of study.

ii. To study the graduates' views on the distance learning system.

iii. To study the expectations of graduates studying in each programme of study.

iv. To study the actual benefits which graduates felt they received after completing their programme of study.

v. To do an analytical study of changes occurring in the nature of graduates work responsibilities and place of work.

vi. To do an analytical study of the attitudes of the graduates towards the programme of studies and the manner in which the university administers each programme.

2.3 **Limitations of Study**

This study was conducted by collecting data from graduates of the School of Educational Studies and the School of Management Science admitted during the academic year 1980 and graduating in the academic years 1982 and 1983, together with certificate graduates completing the Certificate in Teaching Profession Programme and the Certificate in Local Administration Programme in the academic years 1982 and 1983.

2.4 **Terminology**

1. **Graduate:** One who has completed bachelor level studies under the 2-year continuing education programme of the School of Educational Studies and the School of Management Science, having been admitted during the academic year 1980 (No.23....) and graduated in the academic year 1982 or 1983 (4-6 semesters).

2. **Certificate Graduate:** One who has successfully completed
the certificate level programme in Local Administration, School of Political Science, or Certificate in Teaching Profession, School of Educational Studies. These programmes are lower than degree level.

3. **Supervisors**: Supervisors of graduates and certificate graduates completing the questionnaires.

4. **Work Colleagues**: Those working at the same level, or within the same unit, as graduates and certificate graduate.

2.5 **Research Procedure**

The following methods were employed in conducting this study:

2.5.1 **Type of Research**

Applied research was employed by following-up and assessing data collected directly from related persons by compiling information from research instruments developed by the researchers.

2.5.2 **Limitations**

As this study was limited by time and budget, the following sample groups were used:

1. Sample group included only sample groups chosen at random from the population or from those completing their studies in the academic years 1982 and 1983.

2. Graduates in the sample groups were chosen specifically from amongst those who had registered for admission in the first batch of students, namely in the academic year 1980-81.

3. Sample groups in (1) and (2) comprised population who had graduated at the bachelor level from the School of Educational Studies in the field of Elementary Education, Secondary Education and Education Administration, and at the bachelor level from the School of Management Science in the field of Construction Management. Sample groups for programmes lower than bachelor level comprised specifically certificate graduates of the Certificate in Teaching Profession, School of
Educational Studies, and Certificate in Local Administration, School of Political Science, completing their studies in the academic year 1983 and 1984.

2.5.3 Selection of Sample Groups

The Stratified Random Sampling method was used to select sample groups. Details are as follows:

Sample Groups

1. Graduates who completed their studies from the School of Educational Studies and the School of Management Science in the academic years 1982 and 1983.

2. Students who completed their studies at a level lower than bachelor degree in the Certificate in Teaching Profession Programme of the School of Educational Studies and Certificate Programme in Local Administration, School of Political Science.

Methods of Selecting Sample Groups

1. Sample groups in heading (1) were divided according to region, namely Northern, Central, Northeastern, Southern and Bangkok.

2. Graduates were divided according to field of study, namely Elementary Education, Secondary Education, Education Administration and Construction Management.

3. Stratified Random Sampling was employed for graduates in each group with about 25% for each sample group.

4. Sample groups of certificate graduates of the Certificate in Teaching Profession Programme and Certificate in Local Administration comprised all certificate graduates of those programmes.

5. Supervisors and Work Colleagues were chosen as follows:

   a. Supervisors - Graduates and certificate graduates (specifically the Certificate in Teaching Profession) were invited to submit the name and position of one of their supervisors.
b. Work Colleagues - Graduates and certificate graduates (specifically the Certificate in Teaching Profession Programme) were invited to submit the name of one work colleague, and the supervisors the name of one more work colleague of the graduate and certificate graduate.

c. Work Colleagues - With regards to the Certificate in Local Administration, the researcher arranged the selection himself when interviewing certificate graduates. Either one or two persons were chosen.

<table>
<thead>
<tr>
<th>Programme</th>
<th>Number of Certificate Graduates</th>
<th>Work Colleagues</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Number</td>
<td>Sample Group</td>
</tr>
<tr>
<td>Teaching Profession</td>
<td>581</td>
<td>581</td>
</tr>
<tr>
<td>Elementary Education</td>
<td>8473</td>
<td>2500</td>
</tr>
<tr>
<td>Secondary Education</td>
<td>5741</td>
<td>1700</td>
</tr>
<tr>
<td>Education Administration</td>
<td>6050</td>
<td>1800</td>
</tr>
<tr>
<td>Construction Management</td>
<td>2189</td>
<td>650</td>
</tr>
<tr>
<td>Local Administration</td>
<td>262</td>
<td>262</td>
</tr>
<tr>
<td></td>
<td>23296</td>
<td>7493</td>
</tr>
</tbody>
</table>

2.5.4 Instruments Used in Study

**Type of Materials**

The following types of instruments were used by the researchers in conducting this study:

1. Questionnaires were divided into two sets:

   a. Questionnaires for graduates and certificate gra-
duates of the certificate programmes. These questionnaires were divided into 4 parts, namely;

Part 1 Basic information concerning the person completing the questionnaire including sex, age, level of education, place of employment, number of semesters studied at STOU, changes in place of employment, position, salary, etc.

Part 2 View on the distance learning system, views on the media employed including both the main media and the supplementary media, study and evaluation techniques, services.

Part 3 Views on expectations and actual benefits received, objectives of each programme in accordance with the programme in each area of studies.

Part 4 To enable the person completing the questionnaire to express his/her views on problems and offer suggestions concerning the University's system of teaching and the program studied, problems and suggestions were in the form of open ended questions at the end of the questionnaire. In the latter part of the questionnaire, persons completing the questionnaire were invited to submit the name of one work colleague and supervisor who fulfilled the necessary requirements.

b. Questionnaires for work colleagues and supervisors were divided into 2 parts, namely;

Part 1 Basic information concerning the person completing the questionnaire including relationship to the person completing the course of studies, place of employment, position, age, sex, and number of people in that office completing the programme of studies for each programme.

Part 2 An evaluation of the work performance of the person completing the programme prior to and after completing studies at STOU, with regards to the objectives of the School and programme studied, with emphasis on the application of the knowledge gained to the work and duties. The
latter part of the questionnaire had open form questions for suggestions on the questionnaire and for the proposal of the name of one work colleague of the person completing the course of study.

2. Interview - This was a modification of the questionnaire and used specifically for the students of the Certificate in Local Administration programme. Because this programme did not have tutorials modifications were made by deleting the section on supplementary media and tutorials.

Development of Instruments

The instruments listed above were further developed by the Research Team as follows:

1. Analysis of the research objectives in order to determine the direction of the questionnaire.

2. Analysis of the distance learning system as employed by STOU in order to prepare the section of the questionnaire concerning the distance learning system at STOU.

3. Analysis of the objectives of the School of Educational Studies, School of Management Science, Elementary Education, Secondary Education, Education Administration, and Construction Management, in order to prepare section 3 of the questionnaire.

4. Develop the questionnaire according to the analytical findings in (1), (2) and (3).

5. The questionnaire was submitted to the Consulting Committee for their opinions and for an examination of the content validity.

6. The questionnaire was modified according to the suggestions given by the Consulting Committee.

Try out of Instruments

The version of the questionnaire modified by the Consulting Committee was tried out by the Research Team on Students partici-
pating in the intensive training for experience in educational management, the workshop on educational studies and graduate experience in order to find any faults. With regards to work colleagues and supervisors, students completing the questionnaire were asked to submit the names and the Research Team sent them questionnaires via the students after they had completed their training. After the questionnaires had been filled in they were returned by mail. The results of the experiment showed that the questionnaires were complete in language and content which had to be evaluated. The Research Team made some modifications to the language used and arranged for the questionnaires to be printed for further use.

2.5.5 Data Collection

This was done in accordance with the following stages:

1. Questionnaires were mailed to graduates and certificate graduates of the Certificate in Teaching Profession Programme.

2. Questionnaires were sent to work colleagues and supervisors of graduates and certificate graduates of the Certificate in Teaching Profession Programme in accordance with the names given by those completing the questionnaires in (1).

3. The Research Team conducted interviews with students who had successfully completed the Certificate in Local Administration Programme, and their work colleagues.

2.5.6 Seminar

The Research Team organized to have a Seminar to be held after they had analysed the data received in order to express views and exchange opinions concerning the data they had collected from the people concerned.

2.5.7 Presentation of Reports

A total of 9 chapters of Research Reports were presented. They are:

1. Objectives and Methods.
2. Occupational Benefits of each programme as follows:
4. Elementary Education.
5. Secondary Education.
6. Education Administration.
7. Construction Management.
8. Certificate in Local Administration.

Each chapter had the following headings:

1. Basic information on the person completing the questionnaire
   - Graduates
   - Work Colleagues/Supervisors
2. Opinions on the Distance Education System.
4. Work colleagues and supervisors views on the work performance of graduates and certificate graduates.
5. An analysis of the relationship between the opinions.
6. Problems and Suggestions.

   Chapter 8 Discussion on Findings
   Chapter 9 Summary and Recommendations

The analytical findings are presented in the frequency percentage mean standard Deviation t-test correlative value and analytical variation.

RESEARCH FINDINGS

3.1 Number of People Completing the Questionnaire

3.3.1 Number of Graduates and Certificate graduates
Approximately 32% of the questionnaires sent to graduates and certificate graduates of the sample groups as designated in Chapter 2 were returned. Details are shown in Table No. 3.1.

Table 3.1   Number of sample groups and questionnaires returned distributed according to programme of studies.

<table>
<thead>
<tr>
<th>No.</th>
<th>Programme</th>
<th>Number of Population</th>
<th>Number of Sample Groups</th>
<th>Questionnaire Returned No.</th>
<th>Perctg.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Certificate in Teaching Profess</td>
<td>587</td>
<td>580</td>
<td>179</td>
<td>30.86</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Primary Education</td>
<td>8473</td>
<td>2500</td>
<td>747</td>
<td>29.88</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Secondary Education</td>
<td>5741</td>
<td>1700</td>
<td>464</td>
<td>27.29</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Education Administration</td>
<td>6050</td>
<td>1800</td>
<td>567</td>
<td>31.50</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Constr.Management</td>
<td>2189</td>
<td>650</td>
<td>204</td>
<td>31.38</td>
<td>Data</td>
</tr>
<tr>
<td>6.</td>
<td>Cert.in Local Administration</td>
<td>262</td>
<td>-</td>
<td>128</td>
<td>48.85</td>
<td>Collected by interview</td>
</tr>
</tbody>
</table>

Total: 23296 7230 2289 31.66

3.1.2 Number of Supervisors and Work Colleagues

The Research Team relied on two additional sources when compiling the data, namely the graduates' and certificate graduates' work colleagues and supervisors who were invited to express their views and opinions on the graduates' and certificate graduates' work performance. Of the questionnaires sent to the work colleagues and supervisors, about 44% and 50% respectively were returned. Details are shown in table 3.2.
Table 3.2  Number of Supervisors and Work Colleagues who returned the Completed questionnaire distributed according to programme of study.

<table>
<thead>
<tr>
<th>Programme</th>
<th>Number Returned Supervisors No. Sent No.</th>
<th>%</th>
<th>Work Colleagues No. Sent No.</th>
<th>%</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate in Teaching Profession</td>
<td>179</td>
<td>64 35.75</td>
<td>179</td>
<td>54 30.17</td>
<td></td>
</tr>
<tr>
<td>Primary Education</td>
<td>747</td>
<td>405 54.22</td>
<td>747</td>
<td>352 47.12</td>
<td></td>
</tr>
<tr>
<td>Secondary Education</td>
<td>464</td>
<td>223 48.06</td>
<td>182</td>
<td>32.10</td>
<td></td>
</tr>
<tr>
<td>Education Administration</td>
<td>567</td>
<td>261 46.03</td>
<td>567</td>
<td>215 37.92</td>
<td></td>
</tr>
<tr>
<td>Constr.Management</td>
<td>204</td>
<td>67 32.24</td>
<td>204</td>
<td>71 34.80</td>
<td>by Interview</td>
</tr>
<tr>
<td>Cert. in Local Administration</td>
<td></td>
<td></td>
<td>128</td>
<td>128 100</td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td>2161</td>
<td>1020</td>
<td>2289</td>
<td>1002</td>
<td></td>
</tr>
</tbody>
</table>

3.2  Research Findings

3.2.1  Opinions on Distance Learning System

The research findings on the opinions on distance learning system based on answers to questions concerning printed materials, education administration, evaluation of studies and general views on the distance teaching/learning system.

1.  Instruction Media: Questions were asked on the main media including teaching materials and supplementary media including cassette tapes, radio and television programmes, and tutorials. Findings are as follows:

Printed Materials: The majority of the students studied the printed materials independently and from the moment they received them. The study was done according to the stages laid down in the printed materials. However, when asked about the pre and post-test form, information recording and doing the exercises at the
end of the subject matter, the respondees replied that they did only part of it.

**Audio-Visual Media:** Audio-Visual media here refers to course materials recorded on cassette tapes, and radio and television programmes for course blocks. Research findings showed that all of the students listened to the cassette tapes and are of the opinion that they were most beneficial. Most of the students listened to only those programmes which were concerned with their course of studies. The same response was received with reference to the television programmes. It was also found that upon completion of their studies, most of the students were inclined to stop listening to the radio programmes but continued to watch the television programmes. This is because they believe that the television programmes are of great benefit to the general public.

**Tutorials:** Tutorials are arranged by the University as an educational service. Student attendance at these activities is voluntary. From the questionnaire, it was found that most of the students attended the studies on some occasions and believed that they were beneficial to their courses. The main reason they attended the tutorials is because of the difficulties they had in understanding the subject matter of the courses in which they had registered.

2. **Educational Services:** The researchers asked the main points concerning the educational services. These were the services offered by the Educational Service Centres which are responsible for providing venues for tutorials and qualifying examinations, as well as services provided at the STOU Corner in public libraries in each province which are responsible for providing services related to research, as well as lending printed materials, research books and cassette tapes. The graduates replied that the services provided by both were of a good level.

3. **Evaluation of Studies:** Most of the students replied that they preferred the use of final examinations to other methods to evaluate their studies, and stated that the examinations should be multi-choice questions as currently being used.
4. General Views on the Distance Learning System - Difficulties

Concerning difficulties faced studying under the distance learning system, graduate replied that it was the same as studying under conventional systems in universities everywhere.

Methods yielding the Best Results: Most of the graduates replied that when studying under the distance learning system, they received the best results when studying by themselves.

Comparison of Knowledge of STOU Graduate with that of Graduates from other Universities: Most of the graduates believe that the level of their knowledge is equal to that of graduates from other universities.

3.2.2 A Comparison of Opinions of Graduates and Certificate Graduates of the Various Programmes.


Table 3.3  A Comparison of Opinions of Certificate Graduates of the Certificate in Teaching Profession Programme on Expected Benefits and Actual Benefits Received from Studying at STOU.

<table>
<thead>
<tr>
<th>No.</th>
<th>Topic</th>
<th>Expectations</th>
<th>Actual Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>S.D</td>
</tr>
<tr>
<td>1.</td>
<td>Understanding of Basic Education</td>
<td>3.82</td>
<td>0.78</td>
</tr>
<tr>
<td>2.</td>
<td>Lesson Programme Planning</td>
<td>3.83</td>
<td>0.87</td>
</tr>
<tr>
<td>3.</td>
<td>Understanding Students' Behaviour</td>
<td>3.86</td>
<td>0.90</td>
</tr>
<tr>
<td>4.</td>
<td>Personal Adjustment and Professional Development</td>
<td>3.85</td>
<td>0.80</td>
</tr>
<tr>
<td>5.</td>
<td>Upgrading Living Standards</td>
<td>3.58</td>
<td>0.84</td>
</tr>
</tbody>
</table>
From Table 3.3 it can be seen that the expectations of certificate graduates of the Certificate in Teaching Profession Programme were inclined to be high (higher than 3.5 from a total of 5), and at the same time, the actual benefits received from studying the aforementioned programme were also inclined to be high. In some areas, such as in the area of Personal Adjustment and Upgrading Living Standards, it was found that the actual benefits received after completing the course were higher than the benefits expected.

To be continued
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Allama Iqbal Open University
Islamabad — Pakistan
CASE STUDY OF
SELECTED NON-FORMAL POPULATION EDUCATION
PROJECTS/PROGRAMMES IN PAKISTAN

By

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Allama Iqbal Open University
ISLAMABAD

I. Pakistan: A Profile

The Islamic Republic of Pakistan came into existence on August 14, 1947 as a result of the division of former united India into two parts. With its capital in Islamabad it has an area of about 696,000 square kilometers.

According to the Economic Survey (1985-86) in mid 1986, Pakistan's Population is estimated at 97.67 million, making it the ninth most populous country in the world. Moreover, the population is growing at the natural rate of 3.2 percent per annum, but with substantial emigration abroad, resident population has been growing at 3.06 percent per year. Both rates are the highest in south Asia, and among the highest in comparable developing countries of the world.

Pakistan's economic structure is mainly agrarian, with 72% of population living in rural areas. Literacy rate is just 26.2%. General standard of living is not much enviable. Since increase in per capita income is diluted due to an extremely high rate of population growth, the access of common man to appropriate health, education, housing and other basic facilities poses a

This paper was presented in the Regional Training Workshop on the Development of Population Education Materials for Special Interest Groups from 20th April to 2nd May, 1987 in Collaboration with the Ministry of Education, Curriculum Wing, Population Education Cell, Pakistan-Islamabad.
great challenge for policy makers and planners of the country. Life expectancy in 1984 was 51 years at compared to 56 in India, 64 in Turkey, 70 in Sri Lanka and 76 in Hong Kong.

According to 1981 Census, 28 percent of population in Pakistan lives in urban areas. It shows that Pakistan remains primarily a rural economy. Forty two percent of this urban population lives in the four major cities i.e. Karachi, Lahore, Faisalabad and Rawalpindi/Islamabad. The major factors responsible for urbanisation may be enumerated as differentials in earnings, better prospects of gainful employment in urban centres, and inadequacy of basic facilities, such as, health, education, transport, electricity and drinking water in the rural areas.

According to the Economic Survey of Pakistan, the average growth rate of GNP during 1985-86 has been 7.25 percent. According to the World Development Report, 1986, the per capita income was 380 U.S. dollars and it stood at No.28 from the bottom. The Report further states that in 1988, 55 percent of the total labour force worked in agriculture, 16 percent in industry and 30 percent in services, as compared to 60 percent, 18 percent and 22 percent in 1960. This shows that the process of urbanization is fast taking place in the country.

In view of the situation obtaining in Pakistan as a result of the increasing pressure of population on our resources, it has become imperative that a viable and carefully planned population policy be adopted to solve the associated problems of provision of facilities of education, health, housing and transportation to the masses of people. Consequently, the Sixth Plan (1983-88) provides for a population policy which aims at promoting the population planning practice and thus:

1. reduce the CBR from 43 to 36 per 1000 by 1988,
2. prevent 2 million births during the plan period and ensure a decline in fertility,
3. lower down rate of population growth to 2.6 by 1988,
4. reduce fertility rate from 5.9 to 5.4 per woman by 1988.

The Sixth Five Year (Population Sector) Plan takes cognizance of the interrelation between population, resources, environment and development strategies. The strategy of the Plan inclu-
des active participation of all relevant government departments, public institutions, and the private sector in providing services and promotional programmes to inform and change attitudes of people towards small family size. Another part of this strategy will be the involvement of local leadership to make the programme more responsive to local needs and to enhance its acceptability.

Keeping in view the past experience in the field, the plan is being implemented within the framework of the given political and socio cultural environment, with its exposure to risks of continued resistance etc. The programme will continue to be funded through the Federal development funds. An amount of Rs.2,300 million (Approx. $ 144 million) has been provided as plan allocation for this sector.

II. POPULATION EDUCATION THROUGH NON-FORMAL EDUCATION PROGRAMMES: A BRIEF OVERVIEW

Being a developing country, Pakistan has always been facing resource constraints and hence numerous problems in meeting the ever growing multi-farious educational needs of the teeming millions. As high a population growth rate as 3.2 percent per annum is exerting an unprecedented pressure on institutions of formal education. In spite of continuously increasing financial inputs in the system, the percentage wise increase in literacy is not much encouraging, it is rather misleading because the absolute number of illiterates in the country is also continuously increasing. Leaving the exceptions aside of course, the general standard of living coupled with high ignorance, deficient nutrition, low health status, and congested and unhygienic surroundings especially in slum areas and labour colonies etc have always necessitated the exploration of some new methods and techniques obviously non-formal in nature, of imparting education to the masses and bring in them a sort of awareness of their problems and create a sense of reliance for solving them. That is why Pakistan has since long ago recognised that the existing education system cannot provide facilities for the education of the masses and many people cannot afford to leave their homes and jobs to attend the educational institutions. The Education Policy, 1972-80 greatly emphasised the need for the use of non-conventional methods based on new instructional technology to bring education to the homes and places of work through correspondence courses, tutorials, seminars, workshops, television and radio broadcasts and other mass communication media.

The National Education Policy, 1979 appreciating the need
and significance of non-formal approach in providing basic education to the masses emphasised the need for coordination among the relevant agencies and also mentioned a number of steps to be taken for this end in view. They included the harnessing the community resources and organization of 10,000 literacy centres through a number of agencies. Since 72% of population in Pakistan lives in rural areas, only non-formal, nonconventional and cost effective strategies can help us reach there. The approach goes a long way in educating maximum number and variety of groups of people with minimum requirements in terms of staff and other physical arrangements unlike the formal system of education.

Keeping in view the growing need and significance of non-formal education approach for Pakistan, several agencies, institutions and organizations have since long been undertaking numerous non-formal education programmes. Most of these organisations, inter alia do have a considerable amount of content pertaining to Population Education and allied concepts.

Before we take up a detailed analysis of the two selected non-formal education programmes on population education, it seems quite pertinent to have a glance at some programmes of non-formal education run by different agencies having considerable content on population, family and health related issues and addressed to the special interest groups. Without going into their detailed functioning, their brief description is given as under:

1. **Allama Iqbal Open University**

Allama Iqbal Open University (AIOU) is the pioneer institution of non-formal and distance education established in Pakistan in 1974. It has opened doors to those who want to learn or improve their skills for further promotion and increased production without leaving their homes, jobs, or farm, otherwise necessary for joining a conventional institution.

The University's academic programmes cover a variety of broad areas from literacy to M.Phil and Ph.D degrees.

The major programmes of the AIOU containing, inter alia, Population Education concepts may be enumerated as under:

1. Integrated Functional Education Project
2. Basic Functional Education Project
3. Population Education Project
4. Women's Matric Education Project

These projects of the University, in addition to providing basic literacy numeracy and skill component also aim at moulding the opinion of the target people about population and promoting small family norms. They further impart the people instructions about health, sanitation, conservation of resources etc. Here special mention may also be made of the integrated functional Education Project of the AIOU which has been run in different low hope rural areas of Pakistan. Under this project, rural areas, enough backward to justify the launching of such development oriented Project were identified and initial needs assessment surveys was conducted which formed the basic of material development for illiterate rural males and females. The materials so developed were tested on limited samples and then adopted at wide scale in each of the selected areas. In addition to providing literacy, numeracy and some indigenous skills, the materials also aimed at providing information on child care, basic health and sanitation, initial treatment of certain prevalent diseases, and small family norms among the target people.

Being quite cognisant of the need and significance of Population Education in the country, the AIOU did take certain measures to popularise the population concepts in the masses at a large scale. Primary Teachers Orientation Course (PTOC) the very first course of the University did include one full unit on Population Education to convey the population message to the teachers community at large. So far more than 80,000 primary school teachers have been trained in Population Education through this course by the end of 1986.

In addition to that, the M.A. (Educational Planning and Management) course of the University also contains one full study unit on Population Education so as to apprise the prospective educational planners, administrators and curriculum specialists of population dynamics and its implications in education planning and management in Pakistan as a developing country.

2. Ministry of Education

Primary and Non-Formal Education Wing of the Ministry of Education launched the Experimental Pilot Project Integrating Education and Development (EPPIERD) in 1977 mainly aiming at the education of school drop-outs in the rural areas of the Federal Capital Territory, Islamabad. The Project was renamed as READ (Rural Education and Develop-
ment) in 1980. It makes use of village workshops, Women Education Centres, Community Viewing Centres/Adult Literacy Centres, "Mohallah" schools and Mosque Schools in providing literacy, numeracy, indigenous skills, health and nutrition education to the male and female target groups.

3. Health and Social Welfare Wing

a. Under this Wing, Health Education Cells are functioning at Federal and Provincial Headquarters. They appoint health educators in medical colleges, public health nursing schools etc. Started in collaboration with the World Bank, the Plan's aims at the improvement and expansion of health education programmes as an integral part of the health services.

b. Community services such as maternity and child health centres, adult literacy centres, vocational training centres are provided by Federal and Provincial Governments to help people solve their problems. Facilities of sterilisation are also available at the M. & C. Health Centres.

4. Agriculture and Livestock Departments

Field staff of these departments play an important role in advising farmers on plant protection, provision of seeds, crop patterns, poultry farming, sericulture, fish-farming etc. Obviously, the ultimate objective of these departments is to impart income generating skill and help the rural masses raise their standard of living. They also impart skills of grain storage and thus increasing food resources to meet the challenge of growing population in Pakistan.

5. Rural Development Department

Rural development organisations at national and provincial levels are responsible for accelerating the tempo of development in rural areas and to improve the quality of life of masses of our people. Strategies like village, aid Integrated Rural Development Programme and the constitution of Markiz (clustering of villages around a central place) have been adopted by the department. The NCRD (National Centre for Rural Development) caters to the training needs of key personnel engaged in various programmes of rural development.

The NCSW was formed in 1956 with the main objective of stimulating the work of voluntary organizations and providing financial assistance to them. At present, it is providing assistance to the programmes like women welfare, health education, preventive education, nutrition education, maternity and child health along with other population related issues and problems, youth classes, adult education centres, and vocational training for the handicapped throughout the country.

7. Pakistan Broadcasting Corporation (PBC)

The P.B.C. broadcast programmes in national as well as regional languages. Having three basic objectives of information, entertainment and education, most of these programmes address the illiterate farmers, labourers, rural population, women, youths etc. Some of its programmes are specifically designed to apprise people of the population related issues and problems.

8. Pakistan Television Corporation (PTV)

In addition to that, the PTV also has own series of programmes which aim at education the masses on crucial issues and problems of the day, including population, of course. The PTV is specially showing advertisements on small family norms.

Pakistan Girls Guides Association (PGGA)

The PGGA aims at training girls and women in good citizenship so as to enable them to contribute to the welfare of their homes, community, training in home crafts, social work and first aid etc. The PGGA has also started about 100 adult literacy centres where instructions on food and nutrition health, education, economic uplift, responsibilities of women in family and society also form integral part of the PGGA's programmes.

All Pakistan Women's Association

The APWA was founded in 1949 to promote literacy and general awareness for development among the women, in addition
to organizing courses for women on kitchen, gardening, domestic poultry farming, vocational training and training in nutrition, it also provides training to lady health visitors, midwives, auxiliary nurses, civil defence volun-
ters and organizers of population planning activities.

9. Pakistan Academy for Rural Development

The Academy was started in 1959. One of its main objectives is to experiment with new techniques of rural development. Activities of the Academy on non-formal education side are the extension education, and 'Ulema' Project aimed at the education of religious leaders. They are trained in first aid, health, education, vaccination etc. and thus play a pivotal role in rural uplift.

10. Programmes of the Population Welfare Division

The Population Welfare Division is in the process of finalizing its non-formal Population Education Programme which is largely directed towards young people and adults who are outside the mainstream of the formal education system. The backbone of the project would be non-formal population education through the on-going literacy programmes of various departments. Provision of necessary training for the field functionaries of the various departments, orientation of administrators, development of teaching/learning mate-
rials, production of supplementary reading materials for various age groups and manuals for master trainers etc. will form the core of activities envisages under the project. The Population Welfare Division would assist various agencies by providing financial help, assistance in devel-
oping learning materials and conducting of training program-
mes.

Apart from this project, there are many components of non-
formal population education within the on-going population programme of the government.

Interpersonnel, group and community communication consti-
tute the backbone of the Information, Education and Commu-
nication (IEC) strategy, the main purpose of which is to create awareness of population issues and generate an ac-
ceptance of the small family norm as beneficial and desir-
able. The Family Welfare Centres, constitute the main ser-
vice delivery outlet for family planning. But an important
component of their working in non-formal education. Each Family Welfare Centre has an Advisory Management Committee consisting of locally influential persons. In addition to this, each Centre recruits 15-20 Community Volunteers. All these personnel are provided orientation and training in population education, along with the IEC materials available i.e. charts, posters, information folders etc.

Within the Centre, apart from provision of contraceptive and health service, women's development (which includes all activities related to family welfare) constitutes a major element.

At each District, a special Officer has been appointed for IEC and Training. Non-Formal Population Education forms the basis of all training programmes. These are conducted regularly for grass root workers of other departments, NGOs, Mid-level Managers, teachers and religious leaders elected representatives, community volunteers and Members of the Advisory Management Committee. The content of training varies in detail for each category of audience but the basic knowledge remaining the same it includes the following:

- The population problem in the context of national and family welfare.
- The need and advantages of family planning.
- The population welfare programme.
- Motivating individual and communities to adopt the small family norm.
- Doubts and fears regarding contraception and how to overcome them.
- Methods of contraception.

Audio-visual vans are provided in every district of Pakistan, each van being used to organize approximately 15 film shows a month, mainly in the rural and urban slum areas. Each film shows becomes a venue of non-formal population education. Special film in the national and regional languages relating to various facets of population and population themes are screened along with popular commercial
films. Recorded messages regarding the service provided by the service outlets of the programme and where these are available are broadcast.

The non-formal education component through the Population Welfare Programme utilizes the following themes:

1. Breast feeding, weaning & child spacing
2. Maternal and Child Health and nutrition
3. Late marriages
4. Status of Women and Women's Education & Literacy
5. Father's responsibility towards family and responsible parenthood
6. Small family norm

A number of innovative schemes for interpersonnel communication have been launched at the national and provincial level. Some of them are as under:

a. The Mohallah Motivation Couple Scheme in 6 districts of the country uses teams of husband and wife as motivators, who are required to work in their own neighbourhoods, contact eligible couples, educate them on family welfare issues.

b. In some provinces, barbers, who traditionally enjoy the confidence of the male members of the community, have been trained as agents for non-formal population education.

c. In the province of Sind, Acceptors Clubs have been established at specific Family Welfare Centres. The membership is confined to women with 3 or less children. The meetings of these clubs constitute a forum for non-formal population education and there is a natural spill over of this knowledge among other women of the community.

d. The programme participates in traditional fairs, and folk festivals, to reach groups of population not within easy access of the regular service outlets. Here again, the approach is educative using films, group discussions, pamphlets and other IEC materials.
11. **Adult Basic Education Society**

The ABES is a non-governmental organization supported and financed by missionaries. Its main aim is to provide adult education and vocational and religious training. It also arranges sessions on health education, child care, family life etc. for males as well as females.

12. **FPAP’s Programmes**

The lead in the field of non-formal population education has been provided by the Family Planning Association of Pakistan. While the Family Planning Association of Pakistan undertakes training and IEC programmes very similar to those being conducted by the government programmes, special mention must be made of their non-formal population education programmes for Youth and Women.

**Women**

The role of educated and motivated youth has been recognized as catalysts of change and is being given increasing importance among Family Planning Association of Pakistan’s core activities. Another aspect of this youth oriented strategy is the fact that these young volunteers will be parents themselves soon and their early exposure to demographic realities caused by a high population growth rate will help them to make rational decisions when they are planning. The Family Planning Association of Pakistan has established youth projects in 42 locations in addition to two youth coordination Councils. The latter have involved 70 youth organizations throughout the country, with a membership of 1500. 120 youth leaders were trained in population education and responsible parenthood and they, in turn, trained about 2500 young people. Another area in which Family Planning Association of Pakistan is attempting to motivate young volunteers is the issue of environmental population and deterioration. Problems relating to unplanned human settlements energy wastage, resource depletion, industrial pollution etc. are discussed with student groups and relevant materials are distributed.

The Planned Parenthood and Women's Development Project of the Family Planning Association of Pakistan is based on the fact that as women become economically and socially independent and strengthened, there is a significant decline in
the number of children they are likely to have. One important component of the project is to identify and train community women leaders. This entails studying closely the social pattern of small communities and motivating potential leaders to accept and promote the small family norm. Training is imparted locally and workshops in large cities are also organized to bring forward leaders for an exchange of views and experience. These get togethers are useful for reinforcing motivation. Recognizing the linkage between illiteracy and a high population growth rate, Family Planning Association of Pakistan pays special attention to women's education. Its programmes combine literacy classes with income generation skills, basic domestic science, nutrition, hygiene and child care. In order to allow urban women to accept employment, day care centres have been established at 6 locations which also expose working mothers to the concept of the small family.

After a brief overview of different non-formal population education programmes of different governmental as well as non-governmental organizations, we would now be concentrating upon the case studies of two selected projects of non-formal population education.

II. POPULATION EDUCATION PROJECT AT THE ALLAMA IQBAL OPEN UNIVERSITY

1. Introduction

Appreciating the extending role of the Allama Iqbal Open University in providing education to the people and its experience in launching population oriented courses and programme, the Population Welfare Division of the Government of Pakistan entered into a contract with it on 20th March, 1982 for the implementation of its Population Education Project with the major objective of providing orientation in Population Education and allied concepts to 20,000 Middle and Secondary School teachers both male as well as female throughout the country. This orientation of teachers would obviously have a multiplying effect through students as well as community contacts at large and thereby go a long way in modifying the attitudes of people at large in respect of population related issues.
2. **Objectives of the Project**

Objectives of this Project are to enable the middle as well as secondary school teachers.

i. Comprehend and describe the meaning and nature of Population Education and other allied concepts.

ii. Describe and use the background statistics of population in Pakistan and the Asian Region.

iii. Internalize and make use of the experiences in Population Education in different countries of the Asian Region.

iv. Understand and describe the impact of population increase on socio-economic development in the Region and draw inferences from the same for internalization.

v. Integrate the concepts of Population Education while teaching different school subjects.

vi. Appreciate the dynamic role they can play in resolving the problems created due to population increase in Pakistan.

3. **Material Production**

Population Education Course for middle school teachers aiming at the orientation of 12,000 middle school teachers was started developing in 1982 with the approval of the relevant bodies. The course outline was developed by a combined team of experts which included educationists population experts, demographers, teacher educators, radio/T.V programme producers. On the basis of their wide experience in their respective fields and their formal as well as informal contacts with the target category of teachers and their needs as assessed by them, the team designed the course outline. The units were assigned to different experts, re-source persons and specialists in the field who were given special instructions to make the units self-instructional so as to suit to the distance education system of the Uni-versity. Draft units written by the unit writers were dis-cussed and further improved in a meeting of the unit writers after which the same were sent for editing and printing.
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Allama Iqbal Open University
Islamabad — Pakistan
RESEARCH OUTCOMES OF ASIAN DISTANCE EDUCATION
Research group Workshop
18–21 March 1987

By
Dr. Dean Nielson

This research group was jointly organised by the Social Science Division of the International Development Research Centre (IDRC) Education Programme and Sukhothai Thammathirat Open University, Thailand. This workshop was a continuation of the Jakarta, Indonesia Group Meeting held in 1986 with a purpose to review the progress achieved by each participating country. In addition the operational objective was to receive, examine and offer criticism on research outcomes of each project presented by respective countries. The interest was also to know the problems and constraints each project was facing so as to provide possible solutions and to decide future course of action.

The group participants represented four countries namely Indonesia, Malaysia, Thailand and China. Pakistan being a regular participant could not join because of much regretted illnes of its presenter. The four day workshop also included an informal group discussion, namely publication of studies, self-evaluation of current studies, and future research directions. The details are given at the end of the summaries of the country projects.
Thailand
Sukhothai Thammathirat Open University

"OCCUPATIONAL BENEFITS OF OPEN UNIVERSITY EDUCATION" (THAI-LAND)

By

Dr. Preecha Kampirapakorn

Dr. Preecha reported a tracer study carried out by the STOU on its' first cohort to determine the impact of the programmes taken and credentials gained by the students on their job performance, and promotional and geographical mobility. It is hoped that information gained through this study will be used towards the improvement of the STOU programmes.

The data for this study were collected mainly through questionnaires and interviews. A workshop was also organised at the STOU to generate ideas and views on the focus of the study. The bulk of the data is the form of self reported perceptions and opinions. Evaluation by supervisors and colleagues were also carried out.

The sample was drawn from the 1st cohort students who graduated in 1983 and 1984 from the School of Educational Studies and the School of Management. Initially a 10% sample of 7,230 graduates were selected for the postal survey, stratified by regions and school of study. However, there was 31.66% return of the questionnaires, which generated a final sample of 2289. In this regard, the problem of bias in the sample was raised. With postal questionnaires, the relatively low returns would imply a self selection process, resulting in a biased and homogenised sample. It would appear that this is a possibility as the resultant sample is mainly from rural areas. It was suggested that the characteristics of the sample could be analysed to see whether it is representative or not.

In the presentation of the results of the study, Dr. Preecha focused on some of findings related to graduates in primary education, and certificate earners in local administration and the construction management. The following is a report of the views expressed by participants raised in the course of the presentation and will follow the written summaries used in the presentation.
Primary Education

a. Use of Audio Visual material. In addition to the data presented, Dr. Preecha clarified that it was found that the use of cassette tapes is more extensive than other forms of audio visual materials, as they are easily available to all students (cassette tapes are mailed to students together with printed material).

b. It was pointed out that the town–rural movement of teacher could be due to promotion. It would seem that teachers moving to the rural areas could have been promoted to run the smaller schools in the rural areas.

c. The higher rate of promotion in the sample could be explained in relation to the normal promotion rate for teachers especially as teachers can be promoted up the salary scales without having to assume administrative responsibilities, such as becoming headteachers, etc.

d. The data seems to indicate that the students are happy to stay in the rural areas, in contrast to the rural-urban movement observed elsewhere. This raises some questions regarding the reasons which have motivated the students to follow the programme.

Validity of the Assessment

1. Some discussion focussed on the formulation of the questions in the questionnaire and the constructs used by the respondee in answering the questions. It would be suggested that the project could try to identify these constructs, as these would greatly assist the interpretation of the data.

2. Related to the above, is the question as to whether the respondents were, in evaluating the usefulness of the knowledge and skills of these programmes, making judgement in relation to actual situations, or were they anticipating the possibility of the use of these knowledge and skills.

3. There seems to be a difference in perception of the usefulness of knowledge and skills by the different groups of students. The education students seem to
rate the skills more higher than knowledge whereas the students in the other programmes, the rating for knowledge is similar to those for skills.

4. Discussion also focussed on the problem of how to assess the "usefulness" or benefits of the different aspects of the courses (the knowledge and skills). Could the assessment be based on perceptions or opinions based on hypothetical situations, or based on actual events. If the assessment is based on perception, then the question of biases arises, as these perceptions could be influenced by expectations and values.

Suggestions

1. It was pointed out that there is a wealth of data available at different levels of detail, particularly in relation to the changes of perception of work performance. There is a need for further data reduction and further analysis to get some sense of the relationships between the perceptions and the elements of the courses, and also to look at the strength and weakness of these elements.

2. Some cross-programme analysis could be carried out, as these could provide further information on the courses.

3. There is also a need to look at the relationship between the different sets of data perhaps through cross tabulation which could be used to look at the consistency of the responses.

Indonesia
Universitas Terbuka

RESEARCH ON TUTORIAL SYSTEMS OF THE OPEN UNIVERSITY OF INDONESIA:

By

Dr. Aria Djalil

This report was presented by Dr. Aria Djalil, assisted by Mr. Subandijo. Dr. Aria provided a short introduction to the
Universiti Terbuka (Open University) Indonesia which commenced operation about 3 years ago. Currently the UT has 32 regional centres with a student population of about 140,000.

This is the second report on a project aimed at exploring the relationship between student characteristics, tutorial approaches and learning outcomes; and to suggest suitable tutorials models to be developed for the regional centres.

The focus of the second report is on the relationship between student characteristics, tutorial approach and learning outcomes. Two main courses were surveyed, namely, Mathematics and English with the use of five basic instruments: student background, tutorial, regional centre administration, tutorial instructions, and student perceptions of tutorials. More specifically, there are four major categories of variable, namely, student background, content, tutoring behaviour, and learning outcome. The study model used tries to relate the first three variables to learning outcome consisting of four specific dimensions - satisfaction with tutorials, satisfaction with the administration of tutorial, academic performance and attendance at tutorials.

Eight (8) hypothesis were postulated based in a model of the interactions between the major variables.

These hypothesis were tested and reported. The umt of analysis in this report was students.

Discussions of the findings revolved around the following:

a. Some 25% of students in UT also enrol in other universities;

b. Problems of distance and time appear to "children" the students to attend tutorials (i.e., there is a positive, albeit weak, correlation between distance and travel time and tutorial attendance).

c. Reading the module (V65) first before coming to tutorial is highly correlated to the criterion variables.

d. Tutoring behaviours appear to be positively correlated to satisfaction but negatively to achievement. In trying to explain this a model involving interactions was suggested.
e. The size and type of regional centres appear to be productive of achievement (perhaps a reflection of more knowledgable tutors in the larger universities).

The third phase of the study will focus on the tutor variables such as their background, perceptions and activities and how these variables interact with other students variables to influence learning outcomes.

Malaysia
Universiti Sains Malaysia

"OFF-CAMPUS PROGRAM STUDENT CHARACTERISTICS" (MALAYSIA)

By
G. Dhanarajan
Peter Choo
Zainal Ghani
A Lourdesamy

The Off-Campus Program of the Universiti Sains Malaysia is a relatively small program (about 1500 students) covering sciences, social sciences and humanities. The university is determined to maintain the standards of the program at par with those in the conventional universities and has little tolerance for problems like student drop-out rate which it strives to keep at no more than 20%. One of the overriding challenges of the program is to deal with a student body which is considerably more heterogeneous than that on conventional campuses and to design programs which take into account the differences between off-campus and on-campus students.

A concern for student characteristics is one of the nine interactive features in a basic framework for distance education program development posited by Holmberg (1981) which the Malaysian study follows. Holmberg further spells out what categories of student characteristics are likely to be most salient in programming decisions, namely, student general background and "pre-knowledge", the milieu of the students, student attitudes towards education, particularly distance education systems.

In the Malaysian study researchers operationalized this framework by constructing a checklist of relevant study characteristics and then developing or adapting instruments for use in measuring the characteristics. They used fourteen instruments in
all. The results for four were reported, dealing with the following dimensions:

a. Self-concept
b. Personality
c. Field dependence/field independence
d. Locus of control

The overall sampling design for the study is to cover 50% of current program participants (about 700 in all) stratified according to regional area and academic discipline. For the meeting a preliminary analysis was presented in which about \( \frac{1}{4} \) of the target sample was represented. After a review of basic characteristics (82% male, 70% married, most working, etc.) preliminary results on the four dimensions were reported, providing simple descriptive statistics (sometimes involving comparisons between off- and on-campus learners) and relationship between the variables in question and student achievement (i.e. exam results).

**Self-Concept:** This was measured using the "Tennessee" Self-Concept scale, translated and appropriately modified. Preliminary results comparing on- and off-campus learners reveal striking differences between the two groups on overall self-concept and the subscales measuring self-concept with respect to behaviour, physical self, moral-ethical self, personal self, and family self. The differences were so strong they seemed "too good to be true" and will be checked again. However, a tentative interpretation is that in a highly competitive general environment capable learners who fail to enter higher education through normal channels may experience a relative loss of self-esteem. Certain subscales are also significantly related to achievement, namely "identity", self-satisfaction, moral-ethical self and total variability.

**Personality:** This was measured using the Cattell "16 factor" personality test, adapted in Malaysia to reflect personality needs or drives. Preliminary analyses were inconclusive because the only comparison group was college students in the US (i.e., test norms). Local norms will be developed and other analyses launched in due course. Personality factors which were positively and significantly related to achievement among off-campus students were humility (mild-manneredness), apprehension and self-discipline.

**Field Dependence/Field Independence:** This was measured using the non-verbal "Group Embedded Figures Test". The results
were cross-tabulated with certain student characteristic variables as well as academic achievement. Science students came out relatively high on field independence, as did students of Chinese ethnic origin and those in the younger age groups. Field independence was more characteristic of higher achievers than less achievers.

**Locus of Control:** This dimension was based on Crandall's Intellectual Achievement Responsibility Questionnaire, which contains two subdimensions: acceptance of responsibility for the positive events or outcomes, and acceptance of responsibility for negative events or outcomes. There is also an overall acceptance of responsibility score. This measure did not show any marked trend with respect to sex, race or academic program; however, older students tended to assign success more to themselves than younger. Also there is a tendency for higher achievers to assume more responsibility for their success.

Discussion of the results raised the following points:

1. The variables reported are basically in the psychological domain. Are there sociological and economic variables as well? The group indicated that there were a few such variables and that they would enter the full analysis.

2. The variables have been treated as "input" factors. However, they could be considered as output factors as well (at least some of them -- for instance, self-concept).

3. The use of these results assumes an organizational capacity will to shape a program to suit the needs and characteristics of students. Another model would be to develop a program based on the best pedagogical models and require students to acquire the study habits needed for success.

4. The project has generated an enormous amount of data. The challenge is to reduce the data so that one can see the critical factors which discriminate off-campus from on-campus learners and (within the off-campus group) high achievers from low. Some form of discriminant analysis might be called for here.
5. If possible data sets (norms) for on-campus students should be acquired on all critical dimensions.

"USING VIDEO AS A SUBSTITUTE FOR TUTORS IN DISTANCE EDUCATION"

(CHINA)

By

Mr. Shin Jin-Rong
East China Normal University

Mr. Shin, in his paper briefly outlined the structure of ECNU and in particular the off-campus programme. He then went on to describe the research project in Distance Education in which they were engaged in collaboration with the University of Victoria of Canada. ECNU has carried out off-campus correspondence courses for 30 years, but has come to a realization that its materials and processes (essentially text-book oriented) are ill-suited to the needs of distance learners involved in self-instruction. The main objective of the current project is to investigate whether by means of video lectures the duration of face-to-face tutorials can be reduced by \( \frac{1}{2} \) or more. The pretest-treatment - post-test research model is employed in the research using an experimental, control group design. The experiment is nearing completion. Research results will be available in about 3 months.

The following questions and comments were raised during the presentation by Mr. Shin.

A question was raised regarding the duration of tutorial in ECNU off-campus program. Mr. Shin said that in ECNU off-campus program the students attend a two-week intensive tutorial per semester at the Regional Centres. The tutorial sessions last for about 7 hours a day. In the experimental treatment the tutorial is reduced to one week.

To a question about examination Mr. Shin explained that unlike STOU and UT of Indonesia where objective testing is the main mode of examination, ECNU uses the short essay format examination.

To a question about the status of teachers in China Mr. Shin responded by saying that secondary school teachers enjoy a
reasonably high social status but they are not better off economically (i.e. not well paid) compared to workers in other sectors.

To queries about the video materials produced by ECNU Mr. Shin said that they consisted of specially prepared lectures delivered by well-known lecturers in the specific areas. These lectures are based on the material in the off-campus text. These video lectures are placed in the regional study centre for students to use at any time during the duration of the course from October 1986 to March 1987.

To a query about the extent of off-campus education in China, Mr. Shin responded that about 1/3 of the universities in China have been directed by the Education Ministry to set up off-campus units. About 12% of higher education is through the off-campus mode. This involves roughly about 600,000 students.

To another question regarding collaboration between universities in the production of learning material, Mr. Shin replied that in general the universities prefer to produce their own mainly to project the image of the university. However, it is possible to use the same learning materials in colleges affiliated to the parent university.

To a query about the progress to date of the ECNU/UV project Mr. Shin replied that the project is in the treatment stage. The students in the required centre do not have free access to the centre at all time as anticipated since the opening hours are controlled by the centre staff. Also, many students stay far from the centre and have to travel long distance to avail themselves of the video facilities.

Comments on Non-print material

At USM there is a move to prepare non-print material, but there is a concern about the type of production. Some staff are opposed to video lectures. Video media are considered good for teaching process skills. The important consideration, as in any other instructional design issue, is appropriately fitting the medium to the course content and objectives, optimizing the capacity of video to do what other media cannot do as well and using it in a way consistent with the circumstances of distance learners. Audio tapes and video material in non-broadcast modes are better than those in broadcast modes, since usage is flexible.
STRATEGIC PLAN FOR OPEN UNIVERSITY RESEARCH

By

Dr. Tong In Wangsotorn
Dy. Rector: STOU

Following his expressions of pleasure and gratitude for opportunity granted to STOU act as host for this IDRC sponsored Asian Distance Education Research Group Meeting Dr. Tong made the following statements regarding STOU's research agenda:

1. The STOU has 10 schools - the 11th is being established, the school of Science and Technology.

2. The University is to start its 2nd cycle (in terms of course development, curriculum re-design etc. in 1987. This is 10 years after its start.

3. In order to improve its curriculum and institute re-design the university needs a long of information not only on its courses, their structure, pedagogy etc. but also on their relevance, usefulness, appropriateness etc. This information has to be gathered by the university and many committees are being set up.

4. The university also has a need to inform people of its materials as well as their quality. To substantiate the latter especially, empirical data has to be gathered about these materials.

5. Further information has also to be generated regarding the impact of STOU on national development, including the cost-benefits of distance higher education.

6. In order to gather the above information the university has set up 3 research units. These are:

   i. The Management System and Education Media Research Unit.

   ii. The Centre for Research and Development Testing.

   iii. The Planning Division which has Institutional Research has one of its responsibilities.
7. The Management system and Education Media Research Unit's main focus will be to consider issues relating to the improvement of media production and to carry out regular evaluative exercises on the university's non-print media course ware. This unit is also responsible for assessing the appropriateness, and cost effectiveness of new technologies such as "VITAL", a computer based instructional system.

8. The Centre for Research and Development testing looks after questions relating to "Test items" for the university.

9. The Institution Research Group which falls under Dr. Tong In's responsibility looks after all other information needs of the university not covered by the above two. On the one hand its staff are looking into the impact of the university programme on the larger community (such as the working of Dr. Preecha) and on the other the cost-benefits of the university's estate maintenance using various alternatives. The major areas of the IRG's interest are as follows:

* Follow-up studies - like the IDRC supported project.
* STOU graduates in Grad. Schools
* Employment Survey - of STOU graduates
* Problems of Tutorials - models, usefulness, impact etc.
* Cost-Benefit Analysis of STOU operation

10. Finally discipline oriented research either on issues relating to the teaching/learning processes or the disciplines themselves is being actively encouraged. As the university enters its 2nd cycle academic staff of the 10/11 faculties have breathing time that should enable them to devote time to the pursuit of knowledge. This is an important concern as faculty research outputs not only help in the update of courses are but also enhance the university's reputation.

REPORT ON GROUP DISCUSSIONS

The group considered three broad topics in an informal group discussion format, namely, publication of studies, self-
evaluation of current studies, and future research directions.

**Publication:** The studies will be used within the relevant institutions in the various countries for different kinds of changes in policy and practice. In addition, they will be provided to researchers and policy makers both in-country and out, on the assumption that distance higher education is becoming a topic of general interest. It was proposed that three kinds of publications be produced:

1. A publication in the national language including all data analyses and instruments in uncondensed form;
2. A translation of the above into English (some condensation possible);
3. A highly condensed version of the studies in English for compilation in the form of an edited book.

Concerning point 3 above, researchers decided to condense their reports to the essential points. Each condensed report will be no more than 50 double-spaced pages long. The format will be as follows:

- Executive Summary (+ 2 pages)
- Introduction
- Description of study (Research problem, objectives, sampling, methodology, analysis methods)
- Findings/Results
- Interpretations/recommendations/implications (research; practical)
- Reference/bibliography

In addition to the country chapters there will be introductory, overview and summary chapters written by an editor. Dr. Dhanarajan will act as editor, with the help of Dean Nielsen. The deadline for the condensed chapters will be three months after the conclusion of the main final report in each country, or no later than March, 1988. The executive summaries from each of the chapters could be compiled into a journal article which could be submitted to one of the distance education journals (Canadian, British, Australia, Pakistan).

In order to complete the cycle of meeting and to provide an opportunity for review of the final reports and articles, plans were laid for a network meeting in early 1988 in Islamabad. It
was suggested that Dean Nielsen discuss that possibility with the VC of Allama Iqbal Open University during a forthcoming trip, with preference given to the month of March.

**Self-Evaluation:** Participants remarked on the significant progress made by all teams during the past year. Analyses are beginning to yield results which are of interest not only in the country where the research is conducted, but in other countries in the network. For example all expressed great interest in the outcome of the Chinese experiment on using Video Taped lectures. Furthermore, STOU is interested in replicating some of the work done in Malaysia and Indonesia. Indonesia, which is planning a new research project on UT course impact on teacher effectiveness, can benefit from STOU's experience in this area.

Despite these indications of productivity and complementarity (an affirmation of the worth of a "complementary research network"), researchers felt that the studies had so far fallen short of their potential in terms of analytical depth. The various team leaders were encouraged to go back and further analyze their data so that stronger conclusion and more specific policy guidelines could be formulated.

**Future Research Directions:** Dr. Dhanarajan reminded the researchers that their studies had covered only a portion of the wide spectrum of possible research studies on distance education. Lacking so far, for example, are studies on cost factors and studies relating distance education to national development goals.

Since the researchers are still caught up in their current studies no explicit attempt was made to formulate a new agenda, but it was clear that researchers would like to maintain the network and pursue a new phase under IDRC or other funding. This will be one of the items discussed in the fourth meeting of the network tentatively scheduled for March of 1988.
Trip Report No. 7/86

H. Dean Nielsen
Indonesia,
October 20-24, 1986

Centre for Research and Public Service
Indonesian Open University
Jakarta.

Aria Djalil, Director
Subandio, Data Analyst

Open University Tutorial Systems: Indonesia (3-p-84-0281)

This was an intensive two day collaboration in data analysis, with me getting in the act. The purpose was to initiate the correlation study of the relationship between various features of the tutorials and student attendance, satisfaction (with tutorials) and achievement. Using the SPSS package on a Data General (DG) Mini-Computer we were able to produce results using the student file, some of which were very interesting (e.g. "intensive question and answer sessions" is positively correlated with satisfaction and attendance.)

Further analysis using other files (tutor data, observation records, administrative information) was hampered by the fact that the DG version of SPSS does not have a "merge file" merge capacity. Since IBM-PC/SPSS does, I urged Dr. Djalil to consider shifting his data analysis to the PC. He asked me to suggest this to his Rector, Dr. Setijadi (which I subsequently did -- he agreed.)

We thought it would be good to continue this collaboration through subsequent stages. Since I'll not be travelling to Indonesia in the near future I offered to bring Pak Djalil up to Singapore in January for this (using contingency funds). Djalil will more than likely arrange to do this.

Further observation: the drop-off in tutorial attendance has been catastrophic. The current system will clearly need to be scrapped. Djalil would like to use the analysis to suggest alternatives. The correlation study in progress should be undertaken with this likelihood in mind.
INTRODUCTION TO INFORMATION TECHNOLOGY
COMPUTER HARDWARE

BY

Ijaz H. Khawaja

Now a days computers have increased in importance to the extent that we come in contact with them almost everyday. They are being used in almost all the spheres of life. They are used to prepare pay cheques, for tax deductions and utility bills, to control scor boards, traffic lights, provide information about accidents and traffic violations. The computers are being even used to arrange time table and data-sheets of examinations for the students. Some other computers are helping us in scientific and statistical applications and projections.

The first generation electronic digital computer was introduced in early 1950 and used vaccum tube technology. The second generation computer used solid state transistor technology rather than vaccum tube. The third generation computer is characterised by solid state integrated circuit technology and the fourth generation computer were developed on LSI (large scale integrated) circuit and VLSI (very large scale integrated circuit) technology.

Main frame computers, Mini-Computers and Micro-Computers widely vary in size, capabilities and cost but share a great many characteristics and operating principles.

It must clearly be understood that a computer is a machine only, and is incapable of performing any function or arbitrary decisions until and unless it has been specifically ordered what to do and how to do i.e. we have to instruct the computer for the performance of certain operations. These instructions are to be written in a definite pattern which a computer understands and are known as computer programming. As yet many languages have been developed. These languages or the set of instructions for the solution of a problems in a particular language is called the software. The units enclosed in a single computer system or
peripherals in separate boxes/enclosures which understand and execute these software languages are called the computer hardware.

The logical components of computer hardware may be divided into two parts:-

i. Main computer hardware comprising of
   a. Arithmetic and logical unit
   b. Control Unit
   c. Main Memory

ii. Peripheral hardware consisting of
   a. Input
   b. Output

Basic Functions of the Arithmetic and Logic Unit

The arithmetic and logical unit contain the electronic circuitry to perform arithmetic and logic operations. The one portion of the unit calculates, shifts data, sets the algebraic sign of results, compares, and so on. The other portion carries out operations to determine the sequence of execution of instructions. The overall function of the arithmetic/logic unit is to process data. The detailed operation which the ALU carries out on the data can be classified into two:-

Arithmetic operations

Logic/Branching operations

The arithmetic operations which the unit can perform are addition and subtraction of binary numbers. In both the cases the operation carried out on two binary numbers are called operands and what the operation of two operands produces is called the result. Addition and subtraction are not the only basic arithmetic operation that the arithmetic unit can perform, it can perform division or multiplication also. More complex operations have to be broken in sequence of addition or subtraction operation.

The Basic Functions of the Control Unit

The control unit directs and co-ordinates all the opera-
tions called for by instructions. This involves control of input/output devices, entry or removal of information from store and routing of information between store and arithmetic unit automatic computer processing is done through the control unit as per program instructions until all the data is processed i.e. job is finished or some fault occurs during the processing.

In the computer, execution of an instruction involves opening or closing many paths or gates for a given operation. Two major functions of the control unit are:

- Reference to main storage for instruction or data
- Decoding of instruction obtained from main storage.

**Main Memory**

There are two basic types of memory or storage in the computer:

i. Main Memory or immediate access store (Main Storage).
ii. Auxiliary or direct access storage (Backing Storage).

The information which is required to be rapidly accessed is stored in the main storage and the information not immediately required or less frequently required is stored in the backing storage.

Information is organized by the computer so that it flows back and forth between main store and backing store as required by the system requirements.

**Auxiliary Storage**

The magnetic tape, disk, and diskette are each capable of storing a large quantity of digital data. This data can consists of programs which are waiting to be executed, input data needed for the operation of the computer, output data produced by programs which have been executed, or intermediate result which have been generated by the computer and are being saved for later use. These storage devices are generally connected to the computer via suitable I/O channels.

These storage devices provide an extension of main storage. A user can, for example, locate and update data information in a sequential or random manner.
Magnetic Disk

The magnetic disk consist of high-speed rotating surfaces which are coated with a magnetic recording medium. It has one or more round flat plates whose upper and lower surfaces can be used as storage surfaces. The active surface of the disk is divided into tracks.

The data recorded on this medium is retrieved by two methods namely the (i) Indexed Sequential (ii) Random or Direct.

The retrieval of data by indexed sequential access method (ISAM) is by fetching records into the main store by a predefined sequence.

The retrieval of data by random access method is fetching or a particular record and no sequence is looked for.

Magnetic Tape

A magnetic tape is basically a serial medium and as such provides a slower but cheaper form of storage than other magnetic units. A library of magnetic tapes can be used to economically extend a computer memory.

The amount of information stored on a reel of tape depends on the following factors:-

The length of tape

The packing density (800 or 1600 or 6250 characters per inch).

The size of inter-block gaps (0.5", 0.6", or 0.75).

The amount of information in a block

Input and Output Devices

As we know, it is necessary to provide some means by which a user may communicate with the computer to:

- Input information from the user to the computer
- Output information from the computer to the user.

These functions are carried out by input and output devices
(peripherals) of which many types exist. The different types can be divided into three main groups:

- Input only devices
- Output only devices
- Input and output devices

Input Devices

Input devices read (or sense) data from one of the media such as punched cards, paper tape and magnetic tape or optically readable characters on paper.

The device accepts the information and makes it available to the main storage of the computer by converting it into electrical pulses.

Output Devices

Information generated by the computer can be presented to the user in a variety of different ways. Output devices convert information from the computer, which is in the form of coded electrical signals, to a form that is convenient to the user. It may, for example, be in the form of:

- Printed paper
- Graphs

Line Printer

The line printer is a device that produce output from the computer in printed character form. The name of the device is from its ability to store and print a complete line of information at a time.

A maximum of 2000 lines are printed by certain printers.

Graphs Plotter

The graph plotter can be used as an output peripheral where information is required in the form of graphs or diagrams.

Input/Output Devices

The input/output device, as the name suggests, is a periphe-
eral that provides two-way communication between the user and the computer. Information is usually entered into the computer, via a keyboard which is rather like that of a type-writer. Output information is presented to the user in character from which is either printed on paper or displayed on screen which is similar to that of a television set. Some devices will accept and present information in graphical form.

Input/output devices are generally referred to as terminals because through them the user communicates directly with the computer. The two most common types of input/output devices are:-

- The console typewriter
- The visual display unit (VDU)

**Typewriter**

The two-way transmission of data between the computer and the console typewriter is in the form of electrical signals representing the characters in coded form. Information is transferred serially a bit at a time. Operating speeds are in the range 10 to 40 characters/second and a printed line is usually 80 characters across.

**Visual Display Unit**

The most common visual display unit is the purely alphanumerical type. The unit is self-contained and consists of the following basic parts:-

- Cathode ray tube (CRT) display system
- Keyboard
- Character generator

In appearance the unit is like a small television set equipped with a keyboard. Information entered from the keyboard and received from the computer is displayed on the face of cathode ray tube in the form of characters arranged in horizontal lines.

**Other Input/Output Devices**

Various other devices can also be listed here:-

- Magnetic tapes units
- Magnetic Disk units
Floppy Disk/Diskette

A floppy disk can be used as input/output medium. It has already replaced cards, because of easy handling and storage as compared to cards.

A diskette has a single flat surface with magnetic recording. This single surface is divided into sectors and tracks. Minimum of 128 characters (one record) can be entered on one sector. A diskette may accommodate data of 1898 records. Data entry on the diskette is through key entry.
The Universitas Terbuka, Indonesia
(Open University)

By
Masuda Chaudhry

Universitas Terbuka is the Indonesian name for Open University. Since there were already some open universities in the Asian region and in other parts of the world, it should best be called by the original name to distinguish the Indonesian institution from similar institutions in other parts of the world.

Establishment of the Universitas Terbuka

In the 1950s the Government had created correspondence education to upgrade teachers already in service. In 1981, the Government started two distance education projects which later formed a part of the Universitas Terbuka. The two projects were intended to give in-service training to teachers of secondary and tertiary level institutions.

The link between distance education and teacher in-service training was not accidental since the rapid expansion required the Government of Indonesia to establish "crash programs" for teacher training in order to keep up with the demand for additional teachers. There were subsequent needs for upgrading the skills of those teachers which could only be met with distance education, since regular training was too expensive and replacing the teachers for further training was difficult to do.

The decision to start the Universitas Terbuka came late in 1983, after the Government hesitated to establish an unconventional university for fear of low quality performance. In the meantime, the continued demand for university places and the slow
increase of regular universities made postponement of the Universities Terbuka impossible. The Preparation Committee was given only nine courses to establish the Universitas Terbuka. The system that was eventually decided upon was:

i. a uniform curriculum for everyone taking the same programmes.

ii. using the post office as delivery points for course materials and also as a bank for accepting fees from students.

iii. using existing government higher education institutions as regional offices;

iv. using word processor letter quality-printer outputs a camera ready text for printing;

v. using the University of Indonesia computers and computer programmes to process registration and examination; and

vi. requesting nationally known professors to write the course materials.

There was no time to try out the course materials and multiple choice examinations. Registration and examinations were processed by the University of Indonesia's optical scanners and the results recorded by their computers. The students had to go to the designated post office for registration, receiving the course materials and paying their fee and course materials. Afterwards they had to confirm their registration at the regional office, receive further information about tutorials and examinations and about how to study in a distance education setting.

The course materials were generally the work of individuals rather than teams. The team approach was used only to develop the curriculum. Even this was mostly taken out from the existing government regulated minimum curriculum. After the curriculum was agreed upon by the team, the team proposed writers for the course materials. The first task of the writers was the design of the Basic Course Outline (BCO). On the basis of the BCO, the materials were then subdivided into modules.

It took about six to nine months to complete the writing a course, one month for review and revision and another two weeks
for preparing the text for printing. At least half of all the courses were ready for delivery by the opening of the Universitas Terbuka on 4 September, 1984. The other half of the courses was sent to the post office at a later date.

Applications to enter university were overwhelming. About 270,000 persons applied. The plan to accept 25,000 students in the first year of operation was later revised by the Government to 65,000. Eventually about 60,000 students actually registered after same kind of selection process was applied.

The expectation was that many of the registered students were recent graduates from senior secondary schools; however, more than 75 percent of the registered students was already employed. The purpose of lessening the pressures of demand by recent graduates for university places could therefore not be met. There was the possibility that recent graduates, before entering the Universitas Terbuka, sight seek employment first. If this was the case, the same student would enter the Universitas Terbuka only after employment.

**Aims and Objectives**

The Universitas Terbuka was created to:

a. have better access to higher education especially for the recent graduates of the senior high schools.

b. increase the participation rate at the tertiary level without too much dependence on academic staff.

c. train increasing numbers of students in areas demanded by the economic and cultural development of the country.

d. upgrade the secondary school teachers who graduated from the short term programmes by enabling them to obtain the full teachers training degree.

**The Instructional System**

**MATERIAL AND ITS ADMINISTRATION**

The reason for using print materials as the primary medium was the low price and the relatively simply process of production. The short preparation time and limited resources available
made this decision necessary.

After two years, the Universitas Terbuka tried to introduce more materials in other media especially for the transmission of practical skills such as teaching and science laboratory skills. It remained to be seen how this effort will succeed in the future.

Print and audio materials were sent to students by post. In the first two years the students had to take the course materials from the post office but beginning September, 1986 a new administrative system was introduced. The main characteristics of the new administration system was round registration; students may take their choice of courses within limits posed by the curriculum; course materials shall be sent to students' homes; and examinations of all courses offered will be held three times a year. The delivery became, therefore, much more complicated. Before the new system was introduced every student within the same study programme received the same course materials at the post office. It was far less complicated to pack and deliver the course materials. After the new system was introduced, registration and payment for courses have to be administered and recorded separately for each student. A large computer had to be purchased to allow easy management and recording of such a mass of data.

MODE OF STUDY

After the students received the course materials, they could start the study. Universitas encouraged them to form study groups with fellow students living in their vicinity. It was hoped that the study groups would encourage learning and that difficult parts of the study materials could be easily understood.

Survey results indicated that there were at least two variations of study groups. One group studied on their own and another group hired a tutor to help them with understanding of their course materials. It was perhaps the latter group which caused a drop in attendance at tutorial sessions. By hiring own tutors they could select good tutors, better than the tutors provided for them by the Universitas Terbuka. They could also ask the tutors to go over examination questions so that the students would be better prepared to take examinations.

Prior to the completion of the home assignment and the semester examination, students can attend tutorials. It was ex-
ected that tutorial sessions would be used for helping students to overcome difficult parts of the course. Tutorial sessions were mostly unpopular and attended only by a small fraction, of about 10 percent of the student population. The attendance rate at the beginning was high, more than 80 percent, but soon it dropped to the above level except for certain courses or certain popular tutors.

There was a corresponding increase in the establishment of study groups. Some students claimed that study groups were more effective in providing assistance to the students than tutorials. At any rate, study groups could have more frequent meetings and the meetings could held in their vicinity. Many students have to travel longer distances to reach less frequent tutorials.

RADIO & T.V. BROADCASTING

Audio and video materials were broadcast through government and private radio broadcasters and through the Government's only television station. Radio time could be provided in accordance with the needs. Television time was given only twice a month for 25 minutes each. Other times which could be used were from early in the morning until 1630 hours in the afternoon at which time the regular television programmes started. The cost of broadcasting any courses beyond the allotted 25 minutes each fortnight had to be borne by the Universitas Terbuka. Until the present time the financial means to use more television broadcasts is not available.

WAYS OF COMMUNICATIONS

Indonesia's communication needs were substantial. Thousands of islands spanning a very wide area were integrated into one country and one nation. The students of the Universitas Terbuka lived in all parts of the country. Students at remote locations could not be reached easily by ground transportation from the regional offices. All of this indicated the urgent need of the Universitas Terbuka for various types of communication means available in these regions. Sometimes new communication channels have to be established because the old channels are not adequate.

All possible channels to communicate inexpensively with students and regional offices were used. Apart from the postal services which were already adequately covered in the previous section, telex was used for urgent data transfer and administrative matters. The use of telex services was limited because only
about half of the regional offices had telex machines. It was not easy to set up telex machines at the regional offices; therefore, an attempt to use computer networks was tried out with some success. The problem lies in the low quality of the telephone network. Although Indonesia had an excellent domestic satellite system, the ground telephone lines were already antiquated and full of noise interference.

Since telephone costs were relatively high, tutorials were also conducted at a distance through single side band (SSB) two-way radios. A tryout of the system had almost been completed and there were plans to expand the SSB radio to other places if the tryout was successful.

Inexpensive media for communication were the newspapers and magazines. Press conferences could provide communication channels to reach students in a short time. Newspapers and magazines were eager to print news and articles about Universitas Terbuka because it increased their circulation. With more than 100,000 students the Universitas Terbuka was a big market for the mass media.

The introduction of education technology in Indonesia has changed the concept of distance education gradually. Indonesia has had a domestic satellite system for almost a decade and telecommunication is developing very rapidly. But no extensive use of the satellite system for education was made. A recent effort by the Government, with the assistance from USAID, tries to develop an Indonesian Distance Education Satellite System (SISDIKSAIT) with three communication components: voice interaction, graphics interaction and facsimile, there are still some unsolved problems. In a few years computer networking will be simple but this will only be available in big cities. Outreach to rural areas, although theoretically possible, will met with unanticipated difficulties.

**ASSESSMENT SYSTEM**

The assessment of students' progress was a difficult task for a university with a very large number of student and no academic staff of its own. How could such a university grade papers or have oral examination? How many persons should it hire to do the job and at what cost? It was therefore decided to employ mass assessment methods without dependence on people for grading. The solution was to use multiple choice questions which could be graded by computers. This applied to home assignments as
well as self-evaluations, although self-evaluations were graded by the students themselves.

This less than ideal solution was criticized by some academicians very inadequate to assess students progress. No way has been found to employ other methods of assessment at the earlier stages of their student years. Drop-out rate was very high and therefore the number of students would decrease dramatically when they reach their third year and beyond. Practical work such as practical teaching and laboratory work also needed to be assessed differently. A special team was assigned to study the matter and the trial of new assessment methods was expected to start in 1987.

The development of the examinations themselves was not all in accordance with good test development practices. The exam writers were usually the course writers, but if more exam items were needed another person with the same academic qualifications was hired to write more exam items. Peers were then requested to review the items for content validity and correct writing. Many exam writers were mediocre at first, but through training and experience they have improved. No items were calibrated before use since time was always pressing. An item bank was set up to calibrate items after use, revise and store items for reuse. Five hundred courses should have been offered during the 1986-87 academic year, therefore about half a million test items had to be written to have sufficient stock of items for this particular year which could be used for self-evaluation, home assignments and examinations. The examination items were recalled for reuse.
SPECIAL FEATURES

NEWS AND VIEWS

by

Mrs. Aisha Akbar

There has been a lot of activity on the Campus during the last six months of the Calendar year 1987. The University played host to digitaries, scholars and experts from within the country and abroad while a number of University staff members proceeded abroad to participate in Seminars, Symposia and workshops. Dr. G.A. Allana the Vice-Chancellor visited Japan at the invitation of Japan Foundation under short term visitor's programme. Workshops on different themes also formed an important part of these activities.

The successful experience of AIOU in distance education has drawn attention of the educationists and policy makers all over the world. A number of scholars experts and dignitaries from foreign countries and International organizations as well as from Pakistan visited the University. A brief account of the visits during the period under review is given below:

26th August Mr. Ahmed Ali, Zaia, Director General UNESCO.


2nd September Dr. Forster and Dr. Schnidt of the World Bank.

21st September His Excellency Mr. Nicholas Barrington Ambassador U.K.

29th September His Excellency Mr. Alsyeed Yousaf Al Mutabaqam, Ambassador of Saudi Arabia in Pakistan.

14th October Mr. Mahbub-ur-Rahman, MInister of Education, Bangla Desh.
17th October  Professor Mehdi Amin, Vice-Chancellor of OM Durnan. Islamic University Sudan along with Sheikh Yousaf Hamid Ali Amin, Chairman, Department of Quran & Science Conference.

31st October  A seven member Chines delegation of educationists.

14th November  A group of three senior teachers of Tehran University headed by Aqain Mauzi.

14th November  Mr. Paul Robson, Health Education Adviser ODA.

15th November  Mr. Hohn Caines, Permanent Secretary ODA

19th November  Dr. Barkhard Brent Jees, Prof. Martin Luther University, East Germany.

26th November  Mr. Robert H. Edward, Bureau Chief Prince Karim Agha Khan Paris Office.

24th to 29th  Mr. Hamemul Karim Der ILO Expert on November Training.

22nd December  Mrs. Akhtar Riazuddin, Secretary Women's Division, Govt. of Pakistan.

VICE-CHANCELLOR'S VISIT TO JAPAN

At the invitation of Japan Foundation, Dr. G.A. Allana visited Japan from 10 to 24 October 1987. Study the Japanese culture, art, museums, libraries, theatre, education institutions particularly distance and non-formal institution dealing with correspondence courses, life long and continuing education.

The visit afforded the Vice-Chancellor opportunities of seeing for himself the various socio-cultural and educational centres and exchanging views with the educational authorities in Japan. The visit was noted by the Vice-Chancellor as highly informative and fruitful, since it paved the way for developing linkages programmes between the Japanese Institutions and AIOU.
AIOU DELEGATES TO INTERNATIONAL SYMPOSIA: SEMINAR CONFERENCES ETC.

Prof. Javed Iqbal Syed, Dean, Faculty of Social Sciences & Humanities participated in a workshop on "Export Promotion Development Assistance AIOU" at Cambridge U.K from 6th to 17th July. He also attended the regional workshop of key persons on "Cooperative Development courses in Distance Education at the Higher Education Level" held at Bangkok from 21st to 25th September.

Dr. Shaukat Ali Siddiqi, Dean, Faculty of Education attended the "Experts Study Group Meeting on Completion of Reference Material" held in South Korea from 27th October to 5th November 1987.

Mrs. Razia Abbas Director, BUESP participated in a workshop on "Asia and Pacific Programme of Education for All (APPEAL) held at Chiangmai, Thailand from 19th to 29th August, 1987.

Dr. Maqsood Alam Bukhari, Associate Professor EPM Department participated in the Regional Seminar on Education Development and Work held at New Dehli from 1st to 17 September 1987.

Mrs. Snagufta Haroon, Incharge Students Advisory Services, attended an International Conference on "Counselling in Distance Education" in U.K from 15th Oct. 1987.

Professor M.S.K. Shibli, Registrar attended the inaugural meeting of Asian Association of Open Universities at Bangkok and Tokyo from 12 to 18 November, 1987.

Prof. M. Hanif Chaudhary, Director, Institute of Arabic participated in the symposium on "New Educational System in Open University" in Sudan from 7th to 9th November, 1987.

Prof. Faqir Muhammad Khan, Regional Director, Peshawar participated in the Regional key person's workshop on "Organization and Management of Distance Education study centres" at Jakarta from 9th to 13th November, 1987.

Mr. Muhammad Din, Lecturer attended the 5th Regional Workshop on "Preparation of Literacy follow-up Material in Asia and Pacific" at Puna, India from 9th to 19th November, 1987.
CONSULTANCY SERVICES

The Overseas Development Administration (ODA) of the Great Britain continues to provide assistance to the University in a number of ways. Besides providing training facilities to the AIOU officers and academicians in various fields and subjects, it sends longterm and short term consultants to work with different departments of the University. Mr. J. Ryley worked with Data Processing services in June-July 1987. Mr. R.A. Manual worked with the Finance Department in June, While R.A. Herbert provided consultancy in the field of Health and Pre-Nursing in August-September Mr. John Brown provided consultancy to Print Unit in November-December and Mr. A.B. Baddington and Mr. Munro were consultant for regional services and worked with the respective department in November-December.

WORKSHOP P.G.D. E.L.T.

The workshop on Post Graduate Diploma in English Language Teaching was held at University Campus from 7th September to 21st September. About seventy participants attended. The British Ambassador His Excellency Nicholas Barington presided over the concluding session and awarded Certificates to the participants.

STAFF DEVELOPMENT WORKSHOPS

The University organizes workshops for the new entrants to the University academic staff to orientate them to the Distance Education system. A major aspect of this system is the use of electronic media. Two workshops were held to familiarize the academic staff with electronics media. One on Script Writing for Radio and T.V. held from 3rd to 7th October and the other on Non-Broadcast media and their uses in distance education held from 14th to 19th November.

NEW PROGRAMMES

Allama Iqbal Open University is the first in the country to recognize the importance of functional English. Keeping in view the dual objectives of English language teaching & teacher training, a new programme leading to diploma & M.A. in teaching of English as a Foreign Language (TEFL) was launched in Autumn 1987, Semester. The British Ambassador to Pakistan His Excellency Nicholas Barrington was the chief guest on the programme launching ceremony held in the University Campus on 21st October.
The TEFL Students will have to enrol initially for the diploma which requires course equivalent to four credits. Those wishing to obtain M.A. degree will have to complete six more credits.
BOOK REVIEW

Dr. S.M. Rahman
Col. Bashir Hussain
Maj. Qamar-ul-Haq

Pages 273

Published by Army Survey Group Press Rawalpindi.

Of all the great nations of the world that have contributed to the building of human civilization, none perhaps have wielded the sword with unbounded success than the nomadic Arabs. Issuing from their desert tents, they in a remarkably short time, founded the mightiest empire of the medieval era, which stretched from the shores of the Atlantic in the West to the walls of China in the East. Their territorial conquests were not like those of Chengiz, Halaqu, Atilla and Hannibal, culminating in the destruction of humanity and civilization. Instead, the Arab conquerors were the harbingers of humanity, protectors of civilization and patrons of culture. After the end of the war and on the threshold of the conquest, they proved to be the well-wishers of the captive. In this way, they had won the hearts of the conquered races and ruled not even on their bodies, but also on the souls. They treated the prisoners of war with kindness and liberality to such extent that one captive of Badr proclaimed vehemently:

"Blessings be on the man of Madina who made us ride while they themselves walked on foot; they gave us wheaten bread to eat when there was little of it, contenting themselves with dates".

This generous treatment of the war-winner Muslims towards the prisoners reveals that they fought battle not for the sake of bullion and beatification, but in the way of Allah and his Prophet (PBUH). Fear of death was unknown to them. In the battlefield, they always appeared fearless and valourous. For them there left no attraction in the wealth of this world, no fear of heavily outnumbered enemy with an offensive power.

The Islamic history narrates how a thin army of 313 Muslims had to combat as many as 1,000 well-equipped soldiers of the Quraish and defeated them with great chivalry and valour. This event shows the Muslim's devotion and love for Allah. And it is the mainstream of their victory over a greatly superior forces which was achieved throughout the early battles of Islam. This
book covers all such inspiring episodes.

It cannot be denied that all the early battles of Islam were indeed a conflict between the forces of light and darkness, between truth and falsehood and proved the triumph of Deen over idolworship. Through these battles, the kuffars were crushed and their pride was humble down, with the result that the power of Islam began to increase; which produced a marvellous effect on the Jews as well as the neighbouring Bedouin tribes.

The religious impact, the warfare tactics, the far reaching effects and the historical importance of early battles of Islam are the main factors which led General Mirza Aslam Beg, Chief of the Army Staff, to induce the triple authors of this book to analyse them under the dimension of military leadership and to derive a lesson for the militant forces. This is a very good idea for compilation of such sort of book which may become a source of inspiration, enthusiasm and zeal for all of us not to be deterred by the well-defended enemy and outnumbered forces with sophisticated weapons. Through these narratives, we are destined to feel all around us the sweep and majesty of the tremendous manifestation of faith in the power of Almighty God. Our honourable COAS deserves all praise and felicitation for giving instructions to the learned authors to compile this book which in all respects appears to be comprehensive, informative and luminous.

DR. MAHMUDUR RAHMAN
Incharge, Daftari Urdu
DATA BANK
STATISTICAL GLIMPSES
OF
ALLAMA IQBAL OPEN UNIVERSITY
BY
Waqar Ahmed Siddiqi
Allama Iqbal Open University
Islamabad—-Pakistan

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

GLIMPSES OF SUMMER/AUTUMN, 1987 SEMESTER

Courses offered : 123
Course enrolment : 65841
Student enrolment : 35155
Course enrolment: Overseas : 407
Student enrolment: Overseas : 188

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<th></th>
<th>Male</th>
<th>Female</th>
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<td>Course participation ratio</td>
<td>67%</td>
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<td>Student participation ratio</td>
<td>68%</td>
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<td>Pass % age (BA)</td>
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### REGION-WISE COURSE AND STUDENT ENROLMENT

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<td><strong>Total</strong></td>
<td>65841</td>
<td>55</td>
</tr>
</tbody>
</table>

**MEDIA SUPPORT**

1. Radio programmes presented upto Autumn 1987 semester : 5944
2. T.V. programmes presented upto Autumn 1987 semester : 1023
4. T.V. programmes presented in Autumn 1987 semester : 47

**REGIONAL SERVICES**

1. Regional Offices : 13
2. Sub-Regional Offices : 6
3. Regional Coordinating Offices : 1
4. Study Centres : 418
5. Model Study Centres : 66
6. Tutors : 1873
7. Regional coordinators : 6
8. Regional Libraries : 18
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■ Tasheel-e-Khutbaat-e-Iqbal (Urdu) Rs.31.00
■ Mutaaliya-e-Bible Wa Qur'an (Urdu) Rs.18.00
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