DISTANCE EDUCATION IN INTERNATIONAL PERSPECTIVE:
THE BRITISH OPEN UNIVERSITY AND PROSPECTS FOR
ESTABLISHING AN EGYPTIAN EQUIVALENT

being

a thesis submitted for the Degree of

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by

Abdel-Gawad El-Sayed Bakr,
B.Sc. (Ed). (Assiut), MEd (Tanta)

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<td>ACHS</td>
<td>Air-Correspondence High School (Republic of Korea)</td>
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<td>AIOU</td>
<td>Allama Iqbal Open University (Pakistan)</td>
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<td>ALBESO</td>
<td>Arab League Educational Cultural and Scientific Organization</td>
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<td>AU</td>
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<td>BEC</td>
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<td>CCTU</td>
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<td>CEAD</td>
<td>Conference on Education of Adults at a Distance</td>
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<td>Centre for International Co-operation and Services (UKOU)</td>
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<td>DE</td>
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<td>DERG</td>
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<td>DHE</td>
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<td>DIFF</td>
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<td>DL</td>
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<td>Distance Teaching Universities</td>
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<td>EU</td>
<td>Everyman's University (Israel)</td>
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<td>FeU</td>
<td>Fernuniversität (Federal Republic of Germany)</td>
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<td>FUI</td>
<td>Free University of Iran</td>
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<td>ICCE</td>
<td>International Council of Correspondence Education</td>
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<td>IEC</td>
<td>International Extension College, Cambridge, U.K.</td>
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<td>LDTC</td>
<td>Lesotho Distance Teaching Centre</td>
<td></td>
</tr>
<tr>
<td>MCA</td>
<td>Mauritius College of the Air (Mauritius)</td>
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<tr>
<td>NHK</td>
<td>Nippon Hoso Kyokai (Japanese Broadcasting Corporation)</td>
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NOU  Netherlands Open University
OLI  Open Learning Institute, British Columbia
OUP  Open University Productions (BBC Division in partnership with the O.U. (UK).
SITE Satellite Instructional Television Experiment (India)
SLIDE Sri Lanka Institute of Distance Education
STOU Sukhothai Thammathirat Open University
UGC  University Grants Committee
UKOU The Open University of the United Kingdom
UNA  Universidad Nacional Abierta (Venezuela)
UNED Universidad Nacional De Educación A Distancia (Spain)
UNED Universidad Nacional Estatal A Distancia (Costa Rica)
USP  University of South Pacific (Fiji)
ABSTRACT

This study is concerned with the scope of distance education and tries to provide a framework for the establishment of an Egyptian Open University in the light of the Open University of the United Kingdom.

The scope of distance education dealt with, represents the historical background and the literature related to it. Some special attention is paid to the economic aspects of distance teaching, and a survey of international perspectives on distance higher education. These sections are in the form of a descriptive analysis, and provide background and context for the Egyptian decision-makers for purposes of comparison and support.

The British Open University system is then selected for study due to the fact that it is the most remarkable innovation in this field, and is respected in many countries. It is because of this that the empirical section of the study, undertaken in Egypt, is based on the British Open University system. This way, the possibilities of applying a similar system for Egyptian higher and continuing education can be judged. Questionnaires were devised by the writer and administered to the academic staff at 11 Egyptian Universities, directors of radio and television educational broadcasts, and the National Council for Research and Technology have been examined to see the extent to which the UKOU model is acceptable and applicable in Egypt.
The outcome proved to be positive. Some clear conclusions derived from this positive outcome. For instance, with respect to the proposed Egyptian Open University, the results of the questionnaire show that undergraduate and associate students courses should be the only programmes in the first phase of its establishment; General Secondary School Certificate holders and their equivalents should be admitted; admission policy should not consider the total marks in G.S.S.C. examination; teaching staff appointments should be on the basis of excellent academic experience, and ability in designing courses on a distance teaching basis with evidence of written materials and books; course texts should be distributed with other printed materials by the local study centres after receiving them from the proposed University H.Q. - to avoid some disadvantages of the mail delivery; the course team approach is favoured as its functioning at the UKOU shows it to be a suitable approach for preparing courses and materials; the Radio and Television role in teaching must be central to the new institution but some organising operations, especially the times of broadcasting and the role of the third channel at the Egyptian Television, need to be carefully rephased so as to cover all the locations of Egypt; Tanta City should be selected to be the H.Q. as it is located in the middle of the Nile Delta; public finance is the best way of supporting the proposed university, though some support could be given either by central government or locally.

Finally it could be said that the international evidence of widespread distance education experience and development at a tertiary level justifies the idea of the establishment of an Egyptian Open University, and that much of the structure and operation of the British Open University would be a desirable and applicable model.
CHAPTER ONE

THE PROBLEM IN QUESTION

1.1 Distance Education: an Approach to Learning

A remarkable innovation in British higher education, the Open University, established in 1969, focussed on distance teaching systems, an approach which has been spread all over the world in the 1970s and 1980s. Yet distance education in its basic forms and methods is not a recent phenomenon. Historically, it has offered equivalent routes for those seeking qualifications through part-time study; more recently, it has been adopted as a way of offering equivalency programmes outside of regular schools in many countries.¹

It could be said, that distance teaching began with a concern to reach individuals who could not attend regular classes. In Sweden, for example, in the 1880s Hans Hermod, a teacher of bookkeeping, continued to teach a student who moved away from his own town, by sending lessons through the mail. About the same time, an English teacher, William Briggs, who already ran a tutorial College, began to offer instruction by mail ("tuition by post") for students who could not attend in person. He went on to christen his institution grandly "University Correspondence College", make much of its address in Cambridge, and employing H.G. Wells as a tutor.²

² ibid, pp. 7-8.
In the United States of America, the notion of a land grant college with a campus extending to the state boundaries led American universities to offer correspondence courses from the 1890s; and in the late 1920s, the Soviet Union adopted distance teaching for a different purpose; to increase the output of the educational system beyond the limits imposed by the shortage of teachers. Since 1929, Correspondence education has formed a significant component in the Soviet educational system. Many universities have correspondence sections, and there are some fifteen external polytechnic institutes that teach both part-time and correspondence students.\(^1\) Earlier correspondence projects elsewhere had contributed slightly to the educational system, in so far as they produced graduates at one level of education or another. But their mainspring was a concern to offer something to small groups of disadvantaged students.

It should be stated that, with reference to the facilities available through on-campus-learning at even the most remote and provincial locations, for North American or Australian senior high schools and universities, correspondence education as an approach to distance learning was clearly a 'second-best'. Nonetheless, it was preferable to no education at all, and during the 1920s and 1930s number of universities in the British Empire came to provide external tuition by correspondence, using methods basically similar to those of the primary school correspondence classes. Their targets were schoolteachers and

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1. ibid, P.8.
civil servants working for a bachelor's degree.¹

These continuous changes and developments in the overall pattern of distance education marked steps on the pathway as distance education systems adapted their methods and operations to face changing world of education and the needs of society and individuals. But it was still primitive, and distance education from this could then be described as "Cinderella awaiting the Fairy Godmother of improved technology".²

Distance education was not destined to remain a Cinderella forever. From the 1930s onward the portents of change should have been increasingly clear, radio broadcasting as an adjunct to primary education came to the fore in the 1930s and 1940s in Latin America and developed to many parts of the world. Civil aviation, already well developed through the Second World War, offered opportunities of speeding up the process of communication between teachers and students. Educationalists even by 1938, glimpsed the possibilities afforded by new technologies in the media. With these possibilities on the horizon it is, at first sight, puzzling that in most parts of the world thirty years would elapse before distance education at the university level came into its own.³

² ibid, p. 13.
³ ibid, p. 14.
FIGURE 1. MAJOR DISTANCE TEACHING INSTITUTIONS IN THE WORLD

1988 EGYPT: Proposed OU
1987
1986
1985
1984
1983 NIGERIA: OU (closed 84)
1982 JAPAN: UA
1981
1980
1979
1978 THAILAND: STIU
1977 SRI LANKA: SLIDE
1976
1975
1974 LESOTHO: LJTIC
1973 MALAWI: MCC
1972 MAURITIUS: MCA
1971 MALAWI: MCC
1970 INDIA: DCC (Punjab Univ)
1969
1968 KENYA: CU
1967
1955
1951 SOUTH AFRICA: UNISA

AFRICA ASIA AUSTRALASIA EUROPE NORTH AMERICA SOUTH AND CENTRAL AMERICA
The first universities using distance teaching methods appeared in the 1950s in South Africa¹ and the Soviet Union. Sweden and Finland also enjoyed a long standing reputation as countries with a sustained commitment to distance education.²

I should like to make a further point, and that is that programmes using distance teaching methods have existed at further education level (technical and vocational-oriented courses) for 130 years and at a higher education level (university and university-oriented college courses) for 100 years.³ In Britain, its origins can be partly traced to the historical distinction between teaching and accreditation which was one of the key features of the Oxford and Cambridge system: the colleges taught, the university examined. Thus when the University of London was established in 1836, it had no teaching functions, but merely registered and examined students, in the U.K. and

¹ See: The Open Universities in South Africa, published on behalf of the Conference of Representatives of the University of Cape Town and the University of the Witwatersrand, held in Cape Town on 9, 10 and 11 January 1957, (Johannesburg: Witwatersrand University Press, 1957); and Truswell, H., 'UNISA, South Africa's Open University', OPTIMA, vol.22, Dec.1972, pp.197-99; and; Reid-Smith, E.K., Some Aspects of Distance Education in the Republic of South Africa and in Britain, A report of the Council of Riverina College of Advanced Education, Wagga Wagga, 1982.

² Willen, B. 'Distance Education in Swedish Universities', Distance Education, vol.4, No.2, 1983, pp.(211-22); and Willen, B., Strategies for strengthening student-teacher Contact in Distance Education: Results of an Evaluation of Distance Education in Swedish Universities, Distance Education Research Group DERG papers No.9, (Milton Keynes : The Open University, January 1984).

overseas, for external degrees. Various private concerns, such as the University Correspondence College (Cambridge) and Wolsey Hall (Oxford) soon arose to provide correspondence tuition for students enrolled for London external degrees. This is one particular pattern of provision, and perhaps the earliest correspondence tuition provided by an independent organisation for degrees awarded by a public university.¹

From these beginnings, the link between technology and distance education has been forged, so that the use of current technological media is one of the essential characteristics of distance education. The relationship of mediated communication to distance education emphasizes the need to understand the impact that new technologies have had on delivery methods.²

The British Open University as it is the core of this study, could be described here as the best innovative example, from this perspective, of the combined and integrated use of the different methods and technological devices available to an autonomous teaching institution realize the opportunities of distance education in higher and adult education. For while the Open University's basic teaching system has changed surprisingly little over the last 16 years, there have been some major developments in distance education, paralleled by important technological changes. Bates distinguished

four major trends:

a) A wider range of media is now becoming available for use in the home. To broadcast television, radio and home experiment kits, can be added audio and video cassettes, video discs, cable and satellite T.V., the telephone, microcomputers, viewdata and teletext systems. When the Open University was established, decision-making regarding the use of media was relatively simple. In essence, the choice had been made before the university opened.

b) There is a greater diversity of access to new media. The three original media, broadcast television, radio and printed texts, were not chosen by accident by the Open University. Virtually every home in the land could be accessed through these media. Thus no-one in Britain should have been prevented from enrolling for the Open University because of difficulty in receiving the teaching material. However, two things have happened in the last 16 years. The principle of universal access regarding broadcasting at the Open University has been eroded, because not all students can watch or listen at the times at which programmes are broadcast. Secondly, most alternative media (video cassettes, cable T.V., etc.) are not universally available in all homes, nor will they be by the end of this decade, if at all. This raises questions of social equity. Should distance teaching institutions use media that are not universally available? Since units costs are lowered if students can share equipment for instance, through

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1. Bates, J., 'The Growth of Technology in Distance Education', in Bates, A. W (Ed), The Role of Technology in Distance Education, (London: Croom Helm, 1984), pp.5-6.
availability at local study centres - to what extent should distance teaching be home-based or local centre-based?

c) Costs are coming down for new media. A C60 audio-cassette, containing one hour of material, can be delivered to an Open University student for less than 50 pence. This cost covers everything (copying, materials, packaging, post) except design and production, and the student can keep the cassette. Similarly, a 25-minute television programme can be delivered on video-cassette for 75 pence per student or for just over £2 for an hour's material - if the student returns the cassettes for re-use at the end of the course. A 16K microcomputer and a video-disc player could now be rented for lower charges. Developments in some areas of technology mean that even institutions with low budgets can afford to produce and distribute some non-broadcast audio-visual media, if they so wish.

d) New media are giving students greater control over their learning and interaction. This is a most significant pedagogic development. While broadcasting does not permit 'interruption' by the student, new media provide greater opportunities for revision, in-depth thinking, and integration. New media increase the amount and level of interaction between a student and learning materials, and in some cases give more opportunity for human interaction. This means that audio-visual media should in theory become more effective in developing learning.

These technological changes, in parallel with innovations in distance education methodology, produce new
models of distance learning. But the question which the writer wishes to raise in this study is: what factors encouraged the educational planners in making their decisions towards the setting up of such distance teaching institutions? The answer in respect of the British Open University case could be illustrated by distinguishing the Open University from conventional universities in the following ways:

a) it is designed for adults of all ages who are already working;

b) study is designed to be home-based;

c) it uses open-network BBC television and radio in addition to written and other materials;

d) it requires no formal educational qualifications for entry.¹

Table 1 highlights the differences between the Open University and conventional institutions of higher education, and provides a framework for the resolution of the major question raised by the writer above.

<table>
<thead>
<tr>
<th>Feature</th>
<th>The Open University has...</th>
<th>Conventional higher education Institutions generally have...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry Characteristics</td>
<td>• An open system of entry with no insistence on matriculation requirements.</td>
<td>• A system of entry based on prerequisite qualification</td>
</tr>
<tr>
<td></td>
<td>• A population aged largely between 25-50 with little recent formal educational experiences.</td>
<td>• A population aged between 18-21 (Late adolescents) with little if any work experience, who are very recent products of formal schooling - products of the front-end system.</td>
</tr>
<tr>
<td>Mode of Operation</td>
<td>• Part-time students Students who are required to learn at a distance from the generators of knowledge (teachers).</td>
<td>• Full-time students Students who are required to study through direct contact with the generators of knowledge.</td>
</tr>
<tr>
<td></td>
<td>• The 'teacher' is a collective body of academics.</td>
<td>• The teacher acting as an individual.</td>
</tr>
</tbody>
</table>

It is essential to recognize the unique contribution of the Open University, being the most 'adult' of all British universities by providing distance education courses leading to ordinary and honours degrees. With a growing range of post-experience and continuing education courses organised on a modular and shorter cycle basis, the Open University has provided an enormous stimulus not only through the judicious mixture of media, but also by the production of 'team written' teaching/learning units and readers which are often models of resource at their various academic levels. More specifically, the success of the Open University has opened up novel perspectives on independent and open learning which may well prove to be salutory for the further development of continuing education forms and structures.¹

In fact, the traditional patterns of provision of higher education in Britain created a need for the provision of higher education for adults. In 1974 Lord Perry asked:

how that need can be satisfied, how far we have succeeded, by the methods used in the Open University, in satisfying it, and finally, how far our experience enables us to draw inferences about the relationship, at the higher education level, between 'initial education' and 'continuing education'.²


As Perry pointed out, in England, if not in Scotland, university education has always been provided for a very tiny fraction of the age group. In about 1960, the proportion for the whole of Great Britain was only 3.2 per cent, according to the Robbins Report of 1963\(^1\) and after an explosive expansion, largely evoked by that Report, it has reached about 7 per cent. The Robbins Report revealed that in Sweden more than twice, and in the United States more than four times the proportion than in Britain were offered an initial chance of a higher education. Since then Britain has increased its absolute numbers, but so has the rest of the world. There is, partly as a result of the rapid expansion of the last two decades, a growing disenchantment with the whole idea of pushing larger and larger numbers of school leavers into full-time higher education. Perry, quoted some of the contributing factors which included:

a) the national cost of higher education escalates;

b) many students do not have a clear personal motivation for study and they go into higher education because it is the 'done thing';

c) the average standard of performance falls (more means worse);

d) graduate unemployment increases because job expectations change more slowly than the number of graduates;

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\(^1\) Report of the Committee on Higher Education (HMSO, 1963)
e) employers find graduates ill-prepared for real jobs - again because job expectations do not change sufficiently rapidly and because uncertain motivation on the student's part leads to ill-chosen courses of study;

f) student unrest, which stems in part from all these other factors, produces public hostility.¹

It could be said that this general disenchantment is common to many countries of the world, and may contribute to a demand for alternative forms of higher education. However, if we accept the need and the demand for the provision of higher education for adults, how are we to satisfy it? The difficulties are immense: some of them can be summarised as follows:

a) adults are usually very occupied with the tasks of breadwinning and of child-rearing. These tasks usually prevent a return to full-time education. Education for credit at the higher education level is available to them on a part-time basis only in certain circumstances, and in a very few geographical locations.

b) even if opportunities existed for such adults to return to full-time education the nation cannot spare them from productive work in sufficient numbers to reduce the deprivation of decades in a reasonable period of time.

¹ Perry, W., op. cit., p.3.
(c) many capable adults are deprived because their initial education finished at elementary school and not even at secondary school level. They are, in consequence, debarred from entering higher education by national entrance requirements.

d) many adults in various walks of life would be unwilling, even were all other barriers removed, to attempt full-time higher education or even part-time higher education in situations where their attempt and its possible failure would be known and where their neighbourhood or workday reputations would consequently be at risk.

e) Deprivation of opportunity at school tends to breed a lack of self-confidence to lead to the feeling that 'education is not for us'.

So these then, are the problems that were well known before the Planning Committee of the Open University began its work. Given its subsequent achievements there is no doubt that in respect of the British Open University: 'More means Better'. Glatter and Morgan suggested that:

"the Open University really comprises at least two separate major innovations in the British context. Firstly a university offering universal access both into the institution and through the courses; secondly, a national educational institution using a sophisticated teaching system based predominantly on distance teaching methods."

1. ibid, pp. 8-9.


So, it could be agreed that distance teaching has now been accepted as a system of providing education to the public, either as a complement to the traditional classroom teaching system, or as an independent one with its own methodologies. Many institutions have now been established in different parts of the world, developed and developing countries alike, which specialize in distance-teaching methods. Depending on the objectives for their establishment and the level of their clientele, these institutions are known by different names: the Open University, the University without walls, the Open School, the National Correspondence Institute, the University of the Air, the Central Broadcasting and Television University, and so on.¹

The role of distance education could be explored by the standardisation of the following six questions:²

a) why is it necessary to provide adult or higher education through the distance education system or systems?

b) for whom is the distance learning intended?

c) how are we to set up an appropriate distance education system?

d) how are we to maintain high-quality teaching at a distance and prevent a lowering of standards?

e) how are we to avoid wastage without producing an overbundance of graduates.


f) what are the keys to success?

From the point of view of the writer, all six questions could be profitably addressed through studying the prospects of establishing an Egyptian distance teaching system or 'Open University', suitable to resolve the dilemma of higher education in Egypt. This could be based on an examination of the establishment of the British Open University, together with some other perspectives on distance education systems in other selected countries, as follow in this study.

1.2 The Scope of Distance Education

It can be said that there is an increasing demand for distance education. This is due, on the one hand, to the development of literacy and the greater opportunity for leisure, and on the other hand to rapid advances in technology accompanied by changing attitudes away from the idea that: "education is the occupation of childhood in preparation for living, and that earning a living is the occupation of adulthood".¹ So, in the effort to extend educational access to all children and adults, wherever they may be compelled by circumstances to live, new programmes and services are expanding at all levels.

As Perraton puts it:

"The scale of the demand had led to a search for alternative methods of education which can reach more people, or reach different people, or do so more cheaply."²


Distance education has been applied, with varying degrees of success, to all sectors. Particularly in the developing countries distance teaching methods have been seized upon because they are seen as either a means of reducing costs per student or of considerably improving access to an educational system for individuals denied a conventional pathway for one reason or another. In particular, distance education creates a world of equal access from which no-one is barred, and obviates the structural impediments which have for so long existed in the formal system, throwing the 'knowledge system' open to all.

The following are some of the key advantages of distance education:

a) the traditional classroom is not a necessary pre-requisite for a teaching situation;

b) distance is not a barrier to education, as it holds a promise of reaching out to target groups of people who could not otherwise be reached by special education and training;

c) it is convenient for the student;

d) the student can work during the day and attend to his course in the evening or vise-versa;

e) the student can work at his own speed without the consequences of group pressure characteristic of a classroom situation;

f) distance education is suitable for certain categories of vocational training, except in subjects like medicine and surgery, especially in the developing countries; in the developed countries such subjects are being taught through institutions like the British Open University;

g) a level of academic work can be covered;

h) it provides the teacher with a means of self-examination as regards to both the content and effectiveness of his/her techniques;

i) it is flexible in terms of both the methods and techniques used, and also in meeting the needs of the individual student: it can easily be an individualised method of teaching;

j) it has the possibility of improving the quality of instruction by inviting the best subject specialists and educationalists available to produce courses for large groups of students;

k) the applicability of distance teaching to large groups of students as a kind of mass communication, is particularly attractive at times when educational institutions are overburdened;

l) it recognises no age-limit for study;

m) side effects of denial of Training for large numbers are eliminated;
n) it is the least expensive and fastest method of educating a much larger number of people than is possible through formal education, especially during periods of constraints on resources, particularly in terms of finance and personal.

On the other hand, distance education is not without obvious disadvantages. The major disadvantages can be: impersonality; the high degree of self-discipline required; the complex organisation necessary to maintain high standards in the preparation of materials; the unsuitability of some home environments as regards study conditions; physical inability to study after a hard day's work. But whatever disadvantages distance education may have, it cannot be compared with other problems and difficulties which face some traditional methods. Distance education has the potential to achieve either in its own autonomous systems or side by side with the conventional system.

1.3 On Examining Distance Education: Dimensions of this Study

Distance education in its international perspectives is one of the main dimensions of this study. The other dimensions are: the British Open University distance higher education and continuing education system as a

2. ibid, pp. 85-86.
unique autonomous distance education institution; the economics of distance education as measured by its inputs and outputs; the tools of distance education, meaning the media of instruction and their relative significance in different examples of distance learning; the prospects of establishing an equivalent system to the British Open University within the context of another national education system, namely that of Egypt.

Given the widespread growth of distance education all over the world, understanding the content of such systems requires an international perspective. Such a perspective could identify:

a) the best mode of application of distance teaching in certain circumstances;

b) the disadvantages of distance learning in certain circumstances;

c) the means of avoiding problems that have already occurred elsewhere;

d) certain paths of development and innovation in the field;

 e) the most appropriate functions for particular technological devices;

f) possibilities of co-operation between two or more systems.
Such an approach need not be too wide-ranging. The examination of one selected system in another country; its objectives, methods, organisation and achievements, could well be significant for the first country to apply. In this way, the experience of the British Open University has been sought in helping the development of similar institutions around the world: Allama Iqbal Open University in Pakistan; Everyman University in Israel; the Free University of Iran, and many others.

So the object of this thesis is, with comparative study and special reference to the British Open University to explain the aims, objectives and prospects of establishing an Egyptian equivalent, or at least applying some of its methods in solving problems in the Egyptian higher education system and continuing education programmes. It is hoped that the results of this study will play an important role in solving problems in the regional universities which extend to cover most of the geographical locations in the Egyptian regions. There is no doubt that in-service teacher education programmes in Egypt could make use of the methods and even the programmes of the British Open University in attacking the problem of illiteracy. So, the scope of this study could be formulated as follows:

a) the economics of distance education on a comparative basis;
b) the various aspects of correspondence education and the use of broadcasts in distance education on a descriptive analysis basis;

c) distance education systems in some selected countries in the six continents of the world for the purpose of comparative analysis;

d) the British Open University system which represents the core of studying the prospects of establishing an Egyptian equivalent.

Another aspect of the dimensions of this study is the range of terminology and method accepted as falling within the broad category of 'distance education'. The following terms have been recognised by the writer for inclusion:

- correspondence teaching/education/study;
- teaching by letter;
- home study;
- teaching by post;
- learning over the air;
- private study;
- self-instruction;
- self-study;
- external study;
- extension education;
- independent study/learning;
- indirect teaching;
- open teaching;
- open learning;
- open education;
- distance teaching;
- distance education;
- distance study;
- off-campus studies;
- 'tele-teaching'.

It could be useful to deal with some of these terms at this stage:

a) **Correspondence Study:**

"A type of Distance Education based on exchange by post of written communications (e.g. course notes, student essays, tutor comments, between tutors and students. It may involve the study of specially-printed materials, text books, home experiment kits, audio-tapes, radio and television broadcasts; and it may be backed up by face-to-face meetings with tutors and by summer schools".\(^1\)

b) **Home Study:**

This term is used mainly in the United States of America and is there confined to further and technical education. The 1979 listing of approved members of the National Home Study Council contain 94 institutions, most of them proprietary. When those universities of the United States of America which teach at a distance wanted to form an association it is significant that they rejected the title 'Home Study' and chose instead 'independent study'.\(^2\)

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c) **Independent Study:**

"A term applied, usually approvingly, to a situation where the student is freed from some constraint that might otherwise inhibit his learning. For example, he may be independent of other students (and therefore free to learn at his own pace) and/or free of some of the constraints a teacher might impose. The student may be free to decide not only his own pace of work, but also the method of learning, and even what is to be learned - the objectives. The term is often used (ill-advisedly) of individualised learning, where the student may be free to work at his own pace but may be highly dependent on a teacher's decision, as to the content and sequence of his learning."

Obviously the term 'Independent Study' is used in higher education in the U.S.A. The 1979 Guide to Independent Study through correspondence instruction lists 68 members of the 'Independent Study Division of the National University Extension Association. Nearly all of these are correspondence sections of extension departments of American universities. So the term 'Independent Study' as applied in one form of teaching at a distance means 'Correspondence Education'.

d) **External Study:**

"Study through a course organised via correspondence or some other means by a college or university"

In fact, this term is most widely used in Australia. Indeed it is confined to that region where it well describes the essence of the integrated model of distance education as

found in many Australian institutions 'external to' but not 'separate from' the faculty staff. It can have little claim to general acceptance because of this limitation and because of confusion with the American 'external degree'.\(^1\)

As well this term could not be supported to describe distance education integrated system or distance teaching organised by an autonomous institution.

e) **Distance Education/Learning/Teaching:**

"Where students and teachers meet face-to-face rarely, if at all, and communicate with one another by such means as correspondence, radio, and television. Examples of this approach are Correspondence Colleges, the U.K's Open University, and Australia's radio classes for isolated children."

In fact, distance teaching or teaching at a distance has been the term most commonly used by the British Open University. But it seems to the writer that the term describes only half the educational process and it would be more precise to describe the process of teaching at a distance. The relationship between the terms distance teaching, distance learning and distance education could be represented as follows:\(^3\) distance education = distance teaching + distance learning.

It could be added, that: the term 'distance education' has been used widely to:

1. Keegan, D.J., *op.cit.*, p.29 - cf the term extension courses and external degree; see also, D. Rowntree, *op.cit.*, pp.87-88.
"cover the various forms of study at all levels which are not under the continuous, immediate supervision of tutors present with their students in lecture rooms on the same premises, but which nevertheless, benefit from the planning, guidance and tuition of a tutorial organisation".

This could be called Holmberg's definition for distance education, whereas, Moore defined it as:

"those teaching methods in which because of the physical separateness of learners and teachers, the interactive, as well as the pre-active phase of teaching, is conducted through print, mechanical or electronic devices".

There are another two definitions for the term 'distance education'; one of them called the French Law (Loi 71.556 du 12 juillet 1971) and the other for Peters.

Keegan has summarised the main aspects of the four definitions, as having the following characteristics:

- separation of teacher and student (learner);
- influence of an educational organisation especially in the planning and preparation of learning materials;
- use of technical media;
- provision of two-way communication;

2. Holmberg, B, ibid, p.11.
4. See - ibid, p.6, pp.9-11.
5. ibid, p.15. and see - G. Rumble, The Planning and Management of Distance Education, (London & Sydney: Croom Helm, 1986), pp.7-15.
- possibility of occasional seminars;
- participation in the most industrialised form of education;

It seems to the writer that all six characteristics are to be regarded as essential for any comprehensive definition. Figure 2 is an attempt to illuminate the elements of distance education.

f) Open University:

"A U.K. university established in 1969 to provide degree courses by correspondence for students of 21 years and over, regardless of whether they have the entrance qualifications normally required by universities. The university now (1981) has some 75 thousand students, the majority of whom have full-time jobs. They study at home about 12-15 hours a week for about 30 weeks of the year. Most of their work is with printed self-instructional materials and text-books, though these are supplemented by some television and radio (broadcast specially by B.B.C.), and some face-to-face tuition is also available. Certain courses entail a week at summer school. Students can attain a credit for each year's work, six credits being needed for a degree and eight for an honours degree. Courses are available in arts, social sciences, educational studies, mathematics, science and technology. Each year, approximately one in every 16 students graduating from U.K. institutions is from the Open University. Similar institutions offering Higher Education by Distance Teaching have been set up in several other countries including Pakistan, Venezuela, and West Germany." 1

Another definition from 1977 stated that:

"The Open University is the newest and most unusual of British universities. Designed primarily for adults who study part-time in their own homes, it requires no normal university entrance qualifications, uses a multi-media teaching system, and has enrolled over eighty thousand undergraduates since its inception in 1971. The University

FIGURE 2. FORMS OF DISTANCE EDUCATION DISTINGUISHED BY THE MEDIUM WHICH IS THE BASIS OF THE LEARNING MATERIALS

Distance Education

Print based
Distance Study Unit
Courses by newspaper

Audio based
Audio cassette courses

Video based
Video cassette courses
Courses by radio

Computer based
Courses by T.V.
Courses by Satellite

headquarters is at Milton Keynes, a new city being developed in North Buckinghamshire, fifty miles from London; the campus is called Walton Hall after the name of the original manor house on the site. At first sight the campus looks much like any other university, but there is a major difference - no students are in residence. Instead, many of the complex operations involved in producing the teaching materials are carried out on the campus; campus buildings house an art and photographic studio, a print shop, a publishing and marketing department (which sells the Open University teaching materials all over the world), and large computing and mailing areas rather than classrooms. In 1975 two major additions were being planned - a broadcasting studio complex and a building for the science and technology facilities. In addition to the headquarters campus, the Open University has thirteen regional offices throughout the United Kingdom, which are responsible for the local organisation of students in their respective areas."

So the use of the term "Open University" will be in the scope of distance higher education not on the basis of an open or closed admission system.

1.4 Methods of Study:

The methods used in the study are varied according to the subjects dealt with and are:

a) historical explanation, in studying the routes and the origins of distance education;

b) descriptive analysis, as a method of supporting and understanding the cases studied;

c) comparative analytical method, as a method of comparing between distance education systems in international perspective;

d) in addition, the empirical method is used to support the study in the form of a questionnaire designed as a set of open-ended questions to study the opinions and ideas of participants in Egypt. The field sample represented: higher education specialists (Chancellors of 11 Egyptian universities: 4 old universities and 7 regional universities); deans and educationists in 19 Faculties of Education within the 11 universities; the experts of the National Council of Education who predicted a system of distance higher education similar to the Open University in the United Kingdom; and the Egyptian Radio and Television educational programmes section.

The questionnaires were sent to all respondents by air mail from U.K. Those that were not returned by air mail were collected personally by the writer in Egypt. This visit to Egypt enabled the writer to interview some respondents, whose personal views form part of the outcome as indicated below.

The questionnaire comprises two sections:

a) the aims, objectives and system of the suggested Open University;

b) the role of Egyptian radio and television in the prospective system.

In addition to the empirical work in Egypt, the writer corresponded with the open universities examined in other countries, and visited the headquarters of the British Open University to examine facilities and interview external liaison personnel.
CHAPTER TWO

REVIEW OF SELECTED LITERATURE

This chapter deals with the literature of distance education, that is to say a selection of what the writer considers to be the most significant titles. These have been selected to be closely related to the context and field with which the thesis is mainly concerned and to give a background for major philosophical ideas and practical developments, with special reference to the Open University phenomenon.

The writer suggests that it is not possible to review in this chapter all the literature available and related, and in any case there is a wider literature referenced within the remainder of the thesis. First, however, the writer would like to point out that in the field of distance education there is, as yet, an insufficient development of books, journals or articles. Many of the works related to distance education are available only from specialised documentation centres such as The Open University International Documentation Centre on Distance Learning in Milton Keynes and The International Extension College's Information Service in Cambridge. Also there are some professionals in the field of distance education who have published selected bibliographies in their own work, for example, Holmberg in his book: Status and Trends of Distance Education.

2. Ibid, p. 63.
Education (1981) and Harry, Keith 'Selected Bibliography', in Distance Teaching for Higher and Adult Education (1981). From these beginnings, the literature will be developed and divided into four categories for review as follows:

a) the characteristics and rationale of distance education;

b) the Open University of the United Kingdom;

c) technology in service distance education;

d) distance education in the 'Third World'.

2.1 The Characteristics and Rationale of Distance Education: Selected Literature

i) Rumble, G., The Planning and Management of Distance Education, (London: Croom Helm, 1986), 259 pp. This book includes twelve chapters, and there is an obvious concern with the planning and management of distance education as well as an analysis of the general characteristics of it. It is an up to date and helpful contribution to the literature. He begins by indicating the diversity of form and practice in distance education, and goes on to discuss its characteristics as presented by Keegan's definition. Rumble develops this theme by examining three models of education and then considering Keegan's seven determining characteristics of distance education against these general educational models. The three models dealt with are:
a) the institution-centred distance education model;

b) the person-centred distance education model;

c) society-based model of distance education.

With respect to the political perspective, he discusses the planning behind the establishment of new distance teaching universities, and the role of distance education systems in national development. These are considered in respect of such concepts as: egalitarianism, modernisation theory, rural development, community education, continuing education, adult education, totalitarianism, and economic theory. These factors and concepts as affecting national educational policy have led to the adoption of basic ideas of distance education in respect of different countries and their circumstances. In his fourth chapter, Rumble indicates that one of the attractions of distance education, at least for politicians, is that the unit costs of teaching are said to be lower than those in conventional class-based education, thus holding out the expectation that more students can be educated for a given level of investment than is the case in conventional systems. This chapter is concerned with the comparative costs of distance and conventional education systems, the internal cost-efficiency and the cost-effectiveness of distance teaching, and the policy implications of the economics of distance education. So, Rumble contends, the potential for savings is often an important factor in the minds of those establishing distance teaching systems. Whether or not a given
distance education system is likely to be more efficient than a comparable conventional one will then depend on a number of factors including decisions taken by those planning the system in respect of choice of media, student support services and the administrative infrastructure supporting the system.

On "Establishing a distance education system", in the following chapter, the author makes clear the importance of specifying the underlying philosophy before commencing to plan a distance education system, as well as the need to make explicit the mission, goals and objectives of the institution or system. Equally, it is vital to clarify the strategies which will be used and ensure that the ways and means adopted are sufficiently reliable to enable agreed goals and objectives to be achieved. With respect to "Organisation" in Chapter Six, Rumble concludes that each system has of necessity to be idiosyncratic but that variables are always present; academic development, teaching, materials production and distribution, and administration. These are found in all distance education systems whether purpose-built, mixed-mode or consortia. He discussed as well, the advantages and disadvantages of these models.

There is a chapter on 'staffing', comparing distance education with conventional systems, as well as one on 'planning', in which strategic planning, concerned with the long-term prospects of an institution or system is stressed.
On 'academic management', Rumble discusses leadership and the management of staff involved in key areas - particularly the development of materials and the support of student learning. In distance education the interface between the academic, operational and administrative areas is more difficult to manage than in the conventional context. Management, it is suggested, needs to ensure integrated decision-making across a range of functionally distinct areas. This can be best through joint decision-making processes which involve both academics and operational and administrative staff. By Chapter Ten, Rumble moves into what he terms "Production/Operation Management" and the need to integrate academic and educational processes, such as curriculum planning, course design and teaching, with production and operations. He considers the implications of new technologies on these aspects. All the indications are, he states, that these changes are likely to be profound, ushering in a new era that will be characterised by the development of "information technology-based distance education systems", affecting the pedagogy of distance education, transactional relationships in individual distance education, and the jobs of all those working in distance education. He then considers "evaluation" as a fundamental difficulty in this form of education in that the student is separated from the teacher, thus preventing immediate feedback and consequent adaptation to student needs. It may be necessary to utilise professional evaluators who are inter-
mediaries between the teacher as a course developer and the students. In such contexts, Rumble examines the criteria for evaluating distance education programmes and the measurement of institutional performance.

ii) Sewart, D, Keegan, D and Holmberg, B (eds), *Distance Education: International Perspectives*, (London: Croom Helm, 1983), 445 pp. This book chronicles great changes in distance education, the articles selected for this volume providing a scholarly basis for theory and practice. It is a source that provides those in both developed and developing countries with a guideline to one of the most rapidly expanding areas of education. The book comprises eight sections and 31 articles, covering, collectively: the concept of distance education; theories of distance education; distance education and society; rationale; students and their progress; choice of medium; the new communications technology; course development; student support services; economics of provision.

iii) Shohat, Avshalom, *Exploration of The Characteristics and Competencies Dominating the Profile of the Persistent Student in Adult Distance Learning*, (Ph.D., Wayne State University, 1983), 146 pp. This study focussed on identifying the dominant characteristics and factors in the profile of persistent students at a distance teaching university. The study further addressed the question of determining the relationship between the
persistent distance learners' variables and their level of success and degree of persistence. The population selected was that made up of the students of Everyman's University, Israel's Open University, who have successfully persisted through at least six courses and have accumulated six credits or more (out of the 18 required for the B.A. degree). The sample consisted of 528 learners who self-administered a questionnaire regarding their background and demographic variables, as well as their attitudes and motivations. The findings of this research lead directly to the conclusion that background and demographic variables continue to play a significant role and continue to affect the level of success of distance learners throughout their studies, including the advanced stages.

iv) Tight, M. (ed), Education for Adults: Educational Opportunities for Adults, vol.2, (London: Croom Helm in association with the O.U., 1983), 321 pp. Opportunities for adult education have grown steadily and by 1983 a wide range of courses, subjects and forms of education were available. This book opens with the historical development of adult education in the United Kingdom and leads on to the study of its present structure. It covers distance teaching opportunities, such as the Open University and the National Extension College, and face-to-face teaching provision in, for example, adult education centres. It also looks at specific programmes such as the Adult Literacy Initiative
in the mid-1970s, and at target groups like the adult unemployed, women and ethnic groups. This book contains much material that provides new insights into both current and potential developments in adult education.

v) Advisory Council for Adult and Continuing Education, *Distance Learning and Adult Students, Report.* (Leicester, ACACE, 1983), 72 pp. In publishing this report, the Advisory Council seeks to draw attention to some initiatives in Britain offering distance learning opportunities for adults. This is very largely a record of success, which the council hope would encourage more educational institutions to enter this field. The report's description of these opportunities concentrates on information about their value to adult students, the types of adults who choose to learn in this way and why they make this choice. It also covers the skills needed, and the problems to be overcome by the organisers and tutors working 'at a distance' from their students.

vi) Perraton, H, *The Cost of Distance Education,* IEC Broadsheets on Distance Learning, No.17, (Cambridge: International Extension College, 1982), 65 pp. This book considers two issues: how to measure the cost of distance education and how its costs compare with those of conventional education. Although it describes itself as a 'broadsheet'
within the output of the International Extension College (Number 17) this booklet, in fact, contains as much, if not more, information on this theme than larger and more costly publications. It is not a text book, neither is it a definitive work of reference. It is a piece of clearly and concisely written 'practical advice and information', as it is described by the I.E.C. This publication stresses the lack of hard information and evidence which exists to enable valid comparisons of economic effectiveness to be constructed, not only as between different education systems but also within a single distance education system.

vii) Moss, C.D. and Brew, A., 'The Contribution of the Open University to Innovation in Higher Education, Higher Education, vol.10, No.2, March 1981, pp.141-151. The problems involved in the effective dissemination of information and ideas concerning teaching in higher education are discussed in this article. The results of a study investigating the influence of the Open University on teaching staff in other higher education institutions are reported and discussed.

In the prologue, which is entitled 'Purposes and Organisation of the Conference', Michael J. Pents states:

In this decade there had been a notable growth of both activity and interest in the education of adults at a distance, and this had happened in many countries at diverse levels of economic development. This growth probably reflected an increasing awareness of the need for more, or more effective, adult education and of the possibility of meeting such needs with the help of distance-learning systems. It was possibly stimulated to some extent by the evident success of the Open University.

(p.1)

The Conference brought together over two hundred participants from nearly fifty countries. Its purpose was to group together, review and assess, experience in the design and implementation of distance-learning projects and materials. A further purpose was to review the experiences of participants in various forms of inter-institutional co-operation and to explore possible future developments in this area. The following questions were confronted: what are 'open education' and 'education at a distance'? who needs adult education and why? what resources are needed? how should these be developed and organised? can international co-operation be expanded and made more effective?

In a plenary address and under the title 'The growth of distance learning', Perry has the following to say about
the British Open University:

ten years old is still pretty young, but the ten years that we've been in existence has been an explosive growth of interest all over the world in what we've come to call distance learning.

"There are already some twenty other Open Universities called by different names, all relatively new, all over the world." they vary enormously, not only in their objectives but in the methods and media that they use, and sometimes it is difficult to spot the common features. There are shared interests, shared problems and shared techniques. Consequently I have been trying to promote for the last two years, with the help of the executive heads of these other institutions, a sort of international institute of distance learning, to which all of us could contribute knowledge and skills and from which all of us could draw help and advice.

(pp.6-9)

A little further into the book, under the title: The concept of adult education at a distance and its application in developing countries, Nicholas A. Kuhanga has to say:

Distance teaching has now been accepted as a system of providing education to the public." While teaching at a distance is being adopted in many countries in the world, there is certainly an even greater need for it in developing countries, if we are to expand educational opportunities, formal and non-formal, to cover a larger proportion of our populations. There are many reasons for this, but suffice it to mention a few.

"First, education is a basic tool
for development... Secondly, developing countries need manpower to carry out social and economic activities.

Thirdly, in most developing countries, at least in Africa, educational opportunities at any level are only available to a small percentage of the population.

(PP.11-12)

Bernard Luskin, under the title Community-based distance education: one model for the future, states:

I would like to relate some of these trends to the emergence of Coastline Community College, as an example of one model in North America that has shown some signs of success.

(p.17)

He added more details of this Institute of Distance Education in California, which was opened in 1976 with nineteen thousand students, and about the advanced technology in the United States and its effect on the communications which has a main role in distance education. He added:

We know now through the concept of distance education that knowledge is portable, and that in some cases it can even fly through the air, and so we have new ways of thinking.

(p.18)

Wichit Srisa-an under the title: 'The education of adults at a distance: an Asian perspective', has this to say:
In the past, various countries in Asia have tried to extend educational opportunities to adults by setting up schools exclusively for them and utilising existing educational establishments to provide instruction as an extra activity outside normal class hours;... in the past decade, for instance, by adapting the open education system and setting up, for this purpose, higher educational institutions of distance learning. Pakistan's Allama Iqbal Open University, Sri Lanka's Institute of Distance Education, China's Central Broadcasting and T.V. University, Australia's Deakin University, Japan's Broadcasting University and Thailand's Sukhothaithammathirat Open University. The writer says: - all these institutions of distance learning, despite their individual characteristics, do indeed have one aim in common: to serve the needs of adults seeking to upgrade professional qualifications and/or to acquire a real understanding of the subjects chosen.

(Wichit Srisa-an identifies six critical problems. The first one is: why is it necessary to provide adult education through the distance-learning system? His answer was that the distance-learning system can be seen as an effective and economical means of extending educational opportunities. The second point is: for whom is the distance learning intended? In this case he considered it to enable adults to undertake university studies, and to ensure the availability of places for young adults fresh from secondary school. The third point is: how are we to set up an appropriate distance-learning system? The fourth is: how are we to maintain high-quality teaching and prevent a lowering of standards? According to the writer,
many academics, especially those of conventional universities, and employers, who have been accustomed to the traditional educational practice, tend to doubt whether it is possible to teach at a distance effectively, and claim that the distance-learning system is likely to turn out graduates of lower quality than those produced by conventional universities. However, some open universities such as the U.K. Open University have proved that it is possible to provide education of high quality similar to that of conventional universities. Srisa-an also indicates that, in developing countries, an open university has to face constraints of various kinds, such as those previously mentioned. The question is how to convince the public of the effectiveness of teaching at a distance and to win respectability for such a new venture: The fifth point is: how are we to avoid wastage without producing an over-abundance of graduates: The sixth point is: what is the key to success?

In Chapter 2, Neil writes about the use of such terms during the conference and tackles the questions of Srisa-an, arguing that the advantages of distance learning apply to both developed and developing countries, in that:

a) the opportunities available in the traditional system are limited;

b) there is a need for the vast majority of working people to i) have access to education on an extensive and egalitarian basis, and ii) avoid having to stay away from work to attend classes.
c) a DLS (Distance Learning System) is a potentially cost-effective means of providing the necessary additional opportunities.

These reasons were echoed and enlarged by the working groups in the conference. For example, the limitations of the traditional system include, in addition to shortage of student places, an inability or unwillingness to solve new large-scale problem areas in education. Traditional systems are more often than not of the 'initial' or 'front-end' type, and consequently do not have the capacity or experience to offer second chances to those who failed the requisite examinations or who, for one reason or another, could not take up an opportunity to extend their education as youngsters. The unwillingness of traditional educational systems to adapt to the pressing needs of national development was, at the worst end of the spectrum, referred to by some participants in terms of inertia and stagnation, of inefficiency and of perpetuating outmoded and irrelevant curricula.

Chapter 3 includes a number of useful references to selected systems of distance education and their curricula, including: The Netherlands Open University; the Department of University Correspondence Courses (DUCC) in Borma (1975); The Allama Iqbal Open University (AIOU) of Pakistan (which has been teaching since 1975), and the Open University programme of the Javeriana University, Colombia.
In Chapter 4, which is entitled: "From curriculum to learning", the author concentrates on the factors governing the choice of media and delivery systems by particular DLSs, and the following considerations emerged from the Group discussions: a) availability, b) accessibility, c) acceptability, d) validity, e) economics and f) organisation and management. Chapter 4 concentrates on the link between curriculum and educational technology.

Chapter 5 entitled: "Observations on the organisation, management and administration of distance-learning systems", looks at the features of governance and organisation and suggests that the idea of 'autonomy' of an 'independent' DL (Distance Learning) organisation may be somewhat illusory. Any DL institution is inevitably dependent to a greater or lesser degree upon conventional teaching organisations, for example for teaching staff, for supervisors, examiners, accommodation and other facilities. While a DL 'wing' can have salutary effects on the teaching methods and practices of its 'parent' conventional institution, it can be inhibited to a marked degree by the 'inward-looking' and 'overly centralised' characteristics of its parent.

In Chapter 6, 'Collaboration in distance learning', the author asks the question: what counts as collaboration and why collaborate anyway? The answer provided comprises economic and technical, educational and pedagogical, political and legal, and social and cultural aspects. The main points
under this heading are concerned with making better or more extensive or new uses of resources that are already available within one or more communities. For example, collaboration between a DL institution and media organisations, library services, industrial and commercial concerns, health services, schools and other educational or training institutions. On educational and pedagogical aspects he considers the main objectives to be improving the quality of learning materials, increasing educational opportunities for a wider student population, and increasing the relevance of studies to student needs. With respect to political and legal dimensions, different kinds of 'political' stimulus are provided by a desire on the part of an institution to increase its credibility, status and reputation (or even to increase its chances of survival), by collaborating with another already prestigious educational institution. Social and cultural factors in education and training are considered to be fundamental forces for initiating, guiding, and promoting changes of almost any kind thought to be beneficial to society. However, the needs identified in this area usually far outstrip the resources available to meet them. Because of their potential for greater cost-effectiveness (compared with that for traditional educational methods) and for reaching dispersed populations, DL institutions frequently initiate, or are approached to involve themselves in, collaborative schemes conceived to meet general social needs, especially of disadvantaged groups of people. Examples are schemes to
meet the particular needs of poorer people, the physically-handicapped, ethnic groups, not otherwise catered for adequately by existing educational systems. The author concludes by considering how schemes of collaboration begin, with reference to successful examples.

Chapter 7 is a conclusion and summary. It is considered that token gestures in allocation of resources would be useless, even though DLSs are potentially considerably more cost-effective than conventional educational systems. There is no way of benefitting from DL 'on the cheap'. So the message of CEAD (Conference on Education of Adults at a Distance) was that large-scale investment in DLSs, research and implementation, is a sound policy and urgently needed, in that the problems of adult education in less-developed countries in particular, are unlikely to be solved without it. Such problems have to be solved. If not, then there will be severe constraint on the effectiveness of schooling for the children of such adults.

ix) Kay, A. and Rumble, G. (eds), *Distance Teaching for Higher and Adult Education*, (London: Croom Helm, The Open University, 1981), 342 pp. This book is based on ten years of experience gained by the Open University's Centre for International Co-operation Services. It provides a detailed analysis of the development of distance learning methods and explores the education, economic, administrative and logistical
implications of these methods in a variety of contexts. It looks at the implementation of distance teaching in universities in a range of countries, including Canada, West Germany, Iran, Israel, Pakistan, United Kingdom and Venezuela. There is also extensive discussion of distance teaching departments from within the conventional university. The book comprises five parts.

Anthony Kaye in Chapter 1 reviews various models of distance provision, concentrating eventually on the autonomous institutional model typical of the new generation of projects which were established during the 1970s in a variety of different countries. A systems analysis of distance education is then presented with two key features:

a) a courses subsystem, concerned with the creation, production and distribution of learning materials;

b) a student subsystem concerned with enrolment, support and assessment of distance students, and their learning needs. These two subsystems are treated in detail in Parts Two and Three of the book, while Part Four examines the related logistical and control subsystems. The first chapter continues with a discussion of criteria for adapting distance methods, and the planning implications of so doing, at varying levels of complexity.
Chapter 2 addresses itself to three principal questions concerning the recently established distance-learning institutions which exemplify the autonomous institutional model:

a) who are the students of these institutions;

b) what do planners need to know about their students, and why?

c) how does one obtain the information needed?

The first of these questions is analysed at three levels by examining the political pressures which led to the establishment of the distance-learning institutions, by looking at the nature of the courses offered, and by describing some 'typical' student characteristics. The second and third questions involve an examination of uses and users of information on students, as well as ways of collecting relevant information.

Chapter 3 reviews the media, materials and learning methods used for distance education. By media is meant, in the broadest sense, the four major categories used in distance education: print, audio-visual media (broadcast and non-broadcast), practical work of various sorts, and interpersonal communication. The term materials refers to the specific items derived from one or other of the four media, which a student receives as part of a distance-learning course (e.g.
correspondence texts, cassettes).

Roebuck, M. 1 in his review of this book states:

Perhaps the fact that the volume concentrates on 'describing' prevents it from taking some issues further and from being critical of the stultifying effect of administrative procedures in this area. For example, in the chapter on assessment there is very little recognition of the educational value of assessment procedures, "in an ideal world, there would probably be no compulsory tests for examination..... Needless to say, we do not live in an ideal world, and the students are not the only body to be considered. The institution needs some approved assessment process for its own self-evaluation, and to control student progress. Society needs assessment process for part of its selection process, so that the jobs may be matched to the people who are available and qualified. The usual answer to the question "Why do we assess?" is because everyone else does, and everyone expects us to. This may sound cynical but it is not intended to be. Thus, although there are a number of key questions asked about the organisation of assessment which the respective chapter admits should not be approached lightly, they do not include "How do we use our assessment procedures to help students learning"? and the model is essentially one of using a highly complex computer-based or regular assignment-based system to monitor progress rather than to assist progress. Perhaps it is unfair to expect a publication which covers so much to cover everything.

In Chapter 14, comprising summarising comments by Kaye and Rumble, they state:

We believe that the creation of these autonomous public sector institutions represented an important and necessary critical stage in the development of distance-education provision and methodologies.

(p.290)

x) Holmberg, Borje, *Status and Trends of Distance Education*, (London: Kogan Page, 1981), 200 pp. Holmberg presents a true picture of distance education as it is today, its reality, theoretical backgrounds, problems and concerns. He discusses various aspects of distance education on the basis of attempts to clarify the distance study concept, and the diverse principles underlying the philosophy of distance education. Theories of distance education and the relation of distance study to general learning and teaching theory are looked at in the context of what characterises distant students and different models of distant education. Holmberg says in his preface to this book: "I hope this book will be useful as a modest contribution to comparative education" (p.9).

He analyses the role of communication in Distance study (Chapter 4), and discusses the organisation and administration of distance education (Chapter 5). In Chapter 6, he considers the evaluation of distance study, and follows on with an examination of the economy of distance education. Chapter 8 deals with the relationship between distance study and formal education. At the end of this book there is a very useful bibliography comprising: surveys of distance education; the characteristics, rationale and philosophy of distance education.
- theoretical approaches; course development; curriculum and objectives of study; media; structure, style and typography of printed courses; two-way communication; supervised correspondence study; evaluation; works on general aspects of education of special relevance to distance education; periodicals concerned with distance education; earlier bibliographies.

xi) Woodley, A, 'How Open is Open?', Higher Education Review, vol.13, No.1, Autumn 1980, pp.3-18. The extent to which the Open University has achieved its goal of openness is assessed in terms of three policy areas: administrative; educational; informational. It is proposed that an even more open policy is now needed.

xii) Holmberg, B, Aspects of Distance Education, Comparative Education, vol.16, No.2, June 1980, pp.107-119. At the time of writing the author was Professor of the Methodology of Distance Education, and Director of the Central Institute for Research into Distance Education at Fernuniversitat, Hagan, West Germany. He was active for 20 years in distance education in Sweden. In this paper he says:

Distance education is not only widely applied today, but it is also the object of scholarly inquiry. This means that some knowledge is available about this study form. In this short paper I should like briefly to consider the student bodies, course creation, two-way communication and, furthermore, some theoretical approaches to distance education.

(p.108)
He considers that those who make use of distance-study methods are a far cry from being a homogeneous group, but the age-group 25-35 seems to predominate in most cases. With respect of American, British and Swedish researches, he contends that correspondence students, to a greater extent than other adult students, have examinations and degrees as their aims. On the other hand, considerable numbers of them have declared, in different contexts, that they study purely for personal and academic interest. On course development, Holmberg feels that it is based on analyses of objectives and target groups, on criteria for structuring the learning matter and the choice of media, both for the very course presentation and for the two-way communication concerned, as well as on formative evaluation. As he relates the course development point with the two-way communication point which is a constitutive element of distance study, he states:

The greatest danger that threatens the effectiveness of distance education seems to be delayed feedback. Only by tele-communication is immediate feedback in distant two-way communication possible. Students seem to accept and profit from comments and corrections given within 7-10 days after an assignment has been completed, but are usually dissatisfied if the delay is of longer duration.

(p.113)

On the theoretical side, Holmberg sees distance education as a kind of mass communication, relating to a theory of industrialised teaching and learning primarily made possible
by the use of technical media. He concludes thus:

Distance education is a much used and rapidly developing form of study which is evidently of increasing importance both to individual students and to society. It is closely related to educational technology, but is applicable to different learning and teaching theories. It is an instrument of individualised study and has aspirations to favour independent study and cater for the autonomous learner. It is based on pre-produced courses and organised non-contiguous two-way communications between students and a supporting organisation. (p.116)


Unlike teachers in traditional universities, Open University teachers are faced with the very difficult task of having to produce course materials for students learning at a distance. Typically, Open University materials include a number of adjunct teaching aids which encourage students to become actively involved in the learning process (e.g. aims and objectives, study guides, self assessment questions, in-text summaries, etc.). Unfortunately, few of these teaching aids have been evaluated systemically. Open University teachers simply do not know, for example, whether a list of objectives placed at the beginning of a course unit actually helps students to learn the related material. This paper describes a methodology for helping Open University teachers find out
whether the particular teaching practices they adopt are successful. The author concludes:

It is hoped that other teachers at distance teaching institutions like the Open University who lack the benefit of face-to-face feedback will be encouraged to follow this teacher's example and find out whether their particular teaching practices are effective. With their help, we might well move closer to bridging the gap (ever widening gap) between teaching and learning at a distance).

2.2 The Open University of the United Kingdom:
Selected Literature

1) Hoult, David Arthur, The Open University: its Structure and Operations, (Diploma in Education), Hull University, 1971, 100 pp. In the summary of the dissertation, the author said:

The Open University has emerged as an autonomous institution with the objective of providing integrated courses at degree level using several media for those who, through various reasons, have been unable to acquire university education at the conventional age.

The need for autonomy and comparability was made explicit from the outset when talks were held with existing educational agencies, particularly those in the fields of adult and correspondence education. The Royal Charter provides this autonomy, recognising inevitable differences from conventional universities, establishing a minimal government structure and
leaving the university to evolve as its particular problems become apparent. He describes the way in which the structure developed and how courses and materials are prepared, especially the unique partnership between the university and the B.B.C. Hoult suggests that the extension of involvement to existing institutions could be the means by which the university has the maximum effect on the tertiary sector in general. He presents the distinction between the O.U. and 'traditional' universities in tabular form.

**TABLE 2: Important respects in which the University differs radically from its predecessors.**

<table>
<thead>
<tr>
<th>A traditional University</th>
<th>The Open University in Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. has physical location</td>
<td>has no physical location;</td>
</tr>
<tr>
<td>2. has students in residence;</td>
<td>has few students in residence;</td>
</tr>
<tr>
<td>3. teachers face-to-face;</td>
<td>teachers at a distance, supplemented by some face-to-face element;</td>
</tr>
<tr>
<td>4. has a large body of academic teachers and researchers;</td>
<td>has a small body of academics, and research will be in the education method rather than in an academic's own subject;</td>
</tr>
<tr>
<td>5. has the library as the only element of teaching at a distance.</td>
<td>will use many long-distance technologies.</td>
</tr>
</tbody>
</table>

Additionally:

the Open University needs at least as large a staff of educational technologists as of academics in the traditional sense.

Source: Hoult, p.17.
Given that this is a diploma dissertation, this is a merely descriptive work, but is nonetheless valuable for its clarity and the fact that it was compiled in parallel with the early years of the O.U. Inevitably, it is dated now.

ii) Tunstall, Jeremy, *The Open University Opens*, (London: Routledge & Kegan Paul Ltd, 1974), 191 pp. This book gives a first-hand account of what the Open University is about and what it feels like to be an O.U. student or lecturer. The articles in the collection - edited by Jeremy Tunstall, himself on the O.U. staff, include contributions from outside observers, from O.U. staff, and from O.U. students. This is an unofficial yet informed and lively account of what it feels like today, and what it felt like in the early days to be part of a project so controversial and progressive.

iii) Ferguson, John, *The Open University from Within*, (London: University of London Press Ltd, 1975), 165 pp. The Open University represents the most exciting development in higher education this century. In overcoming the special problems which have distinguished it from other universities and polytechnics, and in exploring new methods of course structuring and presentation, the Open University has become a major innovatory force within higher education. Ferguson was one of the first senior members of staff to be appointed to the Open University. In this personal account of his
involvement in its formative years, he points to the overwhelming success of this unique venture for providing university education at a distance. He speaks with authority of the university origins, the administrative complexities — central and regional — attendant on its organisation, the close relationships which have been built up with the media and the book trade, and the experience acquired in developing integrated, or at least multidisciplinary, courses of study. The background to the Open University's achievement makes fascinating reading, and this account offers many personal glimpses and insights into its working. The book's contents comprise nine chapters: 1. Certain Personal Matters, 2. A Historical Sketch, 3. Developing the Staff, 4. Choosing the Curriculum, 5. The Medium is the Message, 6. Students, 7. Organisation Man, 8. The Delights and Duties of a Dean, 9. Retrospect and Prospect.

iv) Hoult, David Arthur, The Open University: its origins and establishment (September 1963 to June 1969), (Master of Education, Hull University, 1975, 193 pp. Hoult, developed his interest in the Open University further. The thesis contents are in three parts: Chronological Survey; Aspects of the Development of the Proposals; Conclusions. The thesis is, in effect, a more detailed version of the dissertation, referring more directly to documents and giving a more sophisticated analysis. The conclusion, considers first the decision-making process through which the proposals
were developed and secondly, the notion that ideas of parity and prestige may possibly have been the most important single factor governing the nature of the emergence of the University and had greater significance than is usually acknowledged. This is an important point, and although dealing strictly with a precise past period (from September 1963 to June 1969), it has significance for the establishment of distance education operations in other countries and many of its points are worth considering in respect of the possibility of an Egyptian O.U., especially if the British model is to be followed.


After seven years of hard labour in what has turned out to be the most exciting and rewarding of jobs, I want to tell the story. I am no historian and the 'official history of the Open University' must await a more expert pen.

(p.xiv)

So, in his writing, he dealt with the personal account, what happened in the years before his appointment and the co-operative effort between himself and his fellows. Concerning the novel idea of an Open University, Perry states:

Thereafter, I can draw on my own experience and memory to trace the progress of the ideas that have fired the imagination of the educational world.

(p.xiv)
The book comprises five parts as follows: The Background (3 chapters); The Courses (5 chapters); The Students (5 chapters); The Administrative Plan (3 chapters); The Future (5 chapters). In Chapter 1, Perry draws attention to basic ideas about the new educational system:

The concept of the O.U. evolved from the convergence of three major post-war educational trends. The first of these concerns developments in the provision for adult education, the second the growth of educational broadcasting and the third the political objective of promoting the spread of egalitarianism in education.

(p.1)

He also discusses the importance of the political decision to establish a new type of institution:

Mr. Wilson's plan for a 'University of the Air' may bear little relation to the Open University as it exists today; but it was to be the key that opened the door. It was the first expression of interest, by a powerful political figure, in the provision of opportunities for higher education to adults, studying part-time while in full-time employment, through a multi-media system that harnessed educational broadcasting to correspondence teaching and other methods.

(p.9)

With respect to the political history (Chapter 2), Perry also discusses the efforts of Michael Young, who had been a member of the Labour Party's Secretariat, who immediately after
Mr. Wilson's speeches, set up the National Extension College in Cambridge as a pilot study for what might be developed later. He also pays tribute to the role of Miss Jennie Lee and other political effects in the birth of the Open University.

Chapter 3 deals with the early problems facing the new institution and how solutions could be found with the co-operation of other authorities. The decision to make his appointment two and a half years before the teaching of the first students is commended. Perry found two primary tasks facing him: the first was to physically build the university: the second was to try so to influence the atmosphere within which it would be built that it would be welcomed as an exciting new venture in the field of education at large. A further set of problems lay within the world of education at large.

Part 2 is a routine account of the mode of academic operation, while Part 3 deals with the clientele. The demand for entry is discussed, then credit exemptions, then student problems. Chapter 13 is of particular interest in that Perry discusses the results of the innovation after five years:

All in all, the record of the first five years of operation of the University shows a very considerable level of achievement. The success of our students reflects primarily their own quality and dedication: it is only marginally a reflection of the efforts of the staff of the university. The latter have nevertheless
shown a dedication to this new task beyond what anyone had a right to expect of them. I hope that in future we can maintain this level of performance and indeed improve upon it, as we become more and more familiar with some of the constant parameters to which this chapter has drawn attention. We should then be able to plan more effectively in order to provide the best possible service to the maximum number of students. But this will not happen of itself. It will require imagination and drive to combat some of the new problems that will arise as we approach a steady state, and to find a new challenge to replace the initial one of achieving what was widely regarded as impossible. There is no room at all for complacency.

(p.198)

Part 4, the 'Administrative Plan' is concerned with such aspects as: the charter; the structure of government; finance, while Part 5 moves on to the future: research and post-graduate studies; the steady state of the O.U.; the relationship between the University and the B.B.C.; commercial activities; and continuing education.

In the 'Epilogue', Perry speaks about some changes which brought a new style with them, changes befitting an established institution:

The links with the past are necessarily severed; and the memory of the early struggles fades. This is as it should be, for there are new struggles to be faced, no easier and no less challenging than those that have already been met. There are five that I would pick out. The first may, in a period of national recession, be a struggle for survival in our present form; if fees continue to rise the opportunity that we offer
to the poorer and more educationally deprived section of the community could easily disappear. The second challenge will be to come to terms with the new situation of the 'steady state' in undergraduate course provision, which will call for a readjustment of attitudes and a new pattern of activities for the staff. The third is closely related and vitally important to that new pattern; it is to build the university up to its proper level as a research-based institution. The fourth challenge will be to achieve a proper balance within the established and ongoing university. Finally, we will have the biggest challenge of all in determining, on the advice of the Venables Committee, just what role the university should play in the development of a national programme of continuing education. At the last three lines of his book, Perry says: I have no fear that our successors will face merely a dull routine; they, too, will have a real chance to change the face of education not only in Britain but in the world.

(p.288)

vi) McIntosh, Naomi E, A Degree of Difference: A study of the first year's take to the Open University of the United Kingdom (Guildford: Society for Research into Higher Education, 1976), 320 pp. The Open University is a fundamentally new kind of educational system. It has accepted part-time mature students of disparate backgrounds and abilities who wish to study for degrees in their own homes. Its teaching resources utilise a variety of media, including correspondence materials, television programmes and radio broadcasts. The book is an initial study, undertaken by the Survey Research Department of the Institute of Educational Technology at the Open University, and was designed to be the first stage of a long-term project
following the progress of the first generation of Open University students through the university and provides important baseline information about this new experiment in higher education: information of relevance both to Britain and to overseas countries. It concentrates on the progress of the initial cohort of Open University students, those who entered the University in 1971. It looks at the background of these students as they began their studies, and sets this within the context of the early development of the university.

The study is based on a comprehensive questionnaire, designed for self-completion, and sent to all students as they started their studies. An initial 25 per cent sample has been analysed, and the remainder were banked for later use depending on the survival rate of the first cohort. The questionnaire covered in some detail, the students educational and occupational backgrounds, their work and leisure patterns and their future plans. This report provides information on the characteristics of adult students, the problems of independent learning and also some information on and insights into the problems of the educationally disadvantaged in Great Britain. It shows that Open University students are not only not typical of conventional university students, but are also unrepresentative of their contemporaries in the community at large. From whatever background they come, they have already displayed a propensity to learn which is 'abnormal'. They have, in addition, displayed a degree of social mobility both inter-generational and intra-generational which is unusually high.
The Open University runs a distance teaching system for adults who want to gain a degree in their spare time. According to Riley, it uses a wide range of teaching media on each course, adding special radio and television broadcasts, home experiment kits and some face-to-face tuition and counselling, to a core of correspondence teaching. The degree is a modular one with a relatively free choice of courses to make up 6 credits (8 credits for honours): and so the article proceeds to describe the details of O.U. course structures and credits. He then concentrates on a very important component of the O.U. rationale, the course team. The writer concludes with speculations about the use of the course team concept. In particular, he supports their value in respect of interdisciplinary or experimental courses, and the integrating of new staff. On the other hand, he points out that the preparation of courses by teams is a very slow process and even then depends on compatibility as between group members, something which can never be assumed in planning. He predicts difficulties in this aspect of O.U. structure and operation, especially in respect of individual career profiles and promotion prospects.

viii) Ragett, M. and Clarkson, M., 'A proposal for an Extended Role for the Open University', *Teaching at a Distance*, No.5, 1976, pp.59-63. Early in 1973 a course proposal was submitted to the Post-Experience Unit of the
Post-Experience Unit of the Open University which contained a number of novel and far-reaching ideas. It was proposed, in essence, that the University should provide specifically designed resource package material for groups of people who were not its students in the accepted sense; that the course planning should largely be carried out by a small team, some of whom would be specifically recruited from outside the University for the purpose; and that, in the first instance, money should be provided from outside the institution to 'pump-prime' the operation. In short, the proposed innovation would have prepared the way for a new and extended role for the University as a continuing innovation in higher education, but it failed. The writers discuss possible reasons for failure in their conclusions. They were of the view that innovation at the Open University is as difficult to obtain as anywhere else in higher education, partly due to its monolithic system. They cite the centre-periphery problem whereby the periphery is not as a source of ideas, but merely as an agent for implementors of centrally-conceived plans. It is easy to forget that the Open University is the biggest in the country, with a bureaucracy reflecting its large scale. It is a major publishing house, and television and radio network. All this has grown in respect of offering first degree courses. It is, they suggest, timely for the Open University to harness its powers to a broader set of objectives matching more nearly the aims of being a centre for continuing education. Now that the Open University has come of age, it
should raise its sights and widen its range of functions and services.

ix) Thomas, Alan Berkeley, Problems of Evaluation with special reference to the evaluation of Open University Counselling, Doctor of Philosophy, Educational Technology, (The Open University, Milton Keynes, February 1977), 440 pp. This thesis is concerned specifically with problems of evaluation, both in the general sense of how anything may be evaluated and more particularly with the topic of the evaluation of the Open University Counselling Service. Although evaluation has long been a topic of concern to philosophers, the 'specialism' of educational evaluation has emerged relatively recently. In particular, a body of 'theory and practice' has developed in the United States, oriented initially to the evaluation of curricula and increasingly towards the servicing of educational decisions of all kinds. According to Thomas, although various schemes of evaluation have been proposed, there is widespread dissatisfaction with the results of evaluative research.

Given the problematic nature of evaluation in education and that an examination of the concept of evaluation might throw some light on the difficulties, it is necessary to consider some of the philosophical positions on the subject. Following this a model of evaluation is outlined and the importance of standards for the process of evaluation is emphasised. It is argued that calls for formal evaluations
typically arise under conditions of dispute among decision-makers, and some possible ways of resolving such disputes are considered. In particular, the need to establish the decision-makers' degree of impartiality with regard to research findings is stressed by the author. A thesis such as this on the Open University Counselling Service faced a number of difficulties, and these are openly reported. The account provides a relatively rare glimpse of the social and organisational context of evaluative research in a highly unusual institution. The problems are considered in the light of the analysis of the evaluation process, and in terms of the specific circumstances surrounding the project.

Finally, some suggestions are made as to how more fruitful evaluations might be achieved in the future. The thesis is of special interest to the writer in that it includes some comparative comment, especially as between the U.S.A. and Britain.

x) Mace, J, 'Mythology in the Making: Is the Open University really Cost-Effective?', Higher Education, vol.7, No.3, 1978, pp.295-309. According to Mace, cost-effectiveness analysis is a more appropriate way of evaluating the Open University. A rudimentary application of the technique to the cost structure of the O.U. indicated that it could result in a substantial reduction in O.U.'s costs. At the end of the paper, the author said that:
I have assumed throughout the paper that everybody would agree with the proposition that where the same educational outcomes would result from two, or more, different learning systems, the cheaper should be selected. I have also assumed that my preoccupation with costs and benefits will not be construed as evidence that no account should be taken of the non-economic costs and benefits of educational policies. My position is simply that where economic costs and benefits are involved they must be considered by policy-makers, and where the costs and benefits cannot be measured in money terms some attempt should, nevertheless, be made to quantify them in other terms. Only then will rational decision-making be possible.

xi) Haslam, C, 'Community Education at the British Open University', Educational Broadcasting International, vol.2, No.1, March 1979, pp.36-38. The writer discusses changes in the Open University which involved a wider range of courses that had nothing to do with the degree programme, including in-service courses for teachers, courses for people working in the caring professions, and short courses for the community as a whole.

xii) Woodley, Alan and McIntosh, Naomi, The Door Stood Open, (Sussex: The Falmer press, 1980), 261 pp. As a report, this deals with early demands upon Open University policy. The university plan had always been that it should cater for adult students, with no limit on the upper age band. Then the proposal was made that, in view of the pressure on higher education, the Open University might be suitable for younger students, that is to say, those under 21 years of age.
Understandably, the proposal was not greeted with much enthusiasm by a new institution still struggling to consolidate its efforts. The report is a contribution to the universal dilemma of how, in this technological age, we can best educate an increasing proportion of our population without formal qualification. The assumption is often made that such a group will require above average personal supervision and that it will not succeed using the methods now associated with the Open University. This study provides some of the answers, refuting a number of the old assumptions. In the view of the writer, the report provides a suitable base from which to examine some problems of expanding the teaching of the Open University.

xiii) Leonard, Raymond Edward, Ten Years On: A retrospective look at Open University 'A' students attached to a local study centre, (Master of Arts, Hull University, 1980, 120 pp). The thesis comprises seven chapters as follows: introduction; difficulties encountered in setting up the research; methodology; the biographical approach; a Cohort, Scunthorpe, 1971; the analysis of data; reasons given for studying with the O.U.; pressures encountered whilst studying with the O.U. It can be seen immediately that the dissertation provides an insider's or client's view. No claim is made that the group investigated can be considered representative of the whole Open University student body; it is simply an account of a particular group of Open University students, in one locality
who commenced studying with the Open University in 1971. It is recognised that this exercise might have been more revealing had a parallel group in another town been subjected to the same sort of investigation. This, however, was beyond the scope of the dissertation. Nonetheless, the study appeals because it is realistic.

xiv) McIntosh, N.E., 'Woodley, A. and Morrison, V.', 'Student demand and progress at the Open University - the first eight years', *Distance Education*, vol.1, No.1, 1980, pp.37-60. This assessment of the Open University after its first eight years, considers the nature of the demand for such patterns of study, and also the facts affecting students' progress and graduation. In this paper, the basic beliefs held by the O.U.'s founders are reckoned to have been true. There was a great demand for degree-level studies among working adults and this demand had continued, as evidenced by the application figures over the years. The information on student performance also demonstrated that considerable numbers of people can study successfully at a distance. Three out of four O.U. students reach final registration and over eight out of ten who do so, gain some course credit. Approximately one half of all finally registered students will eventually graduate, she concludes.

The Open University set out inter alia, to solve the problem of drop-outs from external degree programmes such as those operated by the University of London. The article examines this aim, and provides a context for the decisions of educational administrators on external studies, especially in respect of the opportunities created by distance education techniques. It is vital, he states, to ensure that the quality of the learning that occurs at a distance is maintained at a high level. Although cost-effectiveness may be achieved in comparison with other systems when large numbers of students are enrolled per course, the initial cost of setting up an effective distance-learning system may be high. New institutions, public or private, should not be permitted to enter the field without providing guarantees of quality of provision. Keegan also feels that existing institutions in the field should investigate linking their learning materials, but also that comparison between institutions is extremely difficult.

Bynner, J., 'Contributions of the Open University to Continuing Education', UCLA Educator, vol. 22, No. 1, 1981, pp. 44-51. The article describes Great Britain's Open University, which provides continuing education through multi-media teaching packages delivered via the postal service and broadcast media. It further examines major instructional components and the kinds of short-cycle courses provided in the areas of in-service teacher education, health and social welfare, adult and community education.
xvii) 'The Open University system: where next'?, *Teaching at a Distance*, No.22, Autumn 1982, pp.46-51. This article has been written by Janet Jenkins and Roger Lewis at the National Extension College, and is a critique of an earlier one by Geoffrey Wood in (*Teaching at a Distance* No.20, 'Pearls of Wisdom, Blobs of Knowledge', pp.13-23).

Wood's approach has two problematic characteristics. He treats as problematic only the selection of knowledge. He is not really very interested in methods of teaching and learning. Many Open University students (and students generally?) are looking to knowledge to help them grasp the world they are living in. Wood's is essentially an interest in the way knowledge is structured. Wood feels that students at the Open University are second-class students. Their experience compares badly with that of students in conventional higher education. He puts forward five major points to support his claim: the static curriculum; barriers between disciplines; reliance on secondary sources and summaries; passive learning; the limitations of tutors. After the discussion of Wood's opinions, Jenkins and Lewis conclude that he nowhere acknowledges the strengths of distance learning. Two features of the Open University deserve stressing. First, its openness. It is not only open to any student who wants to enrol; the means provided for learning-texts, broadcasts, tutors, other students - are also openly accessible to each student. Those with limited access to certain options can make greater use
of others (e.g. telephone tutoring as an alternative to face-to-face seminars). The teaching is flexible. The course units provide a core. Each student can then proceed as he/she wants: those who want to delve deeper can do so; those who find the work difficult can get help from their tutor; those who are not very interested in a topic can work quickly through it and move on to the next. Any proposals for change should be made in recognition of those qualities.

xviii) Swift, B, What Open University Graduates Have Done: a report, based on a 1980 survey of 3,000 graduates, of the occupational outcomes of studying with the Open University. The Open University, Survey Research Department, paper No.230, July 1982, pp.1-23. This leaflet is intended as background briefing for students and graduates who are beginning to consider using their O.U. qualifications for career purposes. It reports statistical information available from the 1980 survey of graduates, and also draws on the experience and views of graduates who participated in the 1980 survey and/or in an earlier survey in 1977. The aim of the leaflet is to encourage students to think about the careers that may be opened up for them. The main purpose of the leaflet is to inform students and tutors about what O.U. graduates have succeeded in doing in terms of using their knowledge and qualifications in the world of work and to encourage students to think about the possibilities for themselves.
ixx) Smith, R, 'The Open Tech. Experiment', Media in Education and Development, vol.15, No.4, Dec. 1982, pp.154-155. The article reviews the background, development, and structure of the British Open Tech. Programme of open learning, and compares it with the Open University in respect of aims and methodologies. Funding and quality control are also discussed, and some advice is offered for other countries contemplating similar developments.

xx) Peruniak, G.S., 'The Seminar as an Instructional Strategy in Distance Education', British Journal of Educational Technology, vol.15, No.2, May 1984, pp.107-124. The data from this study indicated that those students who attended one seminar early in the course and those who did not, tended to be different subsets of the course population. There was some evidence that seminar attenders progressed more rapidly through the first part of the course and had higher completion rates than non-attenders. However, seminar attenders appeared to take longer to complete the course than non-attenders. The results from the study were strictly correlational and it was not possible to determine the extent to which seminars attracted high performance students contributed to higher performance.

2.3 Technology in Service Distance Education: Selected Literature

that it is in the interests of both educators and broadcasters
to put more effort into discovering the effects of educational
broadcasting on their intended audiences. Otherwise they may
soon find the resources and facilities for educational
broadcasting being used for other purposes. The author
attempts to qualify the term 'effective', as well as the
educational role for television and radio programmes in
Western Europe. In conclusion, he states that there are too
few studies completed, providing accurate and reliable
information about the actual effects of broadcasts on learners,
to show clearly that educational broadcasting in Western
Europe is effective, given the level of expenditure and the
amount of production.

ii) Jamlan, Muaim Hilmi, A Consideration of the
Jordanian School System with Particular Reference to Its
Development and Use of Educational Television as a significant
Teaching Aid, Unpublished Thesis, (Doctor of Philosophy,
University of Hull, 1981, 623 pp. Jamlan stated in the
introductory chapter of his study that the problem in question
is:

The importance of educational television
as a teaching aid in secondary schools
in Jordan is affected by the way in which
it is used. Earlier studies carried out
by the government's Department of
Educational Television were concerned
mostly with the general importance and
usefulness of educational television for
both teachers and pupils in secondary
This is a practical study, designed to examine the actual provision and use of educational television in secondary schools in Jordan. He concludes that television is an aid for teaching at a distance when used in relation to face-to-face teaching but not as a separate system for distance education projects. The researcher made an important point when dealing with educational television in some selected countries, namely in respect of the long-standing and well-tested nature of the successful examples such as the USA, operative since 1940 (Hagerstown Project); France, the first Western European experiment in educational television having taken place there in 1950; Italy, Telescuola project, launched between 1958 and 1961; The Netherlands, the first experiment on the use of educational television began in 1958 by offering educational programmes to forty secondary schools; The Federal Republic of Germany, where the first school television programme was transmitted in 1961-62; Britain, the first general television broadcasts to schools being transmitted in 1957; Canada, with the CBC project
operation from 1954; Japan, where the first television transmission to schools was in 1959; Nigeria, where in 1965 there were three educational television programmes (Western region, Northern region, Lagos); India, following a decade later with the Indian Satellite Instructional Television Experiment (SITE) launched in 1976; Brazil, where the first important experiment in educational television began with an adult literacy programme of the "Fundacao Joao Baptista Do Amaral" in Rio de Janeiro in 1962.

Having considered the context and record of educational television in developed and developing countries, the author discusses the use of educational television in Jordan. He appears optimistic in the light of an apparently well-established provision:

It is used to carry the core of the curriculum and to provide direct teaching at secondary level. The use of educational television was begun in Jordan in 1968 and has been developed considerably to reach a large number of pupils in secondary schools in most parts of the country. In the coming five years educational television is proposing to cover the elementary and preparatory levels and out-of-school education.

(p. 247)

No. 2, May 1983, pp. 100-126. This paper describes the 'Cyclops Telewriting System' and explains how it has been used in a two-year trial project, funded by British Telecom, for tutoring Open University students in the East Midlands region of England. Preliminary findings from the evaluation of the trials are discussed, and suggestions for setting up similar distance-teaching systems are offered. The two-year trial of Cyclops is proving that telewriting tutorials are both educationally effective and acceptable to a large number of students and tutors.

iv) Harris, N.D.C. and Tarrant, R.D., 'Teleconferencing and Distance Learning', British Journal of Educational Technology, vol. 14, No. 2, May 1983, pp. 103-108. The article considers teleconferencing as a potential strategy in education and training. The possible uses are outlined with brief case studies from the U.K. and U.S.A. The types of teleconferencing available in the U.K., their costs and a simple means of calculating costs are included. Some guidelines are given to prepare for and organise a teleconference. According to the writers it was evident that although the basic principles of linking telephones for meetings or seminars had been in existence for a number of years, the facility was not widely used within the region researched (S.W. England), despite its obvious relevance in such an area of dispersed population. Teleconferencing has potential uses for education. The writers cite:
- training information dissemination from head office to local branches;

- contact within split-site schools, colleges, polytechnics and training organisations;

- tutoring for distance learning trainees;

- contact with students on industrial or teaching placements;

- conducting seminars at a distance.

As a result of the impetus of the S.W. region project, some uses of teleconference have been introduced in several sectors.

v) Bates, A.W. (ed), The Role of Technology in Distance Education, (London: Croom Helm, 1984), 231 pp. The purpose of this book is clearly defined by the author. That is to say it does not attempt to provide comprehensive answers, nor a general theory of media selection (although the last two chapters do examine some of the conceptual issues arising from these technological developments). It does, however, attempt to deal with practical matters arising from the use of various technologies in distance education. So it has two principal audiences. The first is staff working in the steadily growing number of "specialised" distance teaching institutions around the world. The second target group is the equally growing number of staff in conventional institutions who are considering
the possibilities and the practicalities of off-campus teaching. There are four parts:

a) Part 1 - introduction and overview; the growth of technology in distance education;

b) Part 2 - media in course design - texts and word-processors - broadcast television - video cassettes - satellite and cable - video discs - computer-assisted learning - audio cassettes - home kits;

c) Part 3 - media in course management and presentation - telephone teaching - cyclops shared-screen tele-conferencing - computers in academic administration - teletext systems - view data system - tutors and media - local media resource centres;

d) Part 4 - selection of technology and course design - pedagogic differences between media - putting it together now and the future.

It can reasonably be stated that the book concentrates on the technological dimensions of distance education.

2.4 Distance Education and the Third World:

Selected Literature

i) Farnes, N, Distance Teaching for Developing Countries, Teaching at a Distance, No.5, 1976, pp.34-39. The majority of
the population of the developing world live in rural areas and the educational resources, and particularly those for higher education, are mainly located in the urban areas. The writer concentrates on the educational needs for rural development for the following reasons:

a) the majority of people in the developing world live in rural areas;

b) these people have a lower standard of living, health and education than those in urban areas;

c) providing education and other services for rural areas poses particularly difficult problems;

d) distance teaching has greatest potential for reaching people in rural areas.

The last point relates closely with the research of the writer and therefore the geographical dimensions of distance education are discussed below. Farnes states:

The basic Tenet of distance teaching is that education should be taken to where people are rather than expecting them to come to where education is.  

(p.36)

He suggests that educational materials can be delivered to learners who are able to study anywhere and in their own time
instead of providing educational materials in large urban institutions at fixed times. He explains some examples from Tanzania (Radio Correspondence Group), Ghana, Iran and India, each of which shows how a flexible range of media involving distance teaching as well as face-to-face sessions can be used to reach a rural population. In conclusion, he says:

We should not delude ourselves as educationalists as to how much effect education can have on its own. Development is a complex process and depends on a wide range of co-ordinated measures. Without, for example, land reform, farm to market roads, credit facilities, opportunities for teachers, health and rural development workers - distance teaching will achieve very little.

(p.39)

11) Kaye, Anthony, How Can Other Countries Learn from the Open University?, Teaching at a Distance, No.8, March 1977, pp.34-38. At the time of publishing this article, the author says:

At the present time, the Consultancy Service attempts to provide technical assistance and advice for distance education projects through the following procedures:
- organised familiarisation visits to the University.
- short-term visits by teams of Open University staff to carry out general or specialised feasibility studies or analyses (studies of this type have been done for institutions in Kenya, Colombia, Pakistan, Iran and Saudi Arabia.
- relatively long-term associations involving a variety of different types of support (such as the arrangements with the Free University of Iran and the People's Open University of Pakistan.
iii) Escott, M.A., 'Adverse factors in the Development of an Open University in Latin America', Programmed Learning and Educational Technology, vol.17, No.4, 1980, pp.262-270. The article begins with a succinct description of the principal experiences in open and distance education in Latin America. It indicates the necessity to reorientate policies and objectives in this area and classify the investment priorities in higher education. An analysis of processes of transfer of technology in open education follows, in which the author asserts that the concepts of 'open' and 'distance' education have not been correctly transferred to Latin America. The processes of creativity versus design of courses, production and distribution of materials for learning, academic evaluation and certification all receive critical treatment in a comparison made with developed country examples. The article indicates and explains variables such as financial resources, political determinants, resistance to innovation, learning styles, student population, organisation and institutional structures, human resources, and communication, as possible factors which constrain the potential development of Open University models in Latin America.

iv) Danskin, Edith Shaw, The Open University as a route to higher education expansion in developing countries: The case of Ramkhamhaeng University, Thailand. (Doctor of Philosophy, Unpublished, London University Institute of Education, London, 1981, 320 pp. It can be considered that some points in Chapter 2 in this study are related to that of the present writer. It
is, therefore, worthwhile listing the sub-titles of her chapter: more or larger traditional type universities?; opening up access to universities; adapting a policy of universal or mass higher education? open universities; the cost of open universities; open universities in the developed and developing world; (including concern with education for national development, admission policies and the use of educational technology); the problems of open universities. Danskin is particularly interesting in respect of the problems of open universities and focuses on three distinct areas: academic standards; the needs of students; and the effective use of the various media, and six main questions:

a) do open universities offer expanded access to a wider range of the population or are the sceptics right in saying that educational expansion tends to open access to more of the same kind of people as are already present in the higher education system:

b) do open universities provide a real chance for those who did not get or do not get to traditional universities, i.e. once enrolled in university, how successful are the different kinds of groups in obtaining a degree?

c) how successful are open universities at teaching new secondary school leavers?

d) how successful is the use of the media in open universities and where do the major problems lie for students in developing countries?
e) how do open universities rate when compared with traditional universities from an academic point of view?

f) are open universities justified on the basis of economy from the government's point of view? Inevitably, the findings are specific to the Thailand situation, some of them do shed some light on the idea of using open universities as an approach to higher education expansion generally in developing countries. It is, therefore, directly relevant to the present study.

v) Diaz-Ramirez, Luis Edwards, Towards an Instructional Design for Distance Education: Implications for Venezuelan Programs (Ed.D, University of Massachusetts, 1982), 323 pp. This author clearly views distance education as becoming a global affair. In the last twenty years, the development of educational technology has shifted traditional face-to-face educational systems toward the massive use of telecommunications technology to reach and train adult populations in the most remote areas of the world. The 1970s, he says, was a period of great development in both the theory and the practice of distance education, with the British Open University leading the way in attracting the adult population. However, he claims, attempts to copy it have not been as successful. This may be because the art of distance teaching requires support services and new forms of instructional design and educational management quite different from traditional settings, even though some
essentials of effective instruction in distance education are better known today.

This study, comprising four chapters, is charged with constructing theory about distance education, but in a practical way describes how distance education has been implemented successfully by the British Open University and the University of Mid-America in the United States. The development of small distance systems, inside traditional universities, the author claims, requires major research and development of the models implemented. This is argued with special reference to the case of Venezuela. Specific suggestion for dealing with small distance projects in the Venezuelan context are presented as the conclusions of this study. A look forward to the 1980s suggests continued growth in this field with more international and national developments and both public and private sectors looking for better opportunities to use the technology now available.

vi) Crooks, S, Distance Education and the Developing World, European Journal of Education, vol.18, No.4, 1983, pp.329-343. In respect of the essentials of distance education, Crooks claims that the purpose of his paper is to consider some of the implications of distance education for the developing world, both in terms of its potential and of its dangers. He supports the various definitions of Holmberg and concentrates on: students, courses, logistics and costs.
For students, distance education represents an enlargement or 'opening' of educational opportunity to new target populations, previously deprived either through geographical isolation, lack of formal academic requirements, or employment conditions. Target groups need the identification in respect of their salient characteristics and needs, so as to enable the most appropriate courses, learning methods and delivery systems to be designed on a systematic basis.

For courses, flexibility in the curriculum and content of learning materials through, for example, modular structures or credit systems are prime characteristics of effective distance learning systems. The conscious design of learning materials for independent study incorporates, for example, clearly-formulated learning objectives, self-assessment devices, student activities and the provision of feedback from students to course writers and tutors. It also requires the planned use of a wide range of media and other resources, selected from those available in the context of the system and suited to the needs of the particular students; these media should include specially-prepared correspondence texts, books, newspaper supplements, posters, radio and television broadcasts, audio and video cassettes, films, computer-assisted learning experimental kits and local tuition and counselling. In other words, any good distance learning package is group specific. Merely making use of technology to budge distances is not enough.
In respect of logistics and costs, Crooks claims much greater flexibility compared with conventional systems in methods of implementation, teaching methods, and student groups covered, centralised mass production of standardised learning materials (such as texts, broadcasts, and experiment kits), implying a clear division of labour in the creation of materials and their 'delivery' to students. There needs to be a systematic search for, and use of, existing infrastructure and facilities as part of the learning system (e.g., libraries, postal and other distribution services, printers, publishers, broadcasting organisations and manufacturers). There is, Crooks claims, a potentially significant lower recurrent unit cost per student than that obtainable through conventional teaching arrangements, together with a lower capital cost per student.

In terms of the needs of the developing world, he describes the fact that there have been many analyses in recent years of the effectiveness of formal educational systems in meeting such needs and writes about: the student flood; acute resource scarcities; unsuitability of output; also inertia and inefficiency. Within the conditions of success and failure, it is possible to outline some general pointers as to the criteria with which distance education systems must be concerned if they are to be of value. He continues to illustrate that their success or failure will depend on their capacity:
a) to find and motive a student population who are often not 'captive' as in a classroom, but who can "vote with their feet" by simply dropping out from their studies;

b) to provide relevant courses and qualifications for these students, geared to national needs;

c) to create teaching materials, based on an integrated use of different media, and capable of motivating students through being perceived by them to be of high quality;

d) to have to hand staff able to produce such materials, and the logistical system to 'deliver' them including a reasonable postal system, adequate radio and television reception, and the like;

e) to show demonstrable student success including the extent to which personal goals have been met, drop-out controlled and examinations passed;

f) to increase provision at the lowest possible cost compatible with the achievement of high standards.

On the economics of distance education, he explains the cost-effectiveness and also deals with drop-out and measures of success.
vii) Abou-Helwa, Ahmad, *Macro-Planning of Post-secondary Education: A Strategic Plan for Egypt's Human Resource Development in a Period of Transition*, (Ph.D, Kansas State University, 1984), 170 pp. Abu-Helwa's research concentrates on one of the most important problems of the higher education in Egypt and from the writer's point of view, the case for ongoing research and development is made with clarity. Here again, the British Open University is favoured. According to Abou-Helwa:

Despite the wide expansion of Egypt's education in general and higher education in particular, Egypt has today developed widespread shortages of skilled labour with a surplus manpower of college graduates concentrated in the public sector. There has not been any formal relationship between educational planning and manpower planning, so that matching between education and employment has been an unknown exercise until very recently.

The broad purpose of the study was to investigate, through an analytical-descriptive method, Egypt's post-secondary education planning with respect to human resource development. Derived from this purpose is the identification and suggestion of ways and means by which Egypt's higher education system can contribute more effectively to the achievement of overall national goals through a strategic plan. The following conclusions are based on the findings of the study, which are:
a) rapid expansion in higher education has resulted in an unbalanced growth in different disciplines, both quantitatively and qualitatively;

b) there is a discrepancy between higher education supply and manpower demand; this is evidenced in the fact that the national economy is not absorbing students after their graduation;

c) to date, there has been little planning in the field of higher education and little co-ordination of educational planning with overall developmental programmes in the country;

d) there is an absence of appropriate criteria for making a judgement as to whether there is a surplus or shortage of graduates in certain professions.

He recommends that Egypt is in need of an approach for decision-making that will be translated into a strategic plan in order to link her higher education system with the socio-economic development projects of the country. This suggested approach should be able to take into account the three factors that affected the development and expansion of Egypt's higher education system: demographic change, social demands and manpower requirements for social and economic
programmes. It is clear that the synthetic approach for decision-making for Egypt's post-secondary education planning has to be ecologically aware in the widest sense, including the human component. This will be beneficial to Egypt's higher education system since it can articulate the economic and cultural needs of the society.
CHAPTER THREE
THE ECONOMICS OF DISTANCE EDUCATION

3.1 Introduction

Educational systems "reflect and respond to a whole range of social, economic, political, religious and cultural influences in any given national and regional context". These influences, the writer terms in this research 'the dimensions of distance education': that is to say, the social dimensions, economic dimensions, political dimensions, geographical dimensions and so on. In respect of this we cannot forget that the educational process is:

"both personal and social: personal, because the end result is a condition of the individual and so essential to his well-being as to constitute a recognised right; social, because it is a matter of such great concern to society as to require special instruments and forms of organisation which justify its claim to be regarded as an institution". 2

The writer suggests that the total dimension of distance education can only be effected by setting up a new system with new institutions that reflect the influences of all the variables bearing upon such a policy. Over the last ten years, distance teaching has expanded rapidly at tertiary level, despite much

opposition from both political and educational establishments, as witnessed by the case of the Open University in Britain. As a result, it can be said that the Open University in Britain represents a distance teaching institution in which the structure reflects the dimensions of the political and sociological forces which affected its foundation. However, in this chapter, some special attention will be given to the economics of distance education, because the writer believes that no new institution can survive and develop without a suitable budget for its operation. In doing so it must be remembered that all dimensions work together and without understanding their interaction, decision-makers cannot devise a scientific way in which the new ideas would succeed.

3.2 Some Initial Principles

The economics of education:

"forms a bridge between economics (particularly, public finance and labour economics), sociology (particularly, social stratification and industrial sociology), social administration, comparative education, and educational psychology, partaking at the same time of a still wider subject, 'the economics of human resources'."


It can be said that over the last two decades a great deal has been written about the cost of education, including sufficient about the cost of distance education for some general conclusions to be possible. But the writing in this chapter represents a descriptive analysis and synopsis in respect of distance education costs and especially the economics of the British Open University. This is because such an approach will help the writer to perceive how Egypt can benefit from the British Open University experience and especially its economic dimensions.

This analysis is not in order to make an estimation of the 'value' of education or of the price paid for benefits of education at a distance. Rather it is an attempt to answer some questions related to the costs of conventional universities and the distance teaching universities, the costs of some distance education systems like radio education, correspondence education, television education and some other institutions of teaching at a distance. A comparative approach will be useful in comparing: "the costs of using print, radio, television and recordings with each other"....., "the costs of introducing a course or a new way of teaching, using
distance teaching methods". So the writer suggests that perhaps it is possible to find a way to compare the costs of the conventional education at the university level in Egypt with the similar costs at the British Open University. This may be developed in another stage of the writer's research.

Certainly, in a world-wide context, the technological climate was such that multi-media distance teaching systems could be developed and evaluated and this of course could be done:

"not only in relation to the feasibility of the technology as a servant of education but also in relation to the inputs and outputs of traditional higher education and these new systems".

The attractiveness of distance education is its potential for economies of scale, but this not only under-values the capacity of distance education to satisfy a wide range of needs but also leads support to the notion that cheap education is the paramount criterion in assessing the desirability of an educational process.

From these points, it can be said that the study of the economics of distance education is important for a number of reasons:

a) Distance education requires the implementation and maintenance of complex systems; the management of distance education frequently requires systems analysis which is little more and little less than another name for economic analysis.

b) The economics of distance education is generally expected to be different from that of conventional education.

c) During the 1960s and early 1970s, public funds made available to post-secondary education increased steadily and substantially. In most countries of the free world, this growth has now ended. However, distance education systems still face a situation of increasing demand, and they have to maximise internal efficiency in order to produce the highest output from the resources allocated to them.

Given the importance of studying the economics of distance education, we need to move towards a theory for distance education. In this respect, the writer favours the following statements from Perraton:


a) Distance teaching can break the integuments of fixed staffing ratios which limited the expansion of education when teacher and student had to be in the same place at the same time.

b) The economies achievable by distance education are a function of the level of education, size of audience, choice of media and sophistication of production.

c) There are circumstances under which distance teaching can be cheaper than orthodox education, whether measured in terms of audience reached or of learning.

The first statement is related to traditional methods of education and the equivalent for distance education. Traditionally, the expansion of education has demanded an expansion in the number of teachers. If that constraint is removed by distance teaching, then the prospects for expanding education may be enhanced, provided that distance teaching is no more expensive than teaching through orthodox methods. The prospect would, on the other hand, be no brighter if distance teaching were necessarily more expensive than orthodox education. Economic forces would tend
towards expanding ordinary schools and colleges. But distance teaching can be cheaper; with broadcasts, as with print, one teacher's words can reach a much larger audience than would ever be possible face-to-face, so that economics of scale are possible. There is empirical evidence of such economies being gained. Jamison and Orival, 1 for example, considered twelve distance-teaching projects for which cost data were available and found that; "most of the projects studied here are less expensive than equivalent traditional methods of education".

The second Perraton statement comprises a hypothesis, but if it is true then it would be established that distance teaching can be effective and that its costs can compare favourably with those of orthodox education.

The third statement qualifies the 'cheap' system. Whether measured in terms of audience reached or of learning achieved, at any level of education, it could easily be that distance teaching works out as an expensive alternative if only a small number of students follow its courses, or if we are

particularly concerned with the number of students who successfully complete a course, as the drop-out rate tends to be high. Also, at any level, costs per student are sensitive to the choice of medium. This could vary widely; one may estimate the costs, for the same programme, of print, radio, and television being in the ratio of 1:10:100.  

3.3 Definitions and Terminology

The definitions of some terms used in this study are useful to explain many economic terms, but before doing that we should consider the following questions: "who wants to know about costs, why do they want to know, and what factors should be taken into account?".  

The answer to any question about costs depends on the level at which the question is asked, and the audience to whom the query is directed. For example, the cost a further education student represents to his employer may be in terms both of the course fee and the time the student spends in college, and therefore away from work. On the other hand, the cost of a student to the college may be in terms of the outlays made by the college which are

1. Perraton, H., 'A theory for Distance Education', in: Stewart, D. et.al, (eds), op.cit., p.44.
attributable to that student. The cost of a student to the nation may be cash outlays plus lost production. There is always a cost.

Secondly, questions about cost may be motivated by a desire to know more about how things are progressing; or where things are going wrong; or a desire to solve particular problems. In general, there are two possible approaches: historical analysis which often aims to derive average costs, and future-oriented analysis which often focusses on differential or incremental costing. Unless the purpose of a cost analysis is understood, it is likely that the results of the analysis will be misused. For example:

"in the case of overseas students in higher education the government has taken the view that fees should reflect the cost to the nations of admitting overseas students to courses in British institutions....".

Third, if we know the identity of the enquirer and the reason for it, then it becomes easier to decide what differentials need to be taken into account in the costing as between: historical costs; replacement costs; standard costs; projected costs; opportunity costs.

1. Ibid, p.61.
All these questions are relevant to definitions and terms of economy and education and specially distance education costs.

a) "Economic"

"Any action or proposal that has to do with the production or distribution of economic goods. One method of production is said to be more economic than another if it is to be more efficient, that is, if for the production of the same output a smaller total quantity of factors of production - land, labour, and capital - is required".

b) "Economics of Education"

"One of the principal factors influencing the quality of a country's labour force is education". ²

So it can be said that the economics of education is:

"a study of the allocation of resources among educational institutions and activities and of returns obtained, both by individuals and nations".

c) "Econometrics"

"The application of measurement approaches (especially statistical and other mathematical concepts and techniques) to the study of economic phenomena - plays an important role in the economics of education". ⁴

2. Ibid, p.149.
4. Ibid.
d) "Costs"

There are many approaches to costing and many different concepts of costing terms and concepts. All assessments of cost are subjective, and therefore we learn as much from the judgements made in deriving that cost as we do from the cost information itself. So it can be said that the costs mean:

"The classification of costs is the basis of all accounting systems. However, although distinctions between one type of cost and another are the subject of certain conventions, the application of those distinctions in any particular situation may be a matter of interpretations or convenience." 1

Figure 3 provides interpretation for the cost classification. The cost of producing a certain output of a commodity is the product of all payments made to the factors involved in the production of that commodity. Clearly, the term 'cost' is ambiguous. 2

It is clear that all definitions are related to "cost" in general, and not the costs of a specific area like education or distance education. Consider some aspects of cost:

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FIGURE 3

TYPES OF COST.

Total Cost

- Revenue (Operating)
  - Actual
  - Conjectural

- Capital
  - Actual
  - Conjectural
  - Interest etc.

Not varying with level of Operating activities
Related to Level of Operating Activities
Determined solely by Management Decision

- Fixed
- Linear
- Non-Linear

- Variable
- Semi-Variable

Cost made up of Both Components
Mixed

i) Total Cost:

"Is the sum of all the costs attributable to the cost unit or cost centre under consideration".

ii) Cost Unit:

"Is a unit of product (for example, a whole course), service or time (or combination of these) in relation to which costs may be determined or expressed. A cost unit may be a job, batch, contract or product group". 2

iii) Cost Centre:

"Is a location, person or item of equipment (or group of these) for which costs may be ascertained for a budgetary period for purposes of cost control" (Sizer, 1969). 3

iv) Marginal Cost:

"The extra cost of increasing output by one more unit, thus, if it costs £110 to produce 50 units of a commodity and £112 to produce 51 units, marginal cost is £2. If marginal cost is falling, production will be under conditions of increasing returns, whereas if marginal cost is increasing, production will be subject to diminishing returns". 4

2. ibid.
3. ibid.
4. Hanson, J.L., op.cit., p.306.
v) Capital Cost:

"Is a cost incurred in acquiring goods or services that have a useful lifetime (or life span) greater than the budgetary period within which the cost is incurred (e.g. a life span exceeding one year). All other costs are charged to revenue costs; which is synonymous with the operating costs". 1

vi) Actual Costs and Conjectural Costs:

"Are known levels of expenditure as represented by a statement of accounts, an invoice or a fixed price quotation. Conjectural costs are forecasts which may be long-term, medium-term or short-term in nature".

vii) The Budget:

"Is a conjectural estimate of the cost which is expected to be incurred over a defined period. Some budgets are subject to cash limits. This means that actual expenditure must not exceed budgeted expenditure but may, of course, be less. Such a budget is therefore still conjectural". 2

viii) Direct Costs and Indirect Costs:

Economists have a number of ways of examining costs. For example, they may differentiate between direct and indirect costs. The word 'direct' indicates

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2. Ibid, p.239.
that these are spent directly by students or by
public authorities on such items as teachers,
teachers' salaries or books. These costs are
directly consequent upon to education being
provided, whereas 'indirect' costs are implied.
For example, a student's time is part of the cost
of education. Indirect costs may be shared with other
activities. Thus, part of central government, general
administration costs are allocated indirectly to
education. Understandably, direct costs receive most
attention because the figures are readily available. 1

ix) Opportunity Cost:

In direct costs, money is handed over directly
to pay for some activity. This is a simple notion
of 'cost'. Economists are equally concerned with the
allocation of resources and the cost of anything is
that which is given up to obtain it. This is the
'opportunity cost'. 2

x) Costs and Expenses:

In respect of determining the costs of
instruction, it is necessary to identify the

1. Atkinson, G.B.J., The Economics of Education,
2. Ibid, p.18.
difference between costs and expenses. An institution of learning spends money to realise its objectives. Space facilities have to be provided, educational equipment purchased, salaries and bills paid.

The sum of these expenses, however, may not reflect adequately the total costs of the various activities undertaken by the institution. Whereas the annual costs of registering students are mainly determined by the total of the salaries and other manpower expenses of the departments concerned, the costs per year for a course unit or for a single student are more difficult to calculate. This is due to the fact that facilities are used that have been acquired for an indefinite number of students or courses. In general, the potential use of such resources will greatly exceed normal needs. ¹

xi) Costs and Instructional Activity:

The total costs of an instructional activity comprise a combination of fixed and variable cost elements. Fixed costs refer to the part of the total cost that is independent of the scale of activity in question. Broadcasting exemplifies an

instructional activity made up entirely of fixed costs. Variable costs are those affected by student numbers. The difference between variable and fixed costs is not clear-cut, but in general an increase in the number of students should lead to decrease in the average cost per student.

xii) Cost-Effectiveness:

The main difficulty involved in analysing efficiency in education is that of measuring output. This difficulty can be reduced by using a cost-effectiveness approach. Cost-effectiveness studies begin by defining the general and specific objectives to be achieved. Alternatives are considered in respect of achieving these objectives, and the costs of such alternatives are calculated.

The cost effectiveness approach can be valuable for educational planners, especially in effecting comparisons between conventional with unconventional modes of operation.

xiii) Cost Benefit Analysis:

This is:

"A technique for the evaluation of an existing situation whereby the social cost is considered in relation to the benefit it confers on the community".

This is potentially useful for assessing the contribution an investment in education might make to the economy. It treats educational expenditure as a businessman might treat any item of spending. 1

xiv) Revenue:

"Is the gross increase attributable to business activities. It results from the sale of merchandise, the performance of services for a customer or a client, the rental of property, the lending of money, and other business and professional activities entered into for the purpose of earning income". 2

e) "Cost Analysis, Cost Effectiveness and Cost Benefit Analysis"

In order to examine the methods by which we can compare the full cost of distance teaching with the alternatives, it is conventional to distinguish between cost analysis, cost-effectiveness analysis, and cost benefit analysis. In cost analysis the attempt is made to identify all the costs involved in a particular activity. 3 Cost-effectiveness goes further by attempting to measure the different costs


of various ways of achieving the same end. Cost benefit analysis goes further still. It involves measuring the benefits of a policy in terms of money; that is to say we are trying to put a price on its effects or benefits.

Lord Perry, in discussing the cost benefits of distance study in the case of the British Open University, says:

"Most of the teaching of the Open University is carried out by the part-time staff (some 6,000 of them), most of whom are employed on a full-time basis by other educational institutions. In paying them for their Open University work, the University does not have to provide them with the services that have already been provided by their primary employer. Thus, for example, we have no need to provide them with office space, with superannuation contributions, or with support for their research. We do not supply them with secretarial help. We give them no vacation on a paid basis. All this is provided by their primary employing institution". 1

f) "Costing Distance Education"

Distance teaching institutions have to consider all types of cost described above. Their innovative nature, at least as compared with traditional modes of

1. Perry, W., Open University, A personal account by the first Vice-Chancellor, (Milton Keynes: The Open University, 1976), p.239.
delivery, involves them in disproportionately high opportunity costs, but once in operation each particular programme may well be relatively cheap in respect of the numbers potentially reached.

When we consider the costing of distance education systems in comparative perspective we must examine all different kinds of distance education within any one system. For example, the British Open University includes the use of television and radio for its teaching, but the German Fernuniversität does not.

"Both these universities run a number of study centres where students are continuously offered tutorials and various media facilities. This is a type of service not provided by what is probably the vast majority of distance-study institutions in various parts of the world publicly funded and private correspondence schools". 1

3.4 Determining the Costs of Distance Education

It has been said that in conventional modes the: "bulk of educational costs are teachers' salaries and the amortisation of capital equipment". 2 Much of the remaining cost goes in providing buildings, and

the equipment within them. As the number of students increases, the cost of education tends to increase proportionally. This means that the variable costs are a very high proportion of the total costs of education.

The costs of distance teaching are quite different. Although some components do vary according to the number of students, a large proportion of the costs will be for central administration, for the writing and setting in type of correspondence courses, and for broadcasts. These costs are 'fixed', and do not rise in direct proportion to the number of students catered for. 1 According to Holmberg:

"If we compare the costs of reaching a particular educational goal, for instance a degree, by distance education with the cost of attaining the same qualification by conventional study, we should be able to draw important conclusions. Then it is essential to compare both input and output. The input would be the total cost (students fees, government or other financing and subsidies, the loss of income incurred by students who give up work for study etc) whereas the output would be the degree or other study goal reached and possibly even its economic value". 2

a) **Cost-Determining Factors**

Costs in distance education may be divided into three groups as follows:  

i) **Inputs**: human resources, information and ideas, money, materials, equipment, buildings;

ii) **Conversion Rates**: machinery capacity, productivity rates, input, output ratios;

iii) **Outputs**: students - absolute number of individuals registered, absolute number of individuals who withdraw, number of students studying courses, number of course credits obtained, number of student hours of study theoretically achieved; courses - absolute number of courses, number of students study-hours involved in the course, number of components such as correspondence texts, T.V. and radio programmes.

Another way of presenting these factors would be to present them as to do, respectively, with level, sophistication and scale.

First, there is the level of education. The cost of conventional education comprises mainly the salaries

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paid to teachers, often up to 80 per cent of educational budgets. Where teachers are relatively well-paid and the staffing ratio is good, as in universities, the cost per student is relatively high. In a distance-teaching institution costs are the same, whether the students are at primary or tertiary level. In consequence, it is not difficult to lower the cost of distance teaching to below that of conventional education, especially at tertiary level.

As to the sophistication of the equipment used, some techniques, e.g. television, colour graphics, can be very costly, but radio broadcasting is relatively cheap. Furthermore, the transistor radio is a widespread domestic facility even in developing countries. So there is always radio broadcasting to reduce costs if necessary.

With respect to scale, it costs much the same to produce correspondence lessons or make broadcasts for a few students as for many. Indeed, there are savings in printing costs as numbers rise. As a result, distance teaching is only going to prove more expensive than conventional methods if there are very few clients.
Having examined the technicalities of costs, let us now consider the economics of the British Open University, because it is important to understand this aspect of its operation before considering its possible application to Egypt. It is first necessary to describe the Open University teaching system and the implications of this for its cost structure.

3.5 The Economics of the British Open University in Comparison with Conventional Institutions

"The output of the Open University is planned to be similar to that of conventional universities. It is the raw material and the techniques of production which are different. It seems appropriate, therefore, to assume for the time being, that the private and social benefits of the two types of institutions will be the same, and to concentrate the analysis on the costs side of the equation."

Furthermore:

"Claims have been made by the Open University that it costs little more than half as much as a conventional university to take a student through to a degree. It may be cheaper to some extent, but costs are not really comparable, because the Open University depends on the premises and part-time services of staff belonging to other institutions of higher education throughout the country. Without these its costs would be much higher - it is doubtful whether it could have functioned at all, at least in its present form."

There are five components to the Open University teaching system, namely correspondence material, television and radio programmes, class tuition at local study centres, and summer schools. The first three items are impersonal, whereas the last two involve direct client contact. An additional form of contact is through the provision of counsellors who advise the client on non-academic problems. The client receives regularly a package of correspondence materials containing written matter, and sometimes slides, films, records, even kits for home experiments in science. There is a guide to relevant radio and television programmes that are broadcast anyway. The student has assignments at determined intervals which are either by a tutor or by computer.

This system determines the cost structure. The expense of the impersonal components is fixed in that the size of the clientele is irrelevant. The only variables in the correspondence package are the cost of printing and postage, and of ancillary material that might be sent such as slides or records. So the only major cost that varies with the number of students is that concerned with the provision of personal tuition. This high ratio of fixed to variable costs is in contrast
to conventional universities, where the largest single item in recurrent expenditure, that is salaries, is directly linked to the number of students. ¹

In a major study of early Open University costs Laidlaw and Layard ² produced two cost functions to cover those costs which might be allocated to the production of courses and those which might be regarded as central university costs. They compared the figures with those obtained for conventional universities in the U.K. and concluded that while the Open University was cheaper in itself, if it had to exist alone, it would cost a very great deal more. It is a system complementary to the conventional system of higher education and parasitic on that system.

Most of the teaching of the Open University is carried out by the part-time staff, most of whom are employed on a full-time basis by other educational institutions. In paying for their Open University work, the university does not have to provide them with the services that have already been provided by their primary employer. Thus, for example, there is no need to provide them with office space, superannuation

contributions, or further support for their research such as study leave.

In addition to the work of Laidlaw and Layard\(^1\), Lumsden and Ritchie\(^2\), Rumble\(^3\), Mace\(^4\), Wagner\(^5\), and Lumsden and Scott\(^6\); provide useful analyses of the costs of the Open University. Most of these studies concentrate on the output of the Open University in comparison with conventional methods. Wagner (1972) in particular made four comparisons:

1. Ibid.


a) the average recurrent cost per equivalent undergraduate in which the Open University cost is little more than a quarter of conventional universities;

b) the capital cost per student place where the Open University figure is about 6 per cent of the conventional figure;

c) the average recurrent cost per graduate which indicates that the cost at the two types of institutions would be equalised if the Open University had a dropout rate of 85 per cent;

d) the resource cost per equivalent undergraduate where the Open University costs are about a sixth of conventional universities.

**TABLE 3: COST OF THE OPEN UNIVERSITY AND CONVENTIONAL UNIVERSITIES**

<table>
<thead>
<tr>
<th></th>
<th>OPEN UNIVERSITY</th>
<th>CONVENTIONAL INSTITUTIONS</th>
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</thead>
<tbody>
<tr>
<td>A. Average recurrent cost per equivalent undergraduate</td>
<td>£251</td>
<td>£940</td>
</tr>
<tr>
<td>B Capital Cost per student place</td>
<td>£165</td>
<td>£3000</td>
</tr>
<tr>
<td>C. Average recurrent cost per graduate</td>
<td>£4000 at 85 per cent drop-out rate</td>
<td>£4000+</td>
</tr>
<tr>
<td>D. Resource cost per equivalent undergraduate</td>
<td>£268</td>
<td>£1577</td>
</tr>
</tbody>
</table>

According to Wagner, in comparing costs:

"We often want to know about both the average cost per student and the marginal cost. The average cost per student can, in principle, be found by dividing the total annual cost by the number of students. The marginal cost is, in contrast, the extra cost of teaching a single extra student". ¹

While Perraton says that this:

"Figure enables us to see the financial consequences of expanding a distance education project to teach more students. In order to determine these figures, we need to calculate the fixed costs, those which do not vary with the number of students enrolled and the variable costs, which vary with each additional student". ²

One of the problems with the Open University is therefore that there is no reliable information on the number of likely graduates each year. Wastage rates of existing correspondence institutes are a poor guide because the Open University is much more than a correspondence college. It offers an integrated system of teaching in which radio, television, personal tuition and correspondence all play a part.


According to Rumble:

"Wagner's study (1972) showed that the average recurrent cost per student was about a quarter of that at conventional universities, although it fell to about one-third if allowance was made for the greater research activity at the latter. On the other hand, the cost per graduate was likely to be only one half that of conventional universities owing to the higher drop-out rate of the Open University students..." 1

Carter 2 indicated that he was entirely in agreement with Wagner's main conclusion about the cost advantage of the Open University system; but had some objections, which could be summarised as:

a) Wagner appears to have used expenditure in conventional universities for all students, including the very expensive subjects (such as medicine);

b) The allowance for research costs;

c) Wagner appears to have forgotten that part of the capital cost of conventional universities is also related to non-teaching activities and also that that arbitrary "weighting" of post-graduates is not intended to reflect their demands on capital resources.

Wagner replied accepting the criticism that conventional universities teach expensive subjects such as medicine, but added:

"I am disappointed that Mr. Carter's criticisms should all be on the side of my supposed bias in favour of the Open University. Some of my assumptions in favour of the 'conventional universities might equally be challenged'.

However, in his later study in the same area he revised some of his assumptions and treated the costs of the two types of institutions differently:

"This paper, therefore, will first present the revised figures for 1973. These will show that the average cost per equivalent undergraduate at the Open University was slightly lower than had been forecast, largely due to the university enrolling more students, whilst for conventional universities the results support the assumption of no increase in productivity between 1968-69 and 1972-73. The rest of the paper is concerned with a detailed analysis of Open University costs from 1973 to the end of the decade. The figures indicate that whilst in 1975 average costs fell, a rise is likely to have occurred in 1976. Moreover, on the basis of anticipated expenditure and student numbers of 1979, average costs are

unlikely to fall much below the level reached in 1976. Thus, it would seem that further economics of scale arising from the Open University method of teaching are unlikely. The reason for this surprising conclusion will be analysed and the paper ends with an examination of some alternative policies which could yield further reductions in average cost per student."

The results of Wagner's revised calculations are shown in Table 5.

According to Rumble, Wagner concluded that most of the economies of scale of the Open University were gained within the first few years of operation and that since then it has been following the conventional university pattern of little increase in productivity. The main reason was that the additional numbers of students in the system had been matched by an increase in the number of courses offered. Nonetheless, the Open University system was still very cost-efficient in comparison with conventional universities.

Mace in his comments about the economics of the Open University with reference to the economics of the conventional universities in Britain said that:

### Table 4: Open University and Conventional Universities

Original Estimated Average Costs 1973 at 1971 Prices

<table>
<thead>
<tr>
<th>Description</th>
<th>Open University</th>
<th>Conventional University</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Average recurrent cost per equivalent under-graduate.</td>
<td>£278</td>
<td>£940</td>
</tr>
<tr>
<td>B. Average recurrent cost including the inputed rental cost of capital per equivalent undergraduate.</td>
<td>£300</td>
<td>£1200</td>
</tr>
<tr>
<td>C. Average recurrent cost per graduate.</td>
<td>£1200 @ 50 per cent drop-out rate. £4000 @ 85 per cent drop-out rate.</td>
<td>£4000+</td>
</tr>
<tr>
<td>D. Resource cost per equivalent undergraduate.</td>
<td>£295</td>
<td>£1577</td>
</tr>
</tbody>
</table>


### Table 5: Open University and Conventional Universities

Revised Average Costs 1973 at 1971 Prices

<table>
<thead>
<tr>
<th>Description</th>
<th>Open University</th>
<th>Conventional University</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Average recurrent cost per equivalent under-graduate.</td>
<td>£258</td>
<td>£960</td>
</tr>
<tr>
<td>B. Average recurrent cost including inputed rental cost of capital per equivalent undergraduate.</td>
<td>£272</td>
<td>£1111</td>
</tr>
<tr>
<td>C. Average recurrent cost per graduate.</td>
<td>£2719 in 1973. £1842 in the long run.</td>
<td>£4049-£4801</td>
</tr>
<tr>
<td>D. Resource cost per equivalent undergraduate.</td>
<td>£272 minimum</td>
<td>£1647-£1947</td>
</tr>
</tbody>
</table>

Source: ibid, p. 365.
"Recent studies of the Open University (OU) have shown that it is producing graduates more cheaply than conventional universities (CU's), (Wagner, 1977), and that in terms of student intake it is more Open than CU's (McIntosh et al, 1976). These studies support the conclusions reached in earlier studies of the costs and openness of the O.U. vis-a-vis CU's (for example, Wagner 1972, Laidlow and Layard, 1974, McIntosh and Woodley, 1974). Together, these claims amount to a compelling case for viewing the O.U. as more cost-effective than CU's: not only does it produce graduates more cheaply, it is also more effective in "opening" up educational opportunities to disadvantaged groups". 1

There seems no doubt that the Open University is cost-efficient. That is, it is economical in the use of resources relative to the output produced. Holmberg in his comments on Mace's reservations said that:

"The fact that the highly sophisticated multi-media system of the Open University compares very favourably with conventional universities would seem to indicate that distance education generally can be very economical. To what extent this applies to all procedures and media applied is less certain. What we do not know is, for instance, if the costs of study-centre activities of T.V. programmes, both very expensive in relation to their costs, this is a subject well worth looking into, it has been, in fact, the subject of some research...." 2

Nonetheless, however, if one makes a comparison of the cost of educating a student in the Open University with that of educating a student in a conventional institution, it would appear clear that education through the British Open University is relatively cheap.

3.6 Comparing the Economics of Some Selected Distance Teaching Universities and Systems

In comparing the costs of distance teaching systems with the costs of alternatives in one country or in some selected countries, developed or developing, we want to compare like with like. It would be ideal to be able to say that, for a given group of students at a given level, it is cheaper or dearer to use one educational method rather than another. In practice, however, this is not possible, because of problems of comparability. It may be, for example, that correspondence education is an alternative for students who are older than those at traditional institutions or live in more remote areas.

Students of the Open University in Britain, for example, are different from many other university students because they are older and often come from a different educational background.

However, it can be said that, in distance teaching universities, very significant expenses are incurred in the preparation of teaching materials, and are irrespective of the numbers of students in the system. These can be regarded as a fixed cost in relation to the output of students. On the other hand, the course materials themselves represent a very significant output in their own right, for they are the product of a multi-media publishing enterprise. This is an alternative to the labour-intensive nature of conventional
educational institutions. 1

Given the difficulty of simultaneous comparison, it is proposed here to compare the costs of each university consecutively, not including the case of the British Open University which has already been dealt with above.

a) **Finance and Economic Effectiveness of Allama Iqbal Open University: Pakistan.** 2

There is a Treasurer's Department within the University, which is now subdivided into different sections. The Treasurer is assisted directly by the Assistant Treasurer (General) who in turn looks after the billing, cash and receipts sections as under:

- **Budget Section** (responsible for the preparation of the recurring budget, regionwise and allocation to each department/region).

- **Planning Section** (responsible for the preparation of annual development budget estimates and keeping the records of main development projects, plus the handling and clearance of equipment received under foreign aid).

- **Booking Section** (dealing with the compilation of accounts).


There are also the cash section, the payroll section, the billing section, and the purchase and store section. 1

According to the final development plan, initiated in 1976 and finally approved in November 1978, the total development cost was set at R 153.9 millions (approximately £7.5 million at 1978 prices). This sum included a foreign aid component of R 48.2 millions (£2.5 million approximately) and provided for land acquisition and buildings. This also covered the production and distribution of study materials, including broadcasts, and the purchase of printing, audio-visual and scientific equipment, as well as books, office equipment, furniture and vehicles. 2

In respect of co-operation between the British Open University and Allama Iqbal Open University in Pakistan:

"in January/February 1979, an Evaluation Mission from the United Kingdom Overseas Development Administration visited the A.I.O.U. in connection with the phasing of further aid support. In its section on economic effectiveness, the Mission's Report (Collister, 1980) discussed first the potential effect of the A.I.O.U. in helping to solve some of Pakistan's problems of skilled manpower. It pointed to the major contribution the University could make to the national economy by training technicians and discussed specific courses." 3

Two important additional points were made:

i) that A.I.O.U. courses can result in a more efficient and more intensive use of existing educational buildings and facilities in the country;

ii) foregone earnings, if possible to calculate, would be an important factor in any comparison. That is to say, with students able to take courses directly relevant to their work, performance and personal prospects while still continuing with their jobs, were not losing their services.

b) **Finance and Economic Effectiveness of Costa Rica's Universidad Estatal A Distancia**

U.N.E.D. was established in 1977 as a response to problems then being faced by the traditional campus-based universities in Costa Rica. It is a vigorous institution that is meeting previously unsatisfied demands for university education, and is now expanding into other academic areas. According to Rumble:

"U.N.E.D.'s 1980 budget anticipated expenditure of 55.3 million colones. Rumble (1981) showed that by 1985, costs are likely to rise to 137.5 million colones. About 32.4 percent of the increase is accounted for by the introduction of the proposed secondary school Bachillerato programme. A further 18.2 percent covers the expansion of the broadcast element from the current 80 programmes per year to 240 per year (something which is now very unlikely to happen). 17.8 percent reflects an increase in student numbers, and 15.8 percent increases following on the planned growth in courses.

1. Rumble, G., Costa Rica's Universidad Estatal A Distancia: A Case Study, Distance Education Research Group, The Open University, DERG papers No.4, November 1981, pp.40-41.
Rumble shows that average student costs are likely to fall as student numbers increase (Table 6). These figures compare favourably with average student costs in conventional Costa Rican universities, which do not have the same potential for economies of scale as has U.N.E.D.


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<tbody>
<tr>
<td>Average cost per student</td>
<td>10,923</td>
<td>8,514</td>
<td>7,012</td>
<td>6,368</td>
<td>6,072</td>
<td>5,817</td>
</tr>
</tbody>
</table>

c) **Finance and Economic Effectiveness of Distance Education in Botswana**

Before 1966 and in the early 1960s, before U.D.I. in Rhodesia, the then Bechuanaland Protectorate administration made an agreement with the Rhodesian Government in which it was to allow students from Botswana to enrol with the Salisbury Correspondence College. Two years after independence, the Botswana Government established a similar college in Francistown. 2 The Distance Education System subsequently grew to


include: the Francistown Teacher Training College, Lesedi la Riso (A Radio-Learning Campaign in Western Botswana) and The Botswana Extension College.

In the establishment of this section of education in Botswana, it was agreed that relative costs of distance education are equal to or less than those of traditional on-campus educational systems for a number of reasons. In particular, it was stressed that the relative costs of reaching outlying students who would otherwise find it difficult to avail themselves of traditional education provision were less than they would be if traditional institutions were created in such locations. Indeed, given the demographic pattern in Botswana, such students could not really be reached by conventional means. So the costs incurred by the distance system were certainly in the economic interests of the country in the longer term.

d) Finance and Economic Effectiveness of Athabasca University, Canada

Athabasca University, the newest of the four Alberta universities, was founded in Edmonton, the provincial capital, but was relocated to the town of Athabasca, a small rural community 145 kilometres to the north.

Table (7) displays a variety of data about Athabasca University pertaining to enrolments, courses, staffing, and costs. Comparative data are provided for six years. As
the data indicates, the University grew rapidly, and although the initial boom has passed, there is still some expansion.

The data in Table (7) may be used to measure the relative efficiency of the University based on the annual enrolment figures and the operating expenditure, despite the relatively crude indicator arising. 1

e) The Costs of Teaching at a Distance in the National Extension College, Cambridge, England.

The National Extension College was established in 1963 by Dr. Michael Young. It is an educational trust financed mainly from student fees but also by grants from local education authorities and educational foundations. The pioneering work which the National Extension College carried out in the use of multi-media courses in Britain and the interest which Miss Jennie Lee showed in this work was one of the factors which contributed to the Labour Government of 1966 committing itself to the founding of the Open University. It is an adult teaching unit, which uses the combined resources of postal tuition, radio, television and face-to-face teaching at residential and one-day courses to give a second chance to those who

### TABLE 7: DATA ON A.U. OPERATIONS: 1975-76 TO 1980-81

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>Total Courses Available</td>
<td>3</td>
<td>16</td>
<td>31</td>
<td><em>:</em></td>
<td>66*</td>
<td>95*</td>
</tr>
<tr>
<td>Total Credits Available</td>
<td>18</td>
<td>90</td>
<td>138</td>
<td>240</td>
<td>273</td>
<td>390</td>
</tr>
<tr>
<td>No. of Courses by mode of delivery packaged:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructor-Seminar-</td>
<td>2</td>
<td>12</td>
<td>17</td>
<td>29</td>
<td>42</td>
<td>50</td>
</tr>
<tr>
<td>Supported Teleconferencing:</td>
<td>1</td>
<td>3</td>
<td>14</td>
<td>26</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>Reading Courses:</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>New Enrolments by Programme of Study</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Liberal Studies</td>
<td>726</td>
<td>1255</td>
<td>1525</td>
<td>2790</td>
<td>3145</td>
<td>4112</td>
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<tr>
<td>Admin. Studies</td>
<td>-</td>
<td>15</td>
<td>291</td>
<td>942</td>
<td>1434</td>
<td>1501</td>
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<tr>
<td>Non Credit:</td>
<td>-</td>
<td>-</td>
<td>8</td>
<td>152</td>
<td>83</td>
<td>77</td>
</tr>
<tr>
<td>Total Enrolments:</td>
<td>726</td>
<td>1270</td>
<td>1824</td>
<td>3884</td>
<td>4662</td>
<td>5690</td>
</tr>
<tr>
<td>Total Weighted Enrolments</td>
<td>726</td>
<td>1250</td>
<td>1702</td>
<td>3116</td>
<td>3587</td>
<td>4252</td>
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<tr>
<td>Operating Expenditures in Current Dollars (000)</td>
<td>1118</td>
<td>1986</td>
<td>2511</td>
<td>3772</td>
<td>4485</td>
<td>5965</td>
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<td>STAFF COMPLEMENT</td>
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<tr>
<td>Full-time Professional</td>
<td>32</td>
<td>42</td>
<td>49</td>
<td>56</td>
<td>66</td>
<td>84</td>
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<td>-</td>
<td>-</td>
<td>22</td>
<td>43</td>
<td>70</td>
<td>91</td>
</tr>
</tbody>
</table>

**NOTES:**

* includes non-credit courses.
1. If a course was offered in two different delivery modes, it is counted as two course offerings.
2. Weighted enrolments = (enrolments in 3-credit courses - 2) + (enrolments in 6-credit courses).

**SOURCE:** Athabasca University Fact Book, 1980-81
have been unable to obtain all the help they need within the framework of the state education system.

The finance of the N.E.C. depends on students' fees. Although the College received a government grant in the past, it is now self-supporting. ¹

"In 1980 the N.E.C. had 9,027 enrolments. Its total expenditure on correspondence work was £330,119, so that it cost £36.57 to teach each correspondence student. We can split its expenditure between fixed and variable costs: expenditure on tutors' fees, and a proportion of expenditure on printing and on postage, are variable, in that they rise with each additional student. ... The variable cost per student is £10.53; it costs the college only an extra £10.53 to teach each additional student it receives."

We can make an extremely crude comparison between this figure and that of conventional education at secondary level, roughly the level at which most of N.E.C.'s courses were pitched. The average cost of the education at state secondary schools in 1979/80 was £633. If we assume that a year's secondary course is the equivalent of six of N.E.C.'s single-subject courses, we can see that the cost of studying one subject at school was £105.50. This cost was not dependent on the number of children at school: it would be much the same for large schools or small, or for large

education authorities or small. ¹

3.7 The Costs of Teaching and Learning Materials

The materials concerned here are: the written materials, the auditory registrations, the visual registration, computer-assisted and face-to-face teaching. Only the first three types of materials will be discussed in terms of cost.

a) The Cost of Written Materials

Written instructional materials consist of text, pictures, maps and diagrams.

"The cost of an instructional unit will vary according to the frequency of occurrence of these different elements. This frequency will depend not only on the kind of subject matter involved, but also on ethetic or marketing requirements." ²

The total cost of written instruction can be obtained by combining the costs for development, production, and distribution. The total cost per lesson unit can be represented by the equation:

\[ \frac{TC}{D} = \frac{CO}{N} + \frac{CPD}{D} \]

In which:

1. Perraton, H., op.cit., (1982), pp.20-21,
The total cost per student hour (CSH) is found by dividing the duplicate cost (TC/D) by the time necessary for mastering the unit. The usual norm in higher education for this time is 5 pages per hour. In the cases of distance learning, however, a norm of 4 pages per hour would appear to be more reasonable, in view of the presumably poorer scholastic experience of the students concerned. A lesson unit thus would require 8 hours of study.

b) **The Costs of Auditory Registrations**

These costs include: open-circuit broadcasting, cassette tapes at home, records at home, recording at home, and study centres:

The total cost per student of a half-hour sound registration (CSHH) is given by the equation: 1

\[
CSHH = \frac{CDR}{Y \times N} + CDP
\]

1. Ibid.
2. Ibid, p.151.
where $C_{SHH}$ = cost per student of a half-hour.

$CDR$ = costs of development and recording (§ 220).

$Y$ = lifetime of the programme (5 years).

$N$ = number of students per course per year.

$CDP$ = costs of distribution and registration per student.

The general conclusion can be drawn that radio broadcasting constitutes the least expensive alternative, except in the case of very small course populations. Then cassette tapes are the least expensive. The combination of these two - broadcast programmes recorded at home - also appears to be very attractive, both from a financial and an educational point of view. The disadvantage of having to listen at fixed times and with no possibilities of replay is eliminated in this way. If the number of students per course generally does not exceed 250 students per year, cassette tapes produced by the institution itself and delivered to the students by mail constitutes the most attractive option.

It is clear that the cost per hour is higher in the case of auditory registrations, making the written mode the more efficient one, provided that the educational effect is equivalent.
c) **The Costs of Visual Registration**

Visual registrations involve the recording and reproduction of moving images accompanied by sound. Among the possibilities for delivering visual registrations are the following:

i) broadcasting, one repeat included;

ii) VTR or video disc presentations at study centres, including lending service;

iii) video disc presentations at study centres, self-service;

iv) video disc presentations at home.

The total cost per student per half-hour registration \((C_{SHH})\) is expressed by the equation: 1

\[
C_{SHH} = \frac{CDR}{Y \times N} + \frac{CDP_{N,S}}{Y \times N}
\]

where

- \(CDR\) = costs of development and recording ($1,255 and $6,000).  
- \(Y\) = lifetime of the programme.  
- \(N\) = number of students per course per year.  
- \(CDP_{N,S}\) = cost of distribution and presentation per student given \(N\) and \(S\).  
- \(S\) = number of study centres.

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1. Ibid, p.163.
This overview shows that the video disc option, either in the form of self-service facilities at study centres or in the form of presentations at home by means of self-purchased apparatus, constitutes a very attractive alternative from the cost point of view.

3.8 Conclusion

In terms of determining the opportunity for utilising distance education, it is important to clarify the economic implications. If it is true that distance teaching systems cannot be set up without the help and co-operation of orthodox institutions and systems with all its human resources and campuses, then the orthodox system of education needs to benefit from the distance education system in return. To what extent this may be true would depend on further research, but it is a fundamental point for decisions about embarking on distance learning.

Returning to the discussion of the economic dimension of distance education at the higher education level, we may use the words of Rumble et al to summarise: 1

"distance teaching universities require quite complex organisational arrangements before a single student can be admitted; a) administrative functions; b) very considerable sums of money have to be invested in materials design; c) distribution and production; d) local support services.

1. See: Rumble, G. and Harry, K., (eds), op.cit., pp.219-221.
- the costs are incurred irrespective of student numbers and as such can be regarded as fixed or at least semi-variable in relation to the output of students. However, in general terms, once the structure is in existence, it can meet the needs of very large numbers of students; while the "fixed" or "semi-variable" costs of the system tend to be higher than is the case in conventional universities, the variable or direct cost per student is usually much lower. This difference in the cost structure of distance and conventional educational institutions is well understood. It means that in general conventional teaching systems are cheaper for low numbers of students, while distance teaching systems are cheaper for high numbers of students; the threshold at which the D.T.U.'s become economically more efficient (as measured by average student costs) than conventional systems depends both on: the extent to which, firstly, the institutions fixed costs are higher than those of conventional institutions and, secondly, the variable costs per student are lower than those of conventional institutions using face-to-face teaching."

This chapter has included the costs of U.K. Open Universities and some other distance teaching institutions. The studies quoted show that distance teaching universities can be cost-effective in comparison with conventional universities, but that this may not necessarily be the case. Their cost advantage can be undermined if:

a) the investment in media and materials is excessive in relation to the number of students in the system;

b) the direct student costs (or variable cost per student) is above or on a par with those at conventional universities;

c) the variable cost per student in a D.T.U. is only marginally lower than that in a conventional university, since in this case the D.T.U. will need proportionately more students if its average costs are to drop significantly;

d) the D.T.U. cannot attract sufficient students to warrant the investment in the development of its materials and systems.
4.1 Introduction to Correspondence Education

Correspondence education is the aspect of distance teaching which has the deepest routes extending back into the nineteenth century. However, it still represents an important part of teaching at a distance today, and often is the one significant sector of an educational system for which no public agency takes responsibility. Despite its relatively long history, public interest in correspondence education has been rather slow to develop. Perhaps it is because correspondence education has tended to be regarded as a medium of last resort for those people, mainly adults, who were unable for economic or geographical reasons to obtain effective face-to-face education.

The value of specific knowledge has a shorter span than used to be the case, as accuracy and relevance is always changing. Therefore, updating of knowledge or skills, or the acquisition of new ones has become necessary. Education by correspondence is a means of such updating and has become more widely accepted as an important form of adult education, both for instrumental and purely pleasurable purposes.

One feature which most correspondence education systems have in common is that they cater mainly for adults,¹ but especially in developing countries, rapid social change is most quickly eroding the traditional educational support given to young people by their communities and so such education may be utilised by younger groups in such contexts. ² In any case, children of school age do use correspondence courses, particularly in subjects which may not be provided at their schools. But such use is usually of a different order from its use by adults, since it supplements, rather than replaces, the classroom situation. ³

In this introductory section, we should also remember that communications have now become so rapid that there can be frequent and close contact with the external student, through many different media. Audio-visual equipment, however, is expensive and not all who want to learn will be able to afford it, or even use it. Because of its relative simplicity and modest cost, the printed word with written individual guidance from a teacher can reach every person who can be reached by a


postal service, so organised correspondence teaching continues to be, in many cases, the only effective way, of reaching many external students, especially in developing countries.

So correspondence education as a part of the distance learning systems still represents an important factor even in distance education systems of a very modern nature, thus challenging the traditional universities in the field of documentary study. One aspect of this dimension is the mass-production of knowledge in 'knowledge factories', which daily grow in number and size and where the number of scientific enquiries may run into thousands. So routine enquiries of such sources, if they are made by post constitute a significant element of correspondence education. ¹

Governments and educational bodies have become increasingly aware of the possibilities offered by correspondence education, convincing documentation of its achievements are on record. Official providers of education are now more ready to accept that traditional face-to-face methods in formal institutional settings are not the only,

or even the best mode of operation. Correspondence education, being flexible in its application and convenient for the student wishing to study alongside normal employment, has qualities which are of growing significance at a time when the educational process is ceasing to be seen merely as a process of induction. ¹ Its flexibility makes it a vital element in the range of means available to satisfy the growing demand for education. This flexibility is allied to adaptability which is becoming an increasingly important quality. Furthermore, correspondence education has shown itself capable of competing with more orthodox forms of provision, because the phasing of the need for education during the human life span has proved less predictable than in the past. Training for known specialist employment for life is a thing of the past - permanent education is the new requirement. Consequently, people require opportunities for further education at various stages of life. ²

With respect to the British Open University, it has been found advisable to divert emphasis from broadcasting to correspondence as the central medium of instruction. Every degree course makes substantial use of correspondence

¹. Wedell, E.G., op.cit., p.9.
². Glatter, Ron and Wedell, E.G., op.cit., p.ix-x.
course techniques, this providing a nucleus around which an integrated sequence of radio and television programmes and short residential courses can be developed.

4.2 Aspects of the History of Correspondence Education

It could be said that correspondence education began with the first letter from one person writing to give instruction to another, and goes back to ancient epistles. 1

a) In England, correspondence tuition began in about 1840, when a Mr. Pitman sent his students instruction in shorthand by postcards. Its more systematic provision dates from 1880 and 1890. Many of the well-known colleges were established during this period, for example: University Correspondence College, Wolsey Hall, Chambers, Cloughs, Foulks Lynch and Skerry's. Several of these began modestly with the coaching of a few pupils. 2

b) In Germany in 1856, Charles Toussaint and Gustav Langenscheidt founded a school for teaching languages by correspondence. At first, only French was offered, later English and other languages. 3

c) In the 1890s in Sweden, Hans Hermod was running a traditional school in Malmö when one of his students moved to a place about twelve miles distant. It is believed that this gave Hermod the idea to begin printing correspondence courses. Consequently in 1898, he published his first correspondence course 'book-keeping'.

d) In the USA, 1874 may be taken as the start of distance education at university level with the initiative of Illinois State University. This was one of the beginnings of the extension movement. Elsewhere, William Rainey Harper (1856-1906), chiefly remembered now as the intellectual founder of the University of Chicago, experimented early with instruction by mail.

e) In 1910 in Australia, W.A. Grundy, a senior health inspector in New South Wales, was concerned about the difficulty of training health inspectors in New South Wales, and fully taught nine by correspondence. This was the inception of technical education by correspondence in that country. Soon after, in 1914, the Victoria Education Department received a request from a settler in the outback asking if anything could be done for the education of his

1. Ibid, p.2.
two sons. Volunteer student teachers began to undertake the task by correspondence, and thus a major commitment to the teaching of children in outlying locations was born. 1

From these early beginnings, education by correspondence now represents an important sector of educational provision in many parts of the world. In some countries, it has for many years formed part of the public educational system. In others, it has developed largely as a result of private enterprise and serves those outside public provision. As the educational systems in most European countries have grown and developed since 1945, correspondence education, rather than declining, has in fact developed considerably. 2

4.3 **Correspondence Education Definitions**

'Correspondence Education' is no longer a term which can be defined simply as the sending of an ordered sequence of lessons to students through the past with or without opportunities for the correction of exercises. It is now a much more elaborate operation combining a number of teaching and learning devices. This development is due partly to technical development, but is also rooted in a

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methodological change in respect of distance education.

Many terms are in use for correspondence, for example, postal tuition, tuition by mail and home study. It implies that two or more parties are in contact with one another in writing. Consequently, correspondence teaching is taken to mean 'teaching in writing'. What is particularly characteristic of correspondence teaching is that there is two-way communication between teacher and student. This two-way communication need not necessarily be practised in writing but can be achieved by tape recordings or telephone contact. So, according to Holmberg:

"The most exact definition I know has been formulated by Sommer: which I translate as follows; correspondence instruction is a planned and systematic activity, which includes the selection, preparation and presentation of the teaching material as well as the securing and supervision of what students have learnt and in the course of which teacher and student are normally geographically separated from each other the whole time and keep in contact by means of fairly independent media."

a) Home Study and Correspondence Education:

The definition of 'home study courses' is relatively simple. In the United States of America, the term is often used interchangeably with correspondence study as in The

---

Home Study Review, a quarterly dedicated to correspondence education.

Glatter and Wedell, however, feel that home study ought to refer to any student, even completely unaided, which is undertaken at home, or at least away from the setting of a teaching institution. So in this context the definition would depend upon the degree of contact between tutor and student. If a course of study consists of no more than the issue of study material, whether or not related to a terminal examination, and is not providing continuous teaching by a tutor, then the student's home study has, in fact, become self-instruction.

b) The Correspondence Course:

This is conducted by the tutor and student through exchange of written materials by post. There is some ambiguity between the terms 'correspondence course' and 'correspondence education' when some persons use them as synonyms.

c) Correspondence Education:

This is a type of distance education based on exchange by post of written communications (e.g. course notes, student

2. Rowntree, D., op.cit., p.54.
essays, tutor comments) between tutors and students. It may involve the study of specially-printed materials, textbooks, home experiment kits, audio tapes, radio and television broadcasts; and it may be backed up by face-to-face meetings with tutors and by summer schools.

d) The Correspondence Education Student:

The correspondence student has traditionally been the determiner of the nature of correspondence education because the principles of correspondence teaching, like the principles of teaching by any other medium, are rooted in the general laws of human learning. Learning is more effective when students want to learn. Reinforcement helps learning, and so it is important for correspondence teachers to motivate their students by providing work properly adapted to the level of the student and his/her past experience.

According to Miller, given the need to prepare every aspect of the programme in writing, the teaching is likely to be far more carefully thought through than in traditional teaching.  

The vast majority of correspondence students are adults, usually capable of deciding for themselves the amount

and nature of the studies they wish to undertake. What are the factors leading to a selection of correspondence study by such clients? The most obvious reason is the absence of an institution capable of providing face-to-face tuition in a particular area desired by the student. This might suggest that correspondence education should flourish in countries with widely scattered populations. However, the writer considers this hypothesis to be too closely related with the pure geographical factor of distance. Is it, for example, the case that correspondence education does not flourish in areas where distances between urban centres are small? On the other hand, the case for geographical determinism is supported by the difference in the status of correspondence education between Denmark, Norway and Sweden. As the evidence from Denmark makes clear, correspondence education is not generally considered a fully acceptable educational method, largely because there is little demand for it. The absence of demand appears to have resulted in an absence of interest on the part of the public educational system, which in turn led to unregulated private enterprise


2. Correspondence Education in Denmark: its background, history and present status (Danish Ministry of Education, 1.7.68. (40) N.3, pp.10, quoted by: Wedell, E.G., op.cit., p.16.
in the field, which in turn gave correspondence education a bad name.

In Norway and Sweden, the position is quite different due to the enormous geographical areas involved, and the scattered clusters of population in the more remote areas. Nonetheless, the writer still considers that the geographical argument cannot be regarded as conclusive, for in another case correspondence education flourishes in a country where distances are small, namely the Netherlands. Here, correspondence education is very highly developed. This takes us back to the interrelationship between traditional and distance education. In the Netherlands, correspondence education has flourished on the basis of the excellent foundation of traditional facilities at the compulsory stage of education.

The weakness of the geographical argument is further illustrated by the location of correspondence students in the Netherlands, nearly two-thirds of whom live either in the three largest cities or in the three most densely populated provinces of the country.

Certainly, the diffusion of population over large areas has tended to make governments more conscious of the potential of correspondence education for general purposes. In countries with more concentrated populations,
the type of subject offered appears to be of greater importance in determining whether traditional or correspondence methods would be best. The majority of subjects in which correspondence courses are offered may well be related to industry and commerce, which proceed in an urban setting, and it is indeed from this type of setting that the majority of correspondence students have tended to come. According to Wedell:

"The discussion of the importance of the geographical factor in causing students to undertake correspondence education has shown that occupational needs and interests are of equal, if not greater importance. The wish to "get on" in life appears in all countries to be a powerful motivation to undertake correspondence education. The fact that this wish has to be met by means of correspondence usually means that those concerned are prevented, largely by economic circumstances, from developing their talents through full-time study. But this statement also has to be qualified, since a number of occupations access to professional recognition can be gained only by a combination of theoretical and practical studies." 1

e) Student Needs

As in traditional education, so the success of correspondence education depends upon the student. If adults choose correspondence because they may feel inadequate to the demands and pressures of the classroom, then they may

well fail. There is a high wastage rate in this form of study. There is also the fact that for many of its clients correspondence instruction is a method of last resort. So their position as students is marginal not only because of domestic pressures but also in the sense that they may tend to feel threatened or overwhelmed by the demands of a formal course of study. ¹

These negative aspects notwithstanding, the very flexibility with which correspondence teaching can adapt itself to the needs of the individual, can serve a variety of individual needs. Different working speeds as between students presents no problem. The older student can overcome some earlier deficiency without having to learn in the company of a younger age group. At a younger age group, a child can learn a subject which the school may not have available. Schools may even utilise correspondence courses to widen and enrich their own curricula and individualise learning.

4.4 The Administrative Role in Correspondence Education

The administrative side takes responsibility, inter alia, for printing or duplicating study material, possibly the supply of textbooks, the despatch and receipt of

material on its way to and from students and the recording of their marks.

The supply of teaching materials for a course can take three main forms:

a) all the lessons may be sent at once (economical, but open to criticism on educational grounds);

b) they may be sent at regular intervals (relatively expensive and demanding on study discipline);

c) lesson despatch is regulated by student response in returning exercises.

4.5 The Tutor in Correspondence Education

It should not be thought that the teacher does not have an important role in correspondence education.

"As a teacher, you have probably learned through experience the value of knowing as much as you can about learners, their circumstances, and their expectations from a course of study. This is not less important with learners in correspondence courses. Without some degree of effort to flesh out the unseen individuals from whom you will be receiving assignments, you run the risk of allowing the whole process to become alienated or discouraged and may ultimately join the large numbers of those who drop-out of these courses. Particular attention must therefore be paid to the general characteristics of correspondence students." 1

1. Loewenthal, N.H., op.cit., p.34.
It is important for the correspondence teacher never to forget that there is normally no direct contact among the learners. It is also the case that correspondence instruction places particularly heavy reliance on written communication of criticisms and encouragement. Teaching by correspondence is, therefore, a special technique in which the student is tutored by at least two partners, the writer of the course and the teacher in contact with the student. It may be that the writer and the tutor may be the same person, but the more usual practice is for a course of instruction presenting the subject matter and guidance for its study to be produced by a writer, or team of writers, and issued to all students of the subjects whose numbers are usually too great for one person to be able to instruct. There is, then, inevitably a greater amount of planning and co-ordination between teaching colleagues.

4.6 The Significance of Correspondence Education

The significance of correspondence education may have developed in a subsidiary role to conventional teaching, but increasing use of correspondence teaching and recognition of qualifications gained thereby is coming about as a result of the success with which correspondence students meet. This is particularly apparent when they earn their qualifications by passing the same examination as students following conventional
It is clear that there are many good reasons for students to utilise the correspondence medium, for example:

a) the wish to prepare for examinations by which professional and vocational qualifications are to be gained;
b) to further general education;
c) for personal enrichment;
d) for professional reasons;
e) to take a refresher course to overcome a specific weakness in knowledge or skill;
f) to supplement studies being undertaken under a traditional mode;
g) in-service teacher-training.

It is also clear that a proven 'track record' exists for correspondence education in that:

a) it has already helped thousands of men and women to acquire knowledge of subjects, which otherwise they would probably not have gained;
b) there are today many thousands of people already convinced of the feasibility of the system, who are potential users of the correspondence method;
c) educators in traditional institutions are recognising the status of correspondence work and utilising materials produced in that sector;

d) many distinctive new institutions have been established which are now assets to their respective national systems.¹

4.7 Correspondence Education and Higher Education

There are various reasons why correspondence tuition can be an important component of a higher education sector.

For example:

a) the increase in the demand for higher education means that more teaching material is needed; this support could well come from the correspondence sector;

b) widening access to higher education by all social strata brings in groups with a population not likely to be orientated towards education and qualifications;

c) education by correspondence is a particularly important dimension for those who work for their living and study in their spare time, or those having time but not located close enough to a university library and resources centre;

d) correspondence tuition can be a natural complement to university-level radio and television courses, seminars and group studies.

¹ Harper, W.R., op.cit., pp.82-83.
4.8 New Uses for Correspondence Education

The traditional uses of correspondence education which are identified in this chapter are no longer the only ones. The development of multi-media systems has brought the use of correspondence education to the forefront of educational methods. As mentioned above, the demand of the 'educated' for further education is growing. Dr. Borje Holmberg of the Hermes Correspondence College in Sweden identified as early as 1966 three new categories of students which have emerged in Sweden:

a) those who already possess a good education and are professionally established, but who wish to keep in touch with latest developments in their fields;

b) keen schoolboys and schoolgirls interested in getting the most out of schooling;

c) apprentices and manual workers who are instructed by their employers to study in this way.
4.9 Introduction to Broadcasting Education

Education, from a wide scope, gained much from the

"contribution of broadcasting and should be affected by and deeply concerned with any change in the pattern." ¹

The best example of this interdependence is the Open University of the United Kingdom with its partner, the B.B.C., but the partnership goes back a long way. The earliest reference found by the writer about the potential of broadcasting in university education is in an American magazine dated May 1922:

"The people's University of the Air will have a greater student body than all our universities put together." ²

More than 60 years later, radio and television are expanding education in the developed world, as well as in developing countries such as Niger, El-Salvador, American Samoa, the Ivory Coast, Thailand and Mexico. The major achievements

to date have been in primary education, though it is also clear that demand for educational broadcasts either by radio or television increased to service educational systems on non-formal bases as well as in official institutional forms. Nowadays, television is directed not only towards informing and enlightening in general, but also towards teaching the systematic mastery of various skills and branches of knowledge. Moreover:

"instructional television programmes in quite a few countries have become an important integral part of the teaching process in schools, colleges and other educational institutions." 1

Clearly, educational broadcasting must be flexible and able to respond to changing educational needs and new institutions. Such adaptability is as important in style as it is in content. Educational broadcasts must adapt to techniques of presentation and programme design that will be acceptable to an increasingly sophisticated audience whose expectations of radio and television are very high. 2

Another important point is that political, technological, geographical, economical and social dimensions play an essential role in educational broadcasts. For instance:


"the structure of a broadcasting organisation has profound political, social, educational and economic implications. The multiplicity of patterns is the result of national conditions, interests and resources. It would appear that there is no single pattern which could give the most satisfactory results in different countries." 1

4.10 The Position of Broadcasting in Distance Education

According to Keegan:

"if you thought that broadcasting and distance education are synonymous, you would be wrong. By any generally agreed definition of a distance education system, the organised provision of two-way communication between student and tutors is an essential feature of distance education." 2

There are many educational broadcasting institutions that do not include such provision: many distance education systems that do have two-way communications but do not use broadcasting. For example:

"of the 14 autonomous Open Universities operational in 1982, only two made use of more than five hours a week of "through the air" terrestrial transmission: the British Open University and the Chinese Central Television." 3

One reason for the low use of broadcast television by distance teaching institutions is the relatively small number of enrolled students for any particular course. Even at the British Open University, few courses with television have more than 7,000 students, and many have less than 500. It is difficult to convince managers of national broadcasting organisations to provide transmission times for such small numbers. There is a direct relationship here with the problems of book publishing for small countries. The same economic principle applies. Nonetheless, broadcasting makes a significant contribution and before studying the role of radio and television in distance education, and specially higher education, it is necessary to define some educational broadcasting terms.

4.11 Definitions

a) Broadcasting: the sending out by radio or television (especially) in all directions. The term covers the transmission of programmes by various types of distribution system. This may be 'traditionally' beamed from transmitters to conventional aerials and receivers, or have access to other systems, ranging from satellite and microwave systems to closed-circuit cable systems. Systems principally using telephone lines or some form of storage such as tapes or records do not normally come within this definition of broadcasting.

b) **Open Circuit/Channel:** the broadcasting of television or radio signals to the general public (in contrast to closed circuit).

c) **Closed Circuit Television (CCTV):** a television system used within education or training where the signal is not broadcast to the general public but is transmitted to a restricted number of receivers.

d) **Mass Communication:** the sending of a standard message to a large number of people (contrasts with individualised communication in which the message is sent to a particular person).

e) **Mass Education:** the education of large numbers of children, and particularly the commitment to educating the mass (or majority) of a country's children at public expense, which grew up in the industrialised nations during the 19th century.

f) **Mass Media:** the means of communicating a standard message to a large number of people, perhaps simultaneously.

g) **Multi-Media Materials/Approaches/Courses/Packages:** the integrated use of a variety of educational media within a teaching situation in order to take advantage of the special contributions each can make to the students' learning.

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3. Ibid.
h) **Tele-teaching:** ¹ this term which is sometimes used should not be taken to mean "teaching by television", it denotes any teaching done "from a distance" (from the Greek Tele, distant).

4.12 **The Effectiveness of Educational Broadcasting**

It is now well established that radio and television broadcasts provide enrichment for teaching methods and educational effect for both students and teacher. So:

"attractively presented broadcasts can provide valuable publicity for a learning project or related social issue of transmitted at appropriate hours. They can be an invaluable domestic learning asset in certain areas such as the development of language skills. But, perhaps more importantly, T.V. and radio broadcasts can stimulate the viewers and listeners, and develop their motivation and confidence to a point at which they want to start a learning project or embark on a course of action." ²

Both radio and television can be used to enrich conventional instruction in schools and colleges; to substitute for teachers in short supply; to reduce unit costs; provide distance teaching within an institution like the Open University of the United Kingdom. ³ An advantage of educational broadcasting


can be in providing material in a stimulating and motivating way. It can develop and sustain an interest through lively treatment, encouraging the learner to want more information. The teacher can capitalise on this in related face-to-face teaching.

In order to study the effectiveness of educational broadcasting by radio and television, it could be useful to explore the following issues: the purposes of educational broadcasting; educational broadcasting and formal education; educational broadcasting and non-formal education; collaboration in multi-media learning systems.

a) The Purposes of Educational Broadcasting

Teaching purposes and learning situations for educational broadcasting could be described under two main heads. The first is direct teaching, whether in formal or non-formal education; the second is indirect teaching whether in formal or non-formal education. For example:

"the broadcasts, may specifically prepare programmes that are designed to be used by teachers in schools to enhance their students' learning in particular subject areas. The programmes are therefore intended for the formal learning situation; there are examples of such programmes in most of the case studies. But the purpose of these programmes may be a direct teaching one, as in Nicaraguan Mathematics and the Mexican Telesecundarie, or they may have a largely indirect purpose, such
as drama programmes designed to stimulate class discussion or to broaden the range of reading interests, as in much school broadcasting in Europe and North America." ¹

Students learning by correspondence and broadcasting, as in the British Open University, are in a formal learning situation, even though they study at home. The programme prepared for them to complement correspondence tuition may sometimes act as an indirect purpose of maintaining interest and increasing enjoyment of the course.

Not long ago, a simple definition was sufficient, the only hardware involved being a receiver converting the signal into sound with no possibility to store the signal for the purpose of repeated, or deferred listening. Nowadays, devices for storing the radio broadcast signal are common. Well over 90 per cent of students at the Open University now have access, in their homes, to audio-cassette playback equipment, and can record radio broadcasts direct. ² So radio can mean two things: radio broadcasting, mainly for direct consumption, or recordings of radio broadcasts to be stored and used later at the convenience of the teacher or learner.

So educational broadcasting may be designed mainly "to reach, rather than to teach": \(^1\) that is to say to stimulate and to build up interest and confidence; also to increase public awareness of a particular issue and invite participation in its resolution.

b) **Educational Broadcasting and Formal Education**

Educational Broadcasting, plays an important role in improving existing educational provision in schools, colleges, universities or in-service teacher-training. It can operate in both direct and indirect forms and can enrich methods of teaching.

Distance higher education from the formal education point of view has benefitted widely from broadcasting. The growth of educational broadcasting was certainly a major factor influencing the establishment of the British Open University.

c) **Educational Broadcasting and Non-Formal Education**

Educational broadcasting plays a very clear role in non-formal education by equalising or enlarging educational opportunities by: \(^2\)

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"reducing inequalities prior to schooling, either by direct teaching or discovery learning in children's programming; reducing inequalities after schooling, by functional literacy, numeracy, social skills and basic work skills."

It may also engender social action, acting as a politicising agent.

d) Collaboration in multi-media Systems

Educational broadcasting can be used as a system of one-way communication but has much more potential in an integrated network of distance or conventional education. Most educational broadcasting is now accompanied by printed material, text books or work-books for students in classrooms, and guides and schedules for teachers. One of the foremost examples of integration of such media exists in the case of the Open University in Britain:

"At the Open University, educational radio and television programmes are tied to print, which is the dominant medium in the University's teaching system. In addition, where appropriate, these three media are supplemented by home experiment kits, audio-tapes, slides, computer-aided learning and so on."

Educational broadcasting in integration with multimedia systems is not necessary problem free. For example, television, with its high costs may take a disproportionate amount of resources, leaving too little to support other activities in the system. Indeed, broadcasting organisations appear to have difficulties in funding sufficient support for printed materials to use in association with education programmes they transmit. There is also the potential problem of coordination. Programmes that are linked closely to texts must be aired at exactly the right time, unless recorded for use when convenient. Texts that are tightly integrated with other media run the risks of disrupting student learning.

4.13 The Special Role of Television in Educational Broadcasting

There are three educational characteristics of all forms of television: (a) distributional and access characteristics; (b) student control aspects; (c) structural and symbolic aspects.

a) Distribution and Access

For distance teaching, effective distribution and universal access to learning materials for all students is essential. In this aspect, broadcasting has advantages over other types of television distribution such as cable, satellite, cassettes and discs.

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Universal access to television broadcasting brings a number of benefits for distance teaching systems. For example:

i) essential teaching material can be included as access should be universal in respect of the students;

ii) broadcast programmes help to boost recruitment;

iii) the attractive potential of television as a medium provides a special contact for students who are working in isolation;

iv) there is informal educational benefit in respect of the general public.

However, it is difficult to take advantage of these potential benefits if programmes are not available at times appropriate for these goals. The difficulty of obtaining transmission times that are suitable for distance education students is a major limitation of broadcasting.

b) Student Control

The second educational characteristic in question is the limited amount of control it proves over the learning process. Broadcasting is very weak in this respect, particularly in terms of student control. Broadcasts are presented at the same pace for all students. A student does not have the same possibility as with video of going over the same material a number of times.
There are problems too for teacher control because production of programmes is in the hands of professional broadcasters. Teachers do not normally have the professional skills required to make broadcast programmes.

c) Structures and Symbols

A third educational characteristic of television is the manner in which knowledge and meaning are presented and structured through symbols.

Salomon discusses the differences between media in their use of different symbols to present or represent knowledge, and argues that television is a particularly rich medium in this respect. It is possible to tabulate the advantages and disadvantages of television in education in this respect and place them side by side as follows:

Broadcast Television is:

<table>
<thead>
<tr>
<th>Good for</th>
<th>Bad for</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encouraging individual interpretations</td>
<td>Mastery learning</td>
</tr>
<tr>
<td>Stimulating Creative thinking</td>
<td>Feedback/self evaluation</td>
</tr>
<tr>
<td>Providing an overview of Synthesis</td>
<td>Analysis (of processes of situations)</td>
</tr>
<tr>
<td>Narrative/story-telling</td>
<td>Storage of information</td>
</tr>
<tr>
<td>Demonstrating continuous processes</td>
<td>Reflection/deep processing</td>
</tr>
<tr>
<td>Modelling learning processes</td>
<td>Presentation of complex ideas</td>
</tr>
<tr>
<td>Raising awareness</td>
<td>Development of abstract thinking</td>
</tr>
<tr>
<td>Developing skills of evaluation</td>
<td></td>
</tr>
</tbody>
</table>


However, given the problems mentioned above, there is no doubt that television can provide distance learners with learning materials they would not otherwise be able to see. Nonetheless, broadcasting has not been heavily used for distance higher education. This is partly because an enormous quantity of broadcasting would be needed for an entire university curriculum. This can be illustrated by the cases of the French C.T.U.'s and the Chinese C.C.T.U.

A second problem has already been mentioned in respect of control; neither producers or academics like to feel that they are taking orders from someone outside their profession, so both guard their autonomy and independence keenly. And then there is the cost of providing for very small audiences in the higher education market.

In view of this, the Open University and co-operative models are particularly important to consider for any country wishing to establish such a sector in its education as, for example, Egypt, which is one of the main purposes of conducting this study. We should, therefore, now consider the global picture of educational broadcastings from which Egypt may glean valuable information before embarking on her own system in the higher education sector.
4.14 **Educational Broadcasting in Distance Education: a Global Perspective**

As we have seen, educational broadcasting plays an important role in distance education before university education level. Table 8 illustrates the number and geographical range of countries involved in radio programmes for education, while Table 9 does the same for television.

It is clear that, we must now look at the phenomenon of distance education in general in international perspective. This will take two chapters, one on the global context and other on the United Kingdom, with reference to the British Open University.
TABLE 8: CATALOGUE OF COUNTRIES AND TERRITORIES KNOWN TO BE USING EDUCATIONAL RADIO PROGRAMMES IN THE 1970s.

<table>
<thead>
<tr>
<th>Region</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>America, North</td>
<td>Antigua, Bahamas, Barbados, Belize, Bermuda, Canada, Cayman Islands, Costa Rica, Cuba, Dominica, Dominican Republic, El-Salvador, Greenland, Grenada, Guadeloupe, Guatemala, Jamaica, Martinique, Mexico, Nicaragua, Panama, St.Kitts, St.Lucia, St.Pierre et Miquelon, St.Vincent, Trinidad and Tobago, United States.</td>
</tr>
<tr>
<td>America, South</td>
<td>Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Falkland Islands, French Guyana, Guyana, Paraguay, Peru, Venezuela.</td>
</tr>
<tr>
<td>Asia</td>
<td>Afghanistan, Bahrain, Brunei, Burma, China, Cyprus, Hong Kong, India, Indonesia, Islamic Republic of Iran, Iraq, Israel, Japan, Jordan, Republic of Korea, Kuwait, Lebanon, Malaysia, Maldives, Nepal, Pakistan, Philippines, Qatar, Singapore, Sri Lanka, Syrian Arab Republic, Taiwan, Thailand, Turkey, Socialist Republic of Vietnam, Yemen.</td>
</tr>
<tr>
<td>Europe</td>
<td>Austria, Belgium, Czechoslovakia, Denmark, Finland, France, German Democratic Republic, Federal Republic of Germany, Gibraltar, Greece, Hungary, Iceland, Ireland, Italy, Malta, Netherlands, Norway, Poland, Romania, Soviet Union, Spain, Sweden, Switzerland, United Kingdom, Yugoslavia,</td>
</tr>
<tr>
<td>Oceania</td>
<td>Australia, Cook Island, Fiji, Kiri bati , New Caledonia, New Hebrides (United Kingdom), New Zealand, Nive, Norfolk Island, Pacific Islands, Papua New Guinea, Tonga, Western Samoa.</td>
</tr>
</tbody>
</table>

TABLE 9: CATALOGUE OF COUNTRIES AND TERRITORIES KNOWN TO BE USING EDUCATIONAL TELEVISION PROGRAMMES IN THE 1970s.

<table>
<thead>
<tr>
<th>Continent</th>
<th>Countries/Regions</th>
</tr>
</thead>
<tbody>
<tr>
<td>America North:</td>
<td>Antigua, Bahamas, Barbados, Bermuda, Canada, Cuba, El Salvador, Jamaica, Mexico, St. Kitts, St. Pierre et Miquelon, St. Vincent, Trinidad and Tobago, United States.</td>
</tr>
<tr>
<td>America South:</td>
<td>Argentina, Brazil, Chile, Ecuador, Venezuela.</td>
</tr>
<tr>
<td>Asia:</td>
<td>Bahrain, China, Cyprus, Hong Kong, India, Islamic Republic of Iran, Iraq, Israel, Japan, Jordan, Republic of Korea, Kuwait, Malaysia Pakistan, Philippines, Saudi Arabia, Singapore, Syrian Arab Republic, Taiwan, Thailand, Turkey, Socialist Republic of Vietnam.</td>
</tr>
<tr>
<td>Europe:</td>
<td>Austria, Belgium, Czechoslovakia, Denmark, Finland, France, German Democratic Republic, Federal Republic of Germany, Gibraltar, Greece, Hungary, Iceland, Ireland, Italy, Malta, Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, United Kingdom, Yugoslavia.</td>
</tr>
<tr>
<td>Oceania:</td>
<td>American Samoa, Australia, New Caledonia, New Zealand, Pacific Islands.</td>
</tr>
</tbody>
</table>

SOURCE: Hawkridge, D. and Robinson, J., <em>op.cit.</em>, p.28 and see Statistical Year Book, <em>op.cit.</em>
CHAPTER FIVE

ASPECTS OF DISTANCE EDUCATION IN GLOBAL PERSPECTIVE

5.1 Introduction

A general conclusion that may be drawn from what has been said in the previous chapters is that distance education in its two-way communications and various technical devices has proved a very successful means for large numbers of learners to acquire formal educational qualifications, as well as benefit from the non-formal sector such as in rural development. It is hoped by the writer that both its advantages and its limitations have been exposed. Now, in order that the achievements of the Open University in Britain and the prospects for such an institution in Egypt can be assessed, it will be useful to examine the range of distance learning systems already in place throughout the world.

In the United States of America, the passing of the Morrill Act in 1862, the foundation of the Land Grant Universities, and the beginnings of the idea of a university extension movement, related to the notion: "that the campus is the state". So there is no doubt that distance teaching systems date back at least 130 years to the middle of the nineteenth century. In the U.S.A., this led to the first university-sponsored correspondence programme developed by the University of Chicago in 1891, and it is distance
It is possible to distinguish six variants of distance higher education.  

a) **Universities dealing exclusively with (external) students**

Before the advent of the Open University in Britain, the most widely known university of this type was the University of South Africa (UNISA), which has been operating in its present form since 1951. UNISA's students extend over a number of countries, both in Africa and beyond.

b) **Universities offering external examination facilities only**

A second device for obtaining qualifications externally is provided by universities which act as examining bodies to students who have not followed the standard, normally residential courses. In such cases, students are largely left to find tutorial provision on their own. In this category, one may cite two distinct examples:

i) the University of London external degree programme and the National Extension College Degree Service:

The original function of the University of London, founded in 1836, was that of an examining body for external students throughout the country. It was only in 1900, when the university

1. El-Bushra, J., Correspondence Teaching at University, op.cit., pp.15-35.
assumed a teaching function as well as an examining one, that the distinctions between internal and external students arose. It has continued since then to award degrees by examination to external students, in addition to teaching internally. However, since the foundation of the CNAA as a degree-granting body, the University of London has phased out its intake of students from polytechnics and technical colleges in order to concentrate its resources on private candidates, including those from overseas.

The National Extension College in Cambridge became involved in tuition for London degrees in 1964 when it took over from the University Correspondence College. The idea was to provide a service more individualised and responsive to the needs of advanced students.

ii) The External Degree Programme of the Regents of the State of New York.

The New York Regents external degree programme, developed from Carnegie and Ford support is a radical departure from the traditional degree in that a list of the qualifications required is published, and candidates gain their degrees by accumulating such credits. These could come from any accredited programme or institution. In this way, the Regents become a regional examining centre, offering a testing and accrediting service while at the same time maintaining high standards.
c) **Universities offering correspondence teaching in one department only**

Examples of this type are few, one such being the College of Estate Management at the University of Reading, which was founded in London in 1919 under the auspices of the Chartered Auctioners and Estate Agents Institute.

The first professional courses were taught by correspondence, on the basis that a combination of study and work experience was the best form of training for students in this field.

In 1972, the College joined the School of Education, University of the South Pacific, also a single department within a University that is utilising distance education techniques. This is particularly appropriate in the context of a regional university serving widely scattered island communities.

d) **Universities in which teaching departments are required to accept both internal and external students**

In this scheme, both internal and external students follow the same courses and are offered the same degree. This is to ensure that the standards for external awards are safeguarded by laying down that these should be completely integrated with internal work. An outstanding example of this type of plan is the University of New England, Armidale, Australia, which has in turn provided as a model for other new institutions.
e) **Universities in which external teaching is provided in a separate department**

In this case, the function of the correspondence unit is to carry out teaching as well as organising. In this variant, students follow broadly the syllabuses and take the same exams as internal students, though they are taught by different staff.

f) **Universities collaborating to provide instruction on a co-operative basis**

This is a new development but based on many generations of international fraternity in the university world. Joint programmes between 'first' and 'third' world institutions have begun to develop as well as co-operation with individual countries.

With this typology in mind, we can begin to explore the range of distance education at tertiary level on view in the world.

The sets of tables on the following pages provide a selection of cases that clearly illustrate the amount and range of development in this field.

5.2 **Distance Education Systems in Africa:**

In the 1960s, many countries of the third world were beginning to look for unorthodox solutions to their educational problems. In the context of a massive demand for schooling,
<table>
<thead>
<tr>
<th>Country</th>
<th>(1) Institute</th>
<th>(2) Kenya</th>
<th>(3) Lesotho</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Institute</td>
<td>Botswana Extension College (BEC)</td>
<td>Correspondence course unit (CU)</td>
<td>Distance Teaching Centre (DTC)</td>
</tr>
<tr>
<td>(2) Establishment</td>
<td>November 1973</td>
<td>1967</td>
<td>February 1974</td>
</tr>
<tr>
<td>(3) Aims and Objectives</td>
<td>• Using distance education techniques for expanding the opportunities for secondary school education.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Creating a strong connection with Botswana's rural development programme.</td>
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<tr>
<td></td>
<td>• Originally created to provide upgrading courses for primary school teachers with inadequate qualifications and later provided upgrading courses for unqualified teachers.</td>
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<tr>
<td></td>
<td>• It now offers correspondence courses in Kenya Junior Secondary Examinations and East African Certificates of Education.</td>
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<tr>
<td></td>
<td>• Future targets for new courses are small businessmen, trade unions and the police.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Courses/Departments/Facilities</td>
<td>By 1978 a Department of Non-Formal Education was established. The Department now comprises five inter-related units: correspondence courses, informal programmes, media, editorial and materials production, field operations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1) In-service courses for primary school teachers: English, Kiswahili, mathematics, science, religion, history or geography, agriculture or home sciences and educational theory and methodology.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2) To help KIE to upgrade the lowest categories of unqualified teachers. Courses are supported by radio and correspondence materials in three subjects: English, Maths and either History or Geography.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) In 1977 CU developed courses in 7 subjects for EAC with OUA help.</td>
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<tr>
<td></td>
<td>4) Courses in Training of Health Workers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Courses at the JC level: five subjects; English, Kiswahili, Human and Social Biology, Mathematics and Book-keeping and Commerce. Development of a sixth course, Geography, is in progress.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Courses at the CSEC level (Cambridge Overseas School Certificate): three courses, namely, English Language, Mathematics and Geography. Development of a Certificate Course is in progress.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LITE (Lesotho In-Service Education for Teachers).</td>
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</tr>
<tr>
<td></td>
<td>Instructional courses for Life-long Education.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Degrees</td>
<td>JC Certificate courses</td>
<td></td>
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</tr>
<tr>
<td>(6) Students</td>
<td>Students (secondary school education).</td>
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<tr>
<td></td>
<td>People in rural areas.</td>
<td></td>
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</tr>
<tr>
<td>(7) Staff</td>
<td>CU staff.</td>
<td></td>
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<tr>
<td></td>
<td>Radio/TV tutors.</td>
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<td></td>
<td>7 correspondence tutors.</td>
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<td></td>
<td>A course development tutor.</td>
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<tr>
<td>(8) Media and Methods</td>
<td>Study Centres were organised where students could meet and discuss with their tutors in Gaborone, Francistown, Mafeking, Serowe, Maun and Mohale's Hoek.</td>
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<td></td>
<td>Weekend courses were held from time to time with an emphasis on face-to-face teaching and counselling.</td>
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<td></td>
<td>The Library utilises the books-in-post scheme.</td>
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<td></td>
<td>Correspondence study guides with self-taught questions and details of written assignments.</td>
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<td></td>
<td>Textbooks from commercial publishers.</td>
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<tr>
<td></td>
<td>Maps, sets of mathematical instruments, science experiment kits.</td>
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<td></td>
<td>All courses material sent by post.</td>
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<tr>
<td></td>
<td>Radio broadcasts on Voice of Kenya linked to one or two lessons per course each week.</td>
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<tr>
<td></td>
<td>Short residential courses and occasional face-to-face tuition.</td>
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<td></td>
</tr>
<tr>
<td>(9) Assessment</td>
<td>Written assignments are set in alternate lessons in the study guides, they are marked and returned to students. CU students have been allowed to pass individual papers at separate sittings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(10) Administration/Organization</td>
<td>Faculty control of CU courses are completely based on nationally and internationally determined.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(11) Finance/Budget/Contents</td>
<td>Management: Director, Deputy Director, Projects Co-ordinator.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Formal Courses: Student Advisor, Assistant Student Advisor, Registrar, Tutor Organizer, etc.</td>
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<tr>
<td></td>
<td>Course Writing: Senior writer, Courses Editor, Editor Writer, Assistant Courses Editor, Course Writer, and Development: Subject Writer.</td>
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</tbody>
</table>
**Table 11: SELECTED DISTANCE TEACHING INSTITUTIONS IN AFRICA**

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>COLLEGE</th>
<th>HAJJ</th>
<th>MAURITIUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Institute:</td>
<td>Malawi Correspondence College (MCC)</td>
<td>The Mauritian College of the Air (MCA)</td>
<td></td>
</tr>
<tr>
<td>(2) Establishment:</td>
<td>1973</td>
<td>1972</td>
<td></td>
</tr>
<tr>
<td>(3) Aims and Objectives:</td>
<td>The MCC provides correspondence courses for Primary Schools, Junior Secondary Schools, Senior Secondary Schools, and in-service teacher training. The MCC broadcasts a total of about 342 hours a week, or about fifty-five fifteen-minute programmes and two thirty-minute programmes.</td>
<td>To provide a centre for the promotion of education generally especially by means of broadcasting, correspondence courses, and face-to-face tuition; in particular to provide education and training in employment-related skills and to promote the development of skills and attitudes which will raise the standards of life of the people of Mauritius.</td>
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</tr>
<tr>
<td>(5) Degrees:</td>
<td>Primary, secondary and teacher training levels.</td>
<td>SC</td>
<td></td>
</tr>
<tr>
<td>(7) Staff:</td>
<td>MCC tutors prepared courses and it normally consists of 24 lessons each.</td>
<td>(As at the beginning of 1973) full-time: 5 senior administrative and tutorial staff, 2 broadcasting officers, 5 office administrative staff. Part-time - 30 (approximately) course writers, presenters and tutors.</td>
<td></td>
</tr>
<tr>
<td>(8) Media and Methods:</td>
<td>Regular correspondence programmes for secondary school equivalency supported with radio classroom. Radio programmes for the categories mentioned in (4). Correspondence centres in school buildings, secondary school buildings at night (night schools).</td>
<td>The experience of MEC in UK and the system devised for the British GCI greatly influenced the design of the MCA programme. They emphasized three-way teaching: combinations that linked broadcasts, correspondence courses, and occasional face-to-face instruction.</td>
<td></td>
</tr>
<tr>
<td>(9) Assessment:</td>
<td>Each lesson written by MCC tutors includes a final test which can be marked by the student.</td>
<td>Most units of the courses contain one assignment that needs to be checked or marked by the teacher, as well as self-assessment tests.</td>
<td></td>
</tr>
<tr>
<td>(10) Administration/Organization:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(11) Finance/Budget/Costs:</td>
<td>An annual fee of 52 kwacha (T) to study 6 subjects for any student who has completed the primary school leaving certificate exam.</td>
<td>Income from fees, overseas donor agencies, UK Voluntary Committee on Overseas Aid and Development and from Mauritian Government.</td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>(1) Pakistan</td>
<td>(2) China</td>
<td>(3) India</td>
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</tr>
<tr>
<td>Institute:</td>
<td>Allama Iqbal Open University (AIOU)</td>
<td>Central China Television University (CCTU)</td>
<td>Indira Gandhi National Open University (IGNOU)</td>
</tr>
<tr>
<td>Establishment:</td>
<td>1974</td>
<td>February 1979</td>
<td>November 1985</td>
</tr>
<tr>
<td>Area and Objectives:</td>
<td>to provide such facilities to people who cannot leave their homes and jobs.</td>
<td>to promote the modernization of China.</td>
<td>to advance and disseminate learning, and knowledge by a diversity means.</td>
</tr>
<tr>
<td></td>
<td>to provide facilities for the training of teachers.</td>
<td>to raise the level of scientific education.</td>
<td>to provide opportunities for higher education to large segments of the population.</td>
</tr>
<tr>
<td></td>
<td>to impart basic education to the masses at large.</td>
<td>to repair the damage done to education by the 'gang of four'.</td>
<td>to promote educational well-being of the community generally.</td>
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<td></td>
<td>to provide instruction in a wide range of general and special subjects.</td>
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<td>to encourage distance education systems.</td>
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<td></td>
<td>to organise vocational and technical training programmes.</td>
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<td></td>
<td>to carry out researches.</td>
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<tr>
<td>Courses/ Departments/Faculties:</td>
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<tr>
<td></td>
<td>Institute of Education, Institute of Arabic &amp; Islamic Studies.</td>
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<tr>
<td></td>
<td>Dept. of Home Economics and Women Studies.</td>
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<td></td>
<td>Dept. of Iqbalist.</td>
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<td>Dept. of Urdu.</td>
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<td></td>
<td>Dept. of English.</td>
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<td>Dept. of Agricultural Sciences.</td>
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<td></td>
<td>Dept. of Social Sciences.</td>
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<td></td>
<td>Dept. of Basic Sciences.</td>
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<td></td>
<td>Dept. of Industrial Education &amp; Business Management.</td>
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<tr>
<td></td>
<td>All courses at undergraduate level:</td>
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<tr>
<td></td>
<td>Education Department.</td>
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<tr>
<td></td>
<td>Arts and Social Sciences.</td>
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<tr>
<td></td>
<td>Math.</td>
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<td></td>
<td>Chemistry.</td>
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<td></td>
<td>Physics.</td>
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<td></td>
<td>IT.</td>
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<td></td>
<td>13 subjects of undergraduate level (English is compulsory for all students).</td>
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<td></td>
<td>Certificate course in library science.</td>
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<td></td>
<td>Programme of shorter courses in-service diploma course in office organisation and procedures.</td>
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<tr>
<td>Degrees:</td>
<td>BA (Full or half credit) MA level</td>
<td>BA E.C.E. MA (5 subjects)</td>
<td>Bachelor's Degrees 2- credits over a period of 3-4 years</td>
</tr>
<tr>
<td>Students:</td>
<td>Teachers or educational administrators.</td>
<td>Teachers from other universities with the CCTU staff course team.</td>
<td>80 academic staff from 130 centres working for the Directorate.</td>
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<td></td>
<td>Full-time students at other institutions using AIOU course as reinforcement material.</td>
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<tr>
<td></td>
<td>Students in literacy and other projects.</td>
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<tr>
<td>Staff:</td>
<td>30 senior administrative staff.</td>
<td>Teachers from other universities with the CCTU staff course team.</td>
<td>80 academic staff from 130 centres working for the Directorate.</td>
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<tr>
<td></td>
<td>30 senior operational and servicing staff.</td>
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<tr>
<td></td>
<td>50 academic staff.</td>
<td></td>
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<td></td>
<td>Saudi Arabian consultants.</td>
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<tr>
<td>Media and Methods:</td>
<td>CCTU teaches through TV</td>
<td>Mainly correspondence tuition.</td>
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<td></td>
<td>Uses prin.</td>
<td>10 radio programmes per undergraduate course.</td>
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<td></td>
<td>Face-to-face tuition.</td>
<td>Face-to-face or personal contact programme (PCP) at various centres.</td>
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<td></td>
<td>Radio is only used in one part of the English course.</td>
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<td></td>
<td>Course teams of EE, ME, English and Biology are to be set up.</td>
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<td></td>
<td>Tutorial support is provided at Study Centres and through assignments.</td>
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<tr>
<td></td>
<td>Printed course material.</td>
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<td></td>
<td>Radio talks.</td>
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<td></td>
<td>TV presentations.</td>
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<tr>
<td></td>
<td>Audio and video presentations.</td>
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</tr>
<tr>
<td></td>
<td>Network of Study Centres.</td>
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<tr>
<td></td>
<td>Continuous evaluation of students assignments.</td>
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<tr>
<td></td>
<td>Face-to-face tuition.</td>
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<tr>
<td></td>
<td>Library and book bank facilities.</td>
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<td></td>
<td>Practical training wherever required.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>(1) Pakistan</td>
<td>(2) China</td>
<td>(3) India</td>
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</tr>
<tr>
<td>(9) Assessment:</td>
<td>For General Education and Teacher Education: SGT. Continuous Assessment: (2-4 assignment), SGT. 3-Hour final exam.</td>
<td>Is entirely by examination at the end of each semester. The non-assessed assignments in the supplementary material provide one element in the student support with tutors providing individual feedback on student answers.</td>
<td>10 assessments are required from the student per course.</td>
</tr>
<tr>
<td>(10) Administration and Organization:</td>
<td>Academic, Service and Operational Departments, Administrative Department.</td>
<td>Central course design. Production and assessment centre (ICPU in Beijing). Beijing TV organise admissions, supervision, experiments, exams and the direction of local offices.</td>
<td>86 academic members of staff (130 its full strength), 150 administrative personnel. It is headed by a Director and divided into two Sections: Academic and Administrative.</td>
</tr>
<tr>
<td>(11) Finance/ Costs/ Budget:</td>
<td>The total development cost was set at R150,9c (£7.9c) at 1978 prices.</td>
<td>The budget is administered by the State Council and the Ministry of Education, the Broadcasting Bureau responsible for TV production costs.</td>
<td>The Directorate is financed from the fees charged to students.</td>
</tr>
<tr>
<td><strong>Table 13: Selected Distance Teaching Institutions in Asia</strong></td>
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<tr>
<td><strong>COUNTRY</strong></td>
<td><strong>(4) ISRAEL</strong></td>
<td><strong>(5) SRI LANKA</strong></td>
<td><strong>(6) THAILAND</strong></td>
</tr>
<tr>
<td><strong>(1) Institute:</strong></td>
<td>Everyday’s University (BI)</td>
<td>The Sri Lanka Institute of Distance Education (SLIHE)</td>
<td>Sukhothai Thammathirat Open University (STU)</td>
</tr>
<tr>
<td><strong>(2) Establishment:</strong></td>
<td>August 1973 established, April 1974 began.</td>
<td>Created in May 1977</td>
<td>1976</td>
</tr>
<tr>
<td><strong>(3) Aims and Objectives:</strong></td>
<td>The BI is intended initially to meet the needs of three categories: - Members of those groups of Israeli society who are socially and educationally disadvantaged. - Teachers whose qualifications needed improving. - Adult education for which there is little existing provision in Israel.</td>
<td>To provide technical and educational courses suitable for working adults, at 30% cost.</td>
<td>To provide and promote university and professional education.</td>
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<tr>
<td></td>
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<td></td>
<td>To promote research so as to generate new knowledge and to apply it to national development.</td>
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<td></td>
<td></td>
<td></td>
<td>To render public service to society by disseminating knowledge so as to promote personal development and professional competence.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>To preserve and develop national culture.</td>
</tr>
<tr>
<td><strong>(4) Courses and Departments/Facilities:</strong></td>
<td>3 programmes available: a) Academic Degree: 50 courses (1976) Maths, Exact Sciences, Life Sciences, Humanities, and Social Science. b) Adult Education: Public Health, Environmental studies, etc. c) Vocational Courses: Electronic technicians.</td>
<td>2 courses of: a) National Diploma (ND) courses in Maths (3 years), Science and Higher National Diploma (HN) course in Management Studies (4 years). b) Higher National Certificate in Technology.</td>
<td>Students: (without entrance exam.) a) holders of lower secondary certificates or equivalent. b) holders of lower secondary certificates who have had 1 year of work experience and does 20 age. c) holders of diploma or degree of university level as approved by STU Academic Senate.</td>
</tr>
<tr>
<td></td>
<td>Bi or BSc</td>
<td>NU</td>
<td>Students:</td>
</tr>
<tr>
<td><strong>(5) Degrees:</strong></td>
<td></td>
<td>HND</td>
<td>smaller than that in other universities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HNC T</td>
<td>one instructor is responsible for one block or six credits.</td>
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<td></td>
<td>experts</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>staff members of other universities.</td>
</tr>
<tr>
<td><strong>(6) Students:</strong></td>
<td>No formal entry qualifications. In Oct. 1976: 15,000 applicants were received of whom 2,800 were accepted, 26% teachers, 36% technicians, 6% army, 35% of all students were women.</td>
<td>1) School-leavers at the GCE ‘O’ and ‘A’ Level. 2) Unemployed adults. 3) employed adults such as teachers, clerical officers, technicians, account clerks, craftsmen.</td>
<td>Students: (without entrance exam.) a) holders of lower secondary certificates or equivalent. b) holders of lower secondary certificates who have had 1 year of work experience and does 20 age. c) holders of diploma or degree of university level as approved by STU Academic Senate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Students:</td>
</tr>
<tr>
<td><strong>(7) Staff:</strong></td>
<td>Course development and production are carried out by the staff of BI. 19 new full-time staff. 30% part-time.</td>
<td>External staff.</td>
<td>Smaller than that in other universities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>one instructor is responsible for one block or six credits.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>experts</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>staff members of other universities.</td>
</tr>
<tr>
<td><strong>(8) Media and Methods:</strong></td>
<td>Medium of instruction: Hebrew and English. Each course runs for an 18-week semester. Correspondence materials. TV programme (10 courses). Video cassette programmes. Radio programmes. Radio cassettes. Home experiment kits. Set books. 23 study centres.</td>
<td>Printed or standardized lessons. Weakened tutorials are organized in the premises of the Technical Institutions. Laboratory and practical experience at the university campuses during their vacations. Audio-cassettes to support part of the teaching on some courses.</td>
<td>Printed or standardized lessons. Weakened tutorials are organized in the premises of the Technical Institutions. Laboratory and practical experience at the university campuses during their vacations. Audio-cassettes to support part of the teaching on some courses.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Printed or standardized lessons. Weakened tutorials are organized in the premises of the Technical Institutions. Laboratory and practical experience at the university campuses during their vacations. Audio-cassettes to support part of the teaching on some courses.</td>
</tr>
<tr>
<td><strong>(9) Assessment:</strong></td>
<td>Students are expected to complete assignments during the year. These form part of their continuous assessment, approx. 60% exam, 40% assignments.</td>
<td>Self-assessment questions and exercises. Conventionally monitored exams are held at the end of each course year.</td>
<td>Each school has some 3-11 Academic Assessors to advise in academic standards, curriculum development, instruction, educational services.</td>
</tr>
<tr>
<td><strong>(10) Administration and Organisation:</strong></td>
<td>President, Vice-President and three Directors/Managers of specific areas: a) course development. b) course maintenance and tuition. c) student administration.</td>
<td>Director, UNESCO Chief Technical Adviser, and an Associate Expert and another expert provided under the Colombo Plan assists the Director in his work.</td>
<td>Each school has a Board of Studies which consists of a Chairman and 3-7 members to be elected by the full-time staff of that school.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Each school has a Director of Studies and a 3-7 members to be elected by the full-time staff of that school.</td>
</tr>
<tr>
<td><strong>(11) Finance/Corps/Budget:</strong></td>
<td>Rothschild Foundation fund. Capital Investment. Student fees. 60% fees of other universities.</td>
<td>The Ministry of Higher Education covers the fixed costs. Course-related operational costs must be covered from student fees.</td>
<td>The Ministry of Higher Education covers the fixed costs. Course-related operational costs must be covered from student fees.</td>
</tr>
</tbody>
</table>
## Table 14: SELECTED DISTANCE TEACHING INSTITUTIONS IN AUSTRALASIA

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>(1) AUSTRALIA</th>
<th>(2) FIJI</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Institute:</td>
<td>Deakin University</td>
<td>University of the South Pacific (USP)</td>
</tr>
<tr>
<td>(2) Establishment:</td>
<td>30 December 1974</td>
<td>1970</td>
</tr>
<tr>
<td>(3) Origins/ Aims/ Objectives:</td>
<td>To serve the needs of the Governments of Solomon Islands, Fiji, Kiribati, Nauru, Nye, the Tokelau Islands, Tonga, Tuvalu, Vanuatu, and Western Samoa. Extension services began its operations with the School of Education in 1970 and became an autonomous unit of the university in 1974: 1) Its purpose is to offer university studies off-campus and to initiate and facilitate all manner of continuing education. 2) Part of Extension Services are University Extension Centres located in the nine of the USP regional countries through which the university's presence and work in the region is strengthened and co-ordinated.</td>
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</tr>
<tr>
<td>(4) Courses/ Departments/ Faculties:</td>
<td>The six schools are as follows: (1963 per cent of total students shown in brackets). i) Humanities (26.6), courses include: Australian Studies, Journalism and Media Studies, Visual Arts, Performing Arts and Women's Studies. ii) Education (27.6), the BA was more popular in the late 1970s when many teachers sought to upgrade their teacher training to degree status. In addition to the B.Ed., a fourth year qualification, the Graduate Diploma of Educational Administration and the Masters courses in Education. iii) Sciences (14.4). iv) Social Sciences (13.2). v) Management (11.9). vi) Engineering and Architecture (4.8). Deakin University was the only university in the world to offer an MBA which could be completed entirely by distance studies (from March 1980 - October 1983).</td>
<td></td>
</tr>
<tr>
<td>(5) Degrees:</td>
<td>BA (pass and honours)</td>
<td>Degree courses of each former programme being absorbed in each later one.</td>
</tr>
<tr>
<td>(6) Students:</td>
<td>In 1983, total student enrolments were 5,677. Of this total, 1,967 full-time on-campus students, 601 part-time on-campus and 3,476 off-campus. Thus 48% are on-campus and 60% off-campus. Three categories represent student enrolment: i) New intake - i.e. students who have successfully completed either (HEC) or (DE). ii) Advanced standing - i.e. exemptions granted for recognized previous tertiary studies. iii) Special - i.e. mature age students who have not completed secondary education. (N.B.: (HEC): Higher School Certificate - (TDP): Tertiary Orientation Programme).</td>
<td></td>
</tr>
<tr>
<td>(7) Staff (Academic):</td>
<td>Teaching staff at the H.A.</td>
<td>Teaching staff at Suva campus.</td>
</tr>
<tr>
<td></td>
<td>Course team composed of teaching staff.</td>
<td>University staff from Suva campus support the regional centres in conducting laboratories and workshops.</td>
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<td></td>
<td>Tutors at the Study Centres</td>
<td>Local tutors and markers.</td>
</tr>
<tr>
<td></td>
<td>Counsellors at the Study Centres</td>
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<tr>
<td>(8) Media Methods:</td>
<td>Heavy reliance is placed on print (study guides and readers). Audio-cassettes and video cassettes. CD-ROM audio programmes are produced each year. Between 8 and 12 video programmes.</td>
<td>Printed materials is the basic medium.</td>
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<td></td>
<td>Microcomputer programmes are prepared for the MBA and Graduate Diploma of Computing.</td>
<td>Commercial textbooks, audio tapes, and local and satellite tutorials supplement some course materials.</td>
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<td>Electronic mail is used heavily in the Graduate Diploma of Computing.</td>
<td>Use of radio broadcasts is being considered.</td>
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<td>Courses are produced by course teams composed of teaching staff, instructional designers, editors, graphic designers and media staff.</td>
<td>USF Sub-Centres are being established in various countries of the region.</td>
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<td>Counselling and tutorial support services are provided.</td>
<td>Library expansions considered as a local resource to support the student teaching.</td>
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<td></td>
<td>There is a network of study centres in Victoria.</td>
<td>The quality of satellite tutorials is being improved through better planning and organization.</td>
</tr>
<tr>
<td>COUNTRY</td>
<td>(1) AUSTRALIA</td>
<td>(2) FLII</td>
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</table>
| (9) Assessment: | - Continuous self-assessment activities included in the study guides.  
- Formal assessment includes assignments (i.e. continuous assessment) and end of semester examination.  
- The academic year is based on two fifteen week semesters: March - June and July - November. Examinations are held in July and November. | - The university regulations state that all courses must be assessed within the limits of no less than 40% and no more than 60% for both course work and final examination.  
- Assignments and tests contribute to course work assessment in most courses. |
| (10) Administration/ Organisation/ Government: | - This is based on two committees, Council and Academic Board.  
- CES, Centre for Educational Services after mid-1982 extended the services to be integrated with on-campus (before date shortened to be for off-campus students).  
- DEE Distance Education Unit, was formed by grouping the institutional designers working with course teams and dedicated to provide advice to course teams, research and consultancy on distance education. | - The major governing body is the Council of the University, academic and quality control of Extension Services being exercised on behalf of the Council by the Senate and Academic Committee. |
| (11) Finance/ Budget/ Costs: | - The total annual expenditure in the year ending 31 December 1982 was $420,468: 56.5% was spent on teaching and research - 15.8% on academic services - 26.5% on general university services and 1% on student services.  
- Funds are provided by the Commonwealth Government of Australia. | - Basic funding of Extension services is from university sources - but tuition, textbooks and other materials, on USQ Centre fees are charged for each course. |
### Table 15: Selected Distance Teaching Institutions in Northern America

<table>
<thead>
<tr>
<th>Country</th>
<th>(1) CANADA</th>
<th>(2) CANADA</th>
<th>BRITISH COLUMBIA</th>
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</thead>
<tbody>
<tr>
<td>(1) Institute:</td>
<td>Athabasca University (AU)</td>
<td></td>
<td>The Open Learning Institute (OLI)</td>
</tr>
<tr>
<td>(2) Establishment:</td>
<td>November 1975</td>
<td></td>
<td>1st June 1976</td>
</tr>
<tr>
<td>(3) Aims and Objectives:</td>
<td>Athabasca University was established in 1970 (not as a Distance Teaching University), largely in response to enrollment pressures on the Canadian Universities, and was to have been a conventional campus-based university offering innovative undergraduate programmes in arts, science and education. AU was &quot;re-established&quot; with a mandate distinctly different from what was originally intended, some of the educational innovations planned for in those early days lead directly to a number of major policies adopted by the university such as an open admission policy, which enables students to enter the university at any time and to withdraw at any time; and a policy of self-paced and self-directed study through a learning system. The practicalities of designing its own learning systems and the observed success of the UK OU in its early days led AU into distance education directed at adults who, for various reasons, might not otherwise have access to university study.</td>
<td><strong>OLI's purpose was to meet unmet educational need. Thus, it became the task of the Institute first to identify the nature of the unmet need and then to design the three programmes below intended to meet that need.</strong></td>
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<tr>
<td>(4) Courses/Departments/Facilities:</td>
<td>1. There are preparatory courses which are designed to prepare students for university level study in certain disciplines - currently mathematics and French. 2. Junior courses, which are introductory level courses. 3. Senior courses, which assume some appropriate level of prior learning and which may require specific pre-requisites. 4. The university also currently offers three general interest psychology courses for which no credit is awarded, courses are offered in four academic areas of study: Administrative Studies, Sciences, Social Studies and Humanities.</td>
<td>1. Programmes leading to a first degree in arts and science (University). 2. Programmes in career, technical and vocational areas (CTI). 3. Programmes in adult basic education (ABE).</td>
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</tr>
<tr>
<td>(5) Degrees and Academic Programmes:</td>
<td>Bachelor of Arts. Bachelor of General Studies (BGS). Bachelor of Administration. These degree programmes each require that a student accumulate 90 credits, which is equivalent to three years of full-time study.</td>
<td>University degrees in Arts and Science. CTI. ABE.</td>
<td></td>
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<tr>
<td>(6) Students:</td>
<td>All has an open admissions policy. There are no academic requirements for entry to the University, and the only constraint is that students must be eighteen years of age or older and live in Canada. Students are able to register for and complete courses at any time; AU does not have an academic year or academic term.</td>
<td>Students at a university age. Mainly from the 25-44 age group. Persons with family or work responsibilities, the geographically or socially isolated, the physically disabled. Students submitted two ABE programmes (Grade 10 and Grade 12) two completion programmes. The largest age grouping is 21-30.</td>
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<tr>
<td>(7) Staff:</td>
<td>Tutors are part-time members of staff recruited from throughout the Province and employed under a contract that must be renewed annually. They typically have masters degrees or relevant experience in a discipline closely related to the course being tutored.</td>
<td>Course writer, an expert in the subject matter of a given course, an employee of another institution. Course designer, a regular employee of OLI and may be working simultaneously with several course writers. Course developers. Course consultant.</td>
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<tr>
<td>(8) Media and Methods:</td>
<td>The hiring and administration of tutors is the responsibility of a unit called Regional and Tutorial Services. This unit looks after matters pertaining to tutor contracts, terms and conditions of employment, payment of fees and expenses, and so on. Regional and Tutorial Services also provides orientation and staff development programmes for tutors. However, a tutor's primary contact with the University is through a course co-ordinator, to whom the tutor is responsible for all academic matters related to courses and students. The course co-ordinator, who is an academic with qualifications equivalent to those in faculties at other universities, is available to provide tutors and students with additional information about course content as required. Learning Centres, which are administered through Regional and Tutorial Service, have been established in various communities throughout the Province. All Centres stock supplementary reading materials and have computer terminals, television and other audio-visual resources. Library services are available to students who require various library reference materials etc.</td>
<td>The printed word is the major medium of instruction but the course packages prepared for delivery show considerable variation in what they contain depending on the subject matter of the respective courses. Included in all are OLI prepared course manuals and course units, all printed as separate booklets. Then, depending upon the course, packages will contain textbooks, books of readings, novels, pamphlets, audio tapes, business forms, electronic kits and pieces, etc. Audio cassette tapes, produced and duplicated in the OLI sound studio, are used in a number of courses. Course packages in electronics contain circuit boards, components and measuring devices. A computing course supplies students with a micro-computer at a modest rental and this arrangement will soon be expanded across a complete computing science program. OLI courses in typing require students to provide their own typewriters but include OLI prepared audio tapes for practice exercises. Television plays only a minor role in OLI courses.</td>
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<tr>
<td>COUNTRY</td>
<td>(1) CANADA</td>
<td>(2) BRITISH COLUMBIA</td>
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<tr>
<td>(9) Assessment:</td>
<td>Student grades are based on the degree to which students achieve their goals and learning objectives, and are expressed in percentages. The University has established 60 per cent as the passing grade in its courses, a grade which the University considers to reflect a better than marginal performance and an adequate preparation for subsequent courses in the same subject. Formal exams are still required in most courses, but the average number of exams per course has been reduced substantially.</td>
<td>The students must pass a final examination to gain course credit. Under the new, more flexible enrolment system, students may elect to be examined after two, four or six months; and examinations are set every two months. Thus the examinations officer is presented with the enormously complex task of ascertaining student needs, making arrangements and scheduling examinations at up to seventy centres scattered around the province.</td>
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<tr>
<td>(10) Administration/ Organisation:</td>
<td>The chief academic and administrative officer is the President of the University. The University has three Vice-Presidents, each of whom heads one of the University's three operational divisions: Learning Services, which is responsible for academic functions; University Services, which provides administrative services in support of the University's academic operations; and Finance and Facilities, which is responsible for financial affairs and facilities planning.</td>
<td>1963 organisation shows: Principal: (1) Dean Academic Affairs (2) Dean Administration Dean Academic Affairs: Director ETA, Director ABE, Director Student Services, Director University Programmes, Research and Development. Dean Administration: Director Programmes Support, Director Personnel, Controller, Director Data Processing, Ancillary Services, Budget &amp; Finance, Marketing and Information.</td>
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</tr>
<tr>
<td>(11) Finance/ Budget/ Costs:</td>
<td>Tuition fees currently are $2.50 dollars for a 3-credit course and 165 dollars for a 6-credit course.</td>
<td>The Board may be held responsible for the effective financial functioning of an institution. The Institute remains in the situation where funds are derived from two Ministries. The Board, Finance System under the heading of the BOI officials.</td>
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<tr>
<td><strong>COUNTRY</strong></td>
<td><strong>(1) COSTA RICA</strong></td>
<td><strong>(2) VENEZUELA</strong></td>
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<tr>
<td><strong>Institute:</strong></td>
<td>The Universidad Estatal A Guanacaste (UNED)</td>
<td>Universidad Nacional Abierta (UNA)</td>
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<tr>
<td><strong>Establishment:</strong></td>
<td>Formal creation in April 1977</td>
<td>1977</td>
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</table>
| **Aims:** | 1. Bring higher education to a greater number of the adult population, who, for various reasons, could not take advantage of the traditional system and hence remain without an adequate university-based professional career preparation.  
2. Provide a solution to the problem facing the agricultural and working population who have the ability to enter a university but who, for economic, social or geographic reasons could not enter one of the existing universities.  
3. Accommodate an important part of the student population who year by year remain without a chance of registering in the existing universities, and serve as a means of support to the existing university sector in terms of those students who, in spite of the fact that they have the required qualifications, remain outside the universities because of the shortage of places available. | 1. To increase the number of opportunities for higher education and hence diminish the level of frustration amongst those who because of the lack of places cannot attend a campus-based university.  
2. To offer higher educational opportunities to those who are working.  
3. To train professionals to meet the manpower needs of the nation and hence help to make it independent of foreign sources of technical and professional labour.  
4. To be complementary to existing higher educational institutions in Venezuela.  
5. To be innovative in its use of new teaching-learning strategies.  
6. To provide educational opportunities throughout Venezuela.  
7. To optimise the productive use of free time by persons following its programmes.  
8. To contribute towards a diminution of unit costs in higher education. |
| **Courses/ Departments/ Faculties:** | 1. Basic cycle (6 courses)  
2. General Studies.  
3. Professional Studies (Carreras) in: Educational Sciences for Cycle I and II teachers (Bachelors Degree) - Educational Administration (Bachelors Degree) - Business Admin. (Dip.) - Public Admin., Banking (Dip.) - Administration of Cooperatives (Dip.) - Farm Management (Bachelors Degree) - Public Service Administration (Masters Degree), Nursing (Dip.) - Nutrition (Dip.) - Health Service Administration (Bachelors Degree) - Development Promotion (Dip.) - Child Social Services (Dip.) - Agricultural Extension (Bachelors Degree).  
2. Education: Learning Difficulties (short, normal), Mathematics Teaching, Pre-School Education (short, normal).  
| **Degrees:** | Bachelor Degree  
Diploma  
Masters Degree | The basic 'unit of study' is the course. Each course is assigned a credit value which varies within the range 2 to 8 credits - although the majority of courses are of 4 credits.  
UNA's Academic year is based on two 16-week semesters. |
| **Students:** | Persons interested in applying for entry to UNED have to buy a Matriculacion Pack which contains information on the University, an application form, and a fee payment form. Students' applications are vetted against their academic qualifications and a list of accepted students is published in the national press. | Students must have a Secondary Learning Certificate (Bachillerato) before they can register on the Introductory Course, and they must have passed the latter before they can embark on a degree programme. |
| **Staff:** | Curriculum Design Office (Planning Vice-rectorate).  
Authors and full-time Academic Producers (Academic Vice-rectorate).  
Tutor Co-ordinators prepare the assessment materials. | Specialists in the subject area (authors).  
Full-Time Academic Staff.  
External academic consultants and writers appointed to prepare the course materials on the basis of the brief that has been given them.  
Teams of institutional, media and content area specialists who take the author's draft and transform it into distance-learning modules. |
<table>
<thead>
<tr>
<th>Country</th>
<th>(1) COSTA RICA</th>
<th>(2) VENEZUELA</th>
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<tr>
<td>(8) Media and Methods:</td>
<td>The basic teaching medium is the printed course book of which there is normally one per course. Most of the books also have supplementary materials which have been written as a result of the experience gained in teaching the course. Some of the courses have associated with them set books, which the students are expected to read. Limited use is made of cassette-books — that is, a number of audio tapes with supporting printed materials which take the place of the basic course text. Television programmes are also produced in limited numbers and are intended to support the written course texts. Fortnightly tutorials take place at the University's Academic Centres, of which there are 22.</td>
<td>Courses are multi-media. The most important medium in print which may consist of specially designed texts for self-instructional learning, reprints of books and articles, together with commercially published books. All courses have associated study guides which contain self-assessment questions and other material. The texts are printed by commercial publishers on behalf of UN. Television programmes, various supplementary printed and audio-visual materials and tutorial assistance support the main texts. Planning is based on the assumption that no course will have more than four television programmes, each lasting 25 minutes. Radio is based for making public announcements to students about, for example, examination timetables. It is not used for teaching purposes. UN has 21 Local or Regional Centres, about half of which are rented.</td>
</tr>
<tr>
<td>(9) Assessment:</td>
<td>During each 18 week semester, students are expected to do a number of assignments (normally four per course) which are corrected by the tutor, and to attend mid-course and end-of-course examinations. The assignments count for 25 per cent of the overall final grade and the examinations for 80 per cent. Students have to obtain an overall grade of 70 per cent to pass the course. The assessment and examination materials are prepared by the Tutor Co-ordinators.</td>
<td>With more and more specialised courses on offer, it became impossible to provide specialised tutors in all subjects at all local centres. To make up for this, Villarreal (1983: 16) reports that UN had in 1983 put into operation a mode of computer-assisted instruction known as GLS (Guided Learning System), to provide students with individualised instant feedback. Students also have to take formal examinations at the local Centres.</td>
</tr>
<tr>
<td>(10) Administration and Organisation:</td>
<td>UN's organisational structure is based on a small Rectorate and three Vice-rectorates (Administration, Planning and Academic).</td>
<td>UN's organisational structure is based on the President, the Superior Council, Institute of Educational Research, the Academic Vice-rectorate, Operations Directorate, Administrative Vice-rectorate, the Secretariat, the Information Unit.</td>
</tr>
<tr>
<td>(11) Finance/ Cost/ Budget:</td>
<td>UN's 1980 budget anticipated expenditure of 55.3 million colones. Rubble (1981) showed that by 1985 costs are likely to rise to 137.5 million colones.</td>
<td>UN's 1980 budget anticipated expenditure of 89.6 million bolivares (20.8 million US dollars).</td>
</tr>
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</table>
Table 17: SELECTED DISTANCE TEACHING INSTITUTIONS IN EUROPE

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<thead>
<tr>
<th>Country</th>
<th>Institute</th>
<th>Establishment</th>
<th>Goals/Objectives</th>
<th>Courses/Departments/Faculties</th>
</tr>
</thead>
</table>
| (1) Germany   | The FernUniversität-Gesamthochschule Bielefeld. Fernuniversität means "distance teaching university". | 1 December 1972 | 1. To create new opportunities equal the quality and the contents of other higher education systems for 3 categories of the students. 2. To develop a system of distance teaching using the media available to suit the new patterns of the students. | Mathematics and Computing Faculty  
                | Education and Social Sciences Faculty  
                | Economics and Law Faculty  
                | Electrical Engineering Faculty  
                | The Central Institute for Distance Education Research Z2T  
                | The Centre for Development of Distance Study Materials Z2T. |
| (2) Spain     | Universidad Nacional De Educación A Distancia (UNED)                        | 1 February 1972 | 1. To create new opportunities equal the quality and the contents of other higher education systems for 3 categories of the students. 2. To develop a system of distance teaching using the media available to suit the new patterns of the students. | 1. Admissions Course  
                | 2. Degree Courses (Carrera): Law, Philosophy and Letters: (Geography and History, Psychology); Economics and Business Administration: (Economics, Business Administration), Science: (Physics, Mathematics, Chemistry), Industrial Engineering.  
                | 3. In-service Training: (Teachers of Business Studies, Elementary School Teachers). |
| (3) UK        | The Open University of the United Kingdom                                  | January 1969   | Mr. Wilson's plan for a "University of the Air" may bear little relation to the Open University as it exists today but it was to be the key that opened the door. It was to the firm expression of interest, by a powerful political figure, in the provision of opportunities for higher education to adults.  
                | University aims to provide second chance to those adults who have not received higher education, and to provide past experience and refresher courses. | The courses are spread over 32-36 study weeks.  
                | 1. Undergraduate Programme  
                | 2. Associate student programme (courses to help further a career, courses to develop personal interests, family and community courses)  
                | 3. Higher degrees programmes (research degrees, taught higher degrees).  
                | The Faculties:  
                | 1) Faculty of Arts  
                | 2) School of Education  
                | 3) Faculty of Mathematics  
                | 4) Faculty of Science  
                | 5) Faculty of Social Sciences  
                | 6) Faculty of Technology |

(4) Courses/Departments/Faculties:
- Mathematics and Computing Faculty
- Education and Social Sciences Faculty
- Economics and Law Faculty
- Electrical Engineering Faculty
- The Central Institute for Distance Education Research Z2T
- The Centre for Development of Distance Study Materials Z2T

(5) Degrees:
- Diploma I
- Diploma II
- M.A.
- A student will need to take 25-30 asignaturas.
- To obtain the degree of Licenciado the student must follow two cycles of five courses, each course consisting of five or six subjects called asignaturas.
- 1) Cycle of 3 courses (general subjects).  
   2) Cycle of 2 courses more specialised.

(6) Students:
- Full-time students (40 hours study a week)
- Part-time students (20 hours study a week)
- Auditing students
- Conventional university students (3 categories)
- those unable to begin or to complete higher education.  
- those living in remote areas.  
- those ambitious for more qualifications.

(7) Staff:
- UND's teacher-tutors work part-time in the centres. They arrange appointments with students, answer queries by letter, telephone, or face-to-face, mark the assignments and send monthly reports on the progress of students to the various faculties.
- Course team
- Full-time academic staff
- Part-time academic staff
- Tutors
- Counsellors
- Directors (Regional Study Centres)
- ELT production staff
### Table 17: SELECTED DISTANCE TEACHING INSTITUTIONS IN EUROPE

<table>
<thead>
<tr>
<th>Country</th>
<th>Federal Republic of Germany</th>
<th>Spain</th>
<th>The United Kingdom</th>
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<tr>
<td>(8) Media and Methods:</td>
<td>In 1981 the FFE offered 1,200 courses, all were print-based. 40 use supplementary audio cassettes. 15 have optional video-tapes. No courses are computer-based. Offline connections and commenting on students' assignments in the LOTSIE and COM systems is widespread. - The university does not broadcast on radio or TV and there are no plans for it to do so in the near future. - Little use is made of telephone tuition. - Study Centres: 25 in the state of North Rhine Westphalia, 8 in the rest of the Federal Republic and 2 in Austria. - The FFE tends to emphasize the quality of the learning materials and to play down the role of student support services.</td>
<td>Four main components are used in the teaching system: 1) printed materials; 2) audio-visual materials (radio, cassettes, transparencies); 3) tutor-marked assignments, self-tests, and twice-yearly formal exams for the assessment of student study difficulties, progress, and status; 4) opportunities for individual and group tuition, counselling, and enrichment activities (seminars, lectures, etc.) at provincial centres. There is limited radio transmission (15 hours a week).</td>
<td>- Printed main text is the principal teaching medium in most OU undergraduate and associate courses. - Most of OU courses have a radio and a television component. - Kits are supplied to students to enable them to undertake scientific experiments at home to carry out fieldwork and to understand the practical application of theoretical principles. - Attendance at residential school is compulsory for OU students on foundation courses and some higher level courses. The summer schools are held mainly on conventional university campuses during the summer vacation. - Study Centres are located within 13 regional offices for tutor meeting and advisory services etc.</td>
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<td>(9) Assessment:</td>
<td>The courses run for one teaching year of about 26 weeks. - In most faculties a student concludes the study of a unit by sending in an assignment for marking. A small part of the correction may be dealt with in the form of computer marking.</td>
<td>Assessment and evaluation is of four kinds: course work, examinations, recommended activities, and overall evaluation. UKED's students write their assignments in specially-produced books of which there are four keyed to Units 1, 2, 4 and 5 of their (assignments).</td>
<td>- In the OU there are three main forms of assessment: 1) Tutor-marked assignments (TMA) 2) Computer-marked assignments (CMA) 3) End-of-year examination. - There are a calendar for a Broadcast and Assignment. The student receives it before the start of studies.</td>
</tr>
<tr>
<td>(10) Administration/ Organization:</td>
<td>1. The Foundation Vice-Chancellor. 2. The Central Committee. 3. The Senate. 4. The Assembly. 5. Five administrative divisions (organisation, student affairs, personnel, technical production and study centres). 6. The 4 Facilities. 7. Four standing commissions: for research, academic matters, continuing education, structure.</td>
<td>Spanish Ministry of Education, through its Secretary of State for Universities and Research has legal authority over the university system. National Board of the Universities. 9 divisions (Trustees, Governing, the Faculties (6), the faculty departments of which there are 12, Permanent Education, the Provincial Centres, Institute of Educational Science, the Management of economic and administrative affairs and the Secretary.</td>
<td>The executive head of the OU is the Vice-Chancellor, assisted by 4 Pro-vice-Chancellors. Organisationally the OU is divided into 6 major areas: 1) The six faculties. 2) Centre for Continuing Education. 3) The Institute of Educational Technology 4) Regional Tutorial Services. 5) Operations. 6) The Administration.</td>
</tr>
<tr>
<td>(11) Finance / Budget / Costs:</td>
<td>UKED's budget for 1980 was 1,099 million pesetas. Direct government funding contributed 42 per cent, the remainder coming from student fees (25.37), sales of books and materials (12.7%). The government paid the salaries of tenured staff direct. The average cost per student was about £30.</td>
<td></td>
<td>- OU is financed principally from public funds. - The OU's operating budget in 1982 was £60 million. - The average cost per student per year was about one third that of the cost of conventional UK universities and per graduate was about one half.</td>
</tr>
</tbody>
</table>
multi-media distance teaching was seen as obviously relevant; a large scale device offering an alternative route to education for a small disadvantaged minority. The pressure on other educational resources made distance teaching look attractive, and as a result, attempts have been made throughout Africa to use distance teaching, especially in support of literacy campaigns, but also on courses leading to university degrees. Given the range of work being undertaken, it is necessary to concentrate on certain selected examples; for Africa this will be Kenya.

Distance Education in Kenya: the University of Nairobi, Institute of Adult Studies, Correspondence Course Unit (CCU)

It can be said that:

"distance education is nothing new in Kenya. Private, mainly British correspondence colleges have offered courses in Kenya for many years, and Nairobi University has, through what is now called the College of Adult and Distance Education, propagated and applied distance education since 1967."

The Correspondence Course Unit of the Institute of Adult Studies at the University of Nairobi was set up in 1967, "with technical assistance provided by USAID through


the University of Wisconsin". The Ominde Report had advocated: "combination of lessons by radio with an approved correspondence course". In 1970, Kenyan staff, under Peter Kinyanjui (the present Head of the Unit and a Co-director of the International Extension College, (Cambridge), took over the operation of the Unit.

"The unit was originally created to provide upgrading courses for primary school teachers with inadequate qualifications and later provided upgrading courses for unqualified teachers. It now offers correspondence courses in Kenya Junior Secondary Examination and East African Certificates of Education courses; 90% of enrolled students are teachers. The majority of enrolled teachers are reckoned to be fairly young, with short teaching experience. Future targets for new courses are small businessmen, trade unions and the police."

Examples of the Unit's courses are:

1) In-Service Courses for Primary School Teachers:

The Unit offered its first courses in 1968 in several subjects for the Kenya Junior Secondary Examination (KJSE), a national examination taken at the end of the second year of secondary school, but in fact the courses became used by

3. Harry, K., A case study in Distance Learning systems: University of Nairobi Correspondence Courses Unit, Centre for International Cooperation and Services, The Open University, n.d., p.9.
primary school teachers in the P3 grade who had not passed the KJSE.  

The primary school teacher programme covers:

"English (the teaching language in Kenya from grade 4), Kiswahili, Mathematics, Science, Religion, History or Geography, Art or Music, Agriculture or Home Sciences as well as a comprehensive course on educational theory and methodology. In 1985, 4,500 teachers of this category were enrolled, all of them with at least three years teaching experience. If they complete the course and pass the examination, they get permanent jobs, considerable salary increases and become pensionable."  

A second programme ran from 1969 to 1974 in which CCU agreed to assist the Kenya Institute of Education in upgrading the lowest categories of unqualified teachers. This was achieved by a one year study divided into three short residential courses, supported by radio broadcasts in between courses, and also correspondence and radio tuition based on first year materials of CCU's KJSE courses. Teachers were awarded promotion on passing the examination.  

Despite the rise in the number of unqualified teachers following the introduction of free schooling for the first four years of primary education in 1974, the programme was terminated, to be replaced by another for unqualified teachers with better academic standing. This was a three-  


way project comprising: correspondence texts; short residential courses, face-to-face, marking and commenting on written assignments; radio broadcasts. Over 4,000 students sat the final examination in 1977.

Another field of distance education developed in Kenya has been with respect to the training of Health Workers, that is to say for para-medical staff and nurses, especially those operating in remote areas of the country. The following forms of instruction have been used by the CCU in their courses for teachers:

- correspondence study guides with self-test questions and details of written assignments;
- textbooks from commercial publishers;
- maps, sets of mathematical instruments, science experiment kits;
- marking of assignments sent to CCU (all course materials sent by post);
- radio broadcasts on Voice of Kenya linked to one or two lessons per course each week;
- short residential courses and occasional face-to-face tuition.

A combination of correspondence teaching and intensive residential courses proved more effective than radio broadcasts because of remoteness, lack of receivers or inadequate batteries. Long delays occurred in respect of receiving and returning assignments, but the efficiency of the programmes was improved through workshops operated by the German foundation for International Development in co-operation with the College of Adult and Distance Education of the University of Nairobi combining training and actual development of courses.

Study guides are printed locally as the CCU is equipped with its own printing, duplicating and binding facilities. Radio lessons are recorded by CCU staff in their own studio, under the direction of the radio/television tutor. Science kits contain simple chemicals and apparatus, and the student is taught how to use locally available materials. Nonetheless, CCU relies on correspondence as the main link with its students.

Academic control of CCU courses is determined by nationally and internationally agreed syllabuses and examinations, while financial control has passed from the initial USAID grant to the Kenyan Ministry of Education.

According to Holmberg:

"distance education is of vital importance to Kenya. Fruitful development work characterises it. A number of competent Kenyan academics lead this work, which is promising indeed. Systematic training of
distance educators occurs. The application of distance education is regrettably hampered by slow administrative handling and, above all, by lack of resources. Poor mastery of English, the official teaching language for all but the most elementary education, also causes concern. Improvements in these respects would, undoubtedly, lead to far-reaching success for Kenyan distance education."

5.3 Distance Education in Asia

At the tertiary level, various institutions of higher education provide evening classes for external students and many countries in Asia have extended the range of opportunities for the education of adults by adopting an open education system and setting up institutions of distance learning. Pakistan's Allama Iqbal Open University, Sri Lanka's Institute of Distance Education, China's Central Broadcasting and T.V. University, Japan's Broadcasting University and Thailand's Sukhotaithammathirat Open University are examples of this development seeking to serve the needs of adults.

Much of the establishment of distance teaching systems in Asian countries occurred during the period 1971 to 1985. The courses offered range through academic degrees, non-academic degree courses, certificate courses, adult

education courses, and vocational courses. The majority of the students are employed and represent a wide age range. We shall take one of the leading institutions involved as a case study.

The Allama Iqbal Open University - Pakistan

The higher education sector of Pakistan comprises nineteen universities, with an overall enrolment of 62,048 in 1980-81. The Chancellor of the AIOU is the President of Pakistan and the Pro-Chancellor is the Federal Minister of Education. All provincial universities give instruction at honours and postgraduate level only; university ordinary bachelor's degrees are taken externally at colleges.

"This University occupies a unique and respectable place in our educational system, and it is based on a concept never before put to test in this country. Its usefulness and its future will be largely determined by the extent to which it proves itself in its early stages. I believe the University is still passing through an experimental phase. However, I sincerely think that, no matter what happens, this experiment ought to succeed."

1) Foundation and Purposes:

The AIOU was formally established in 1974, following the passing of the People's Open University Act. The


2. These words were spoken by the President of Pakistan in 1979 while addressing the first convocation of the Allama Iqbal Open University; as quoted by Mahiuddin, A., "AIOU - a distance learning institution" in: Allama Iqbal Open University. An Overview, (Rawalpindi, United Printers, 1983), p.5.
policy document preceding its foundation stated:

"A People's Open University will therefore be established to provide part-time educational facilities through correspondence courses, tutorials, seminars, workshops, laboratories, television and radio broadcasts and other mass communication media." ¹

The following objectives represent the aims and purposes of AIOU as envisaged:

• to provide education to people who cannot leave their homes and jobs for this purpose;

• to import basic education to the masses at large;

• to make available facilities for both pre- and in-service training of teachers at all levels of education;

• to provide instruction in a wide range of general and special subjects;

• to organise vocational and technical training programmes;

• to carry out researches directed towards finding answers to various educational problems and determining the shape of educational development. ²

The first course was presented in 1975, ³ and the main thrust of the University has been towards developing a

1. Federal Ministry of Education, Education Policy (1972-80), (Section 7-10).
distance learning mechanism since then, using written material as the nucleus around which additional learning support can be provided in the form of radio or television broadcasts and study centre tutorials. The University is seen to be occupied with the development of learning materials which are at once modern, academically and technically sound and suited to the needs of the citizens of Pakistan. ¹

ii) Organisation and Administration

The AIOU organisation comprises a number of interlocking departments that may be grouped into three: academic, service, and administration:

The academic departments, institutes and faculties are mainly concerned with the planning and writing of teaching materials, and with the supervision of courses being offered.

The service departments include the examinations and administrations office; the regional services network; the course production, printing and publications section; the mailing section; the Institute of Educational Technology. The Registrar's Office and its various sub-divisions, provide the administration, which includes the servicing of the academic departments and institutes, the library and

regional services.  

In addition to the above departments, many inter-departmental coordinating committees exist. The network of regional office and study centres is obviously a very important part of the university organisation. There are 10 regional offices and 150 study centres, located in various parts of Pakistan. It is this countrywide infrastructure that makes it possible for AIOU tutorial, information and counselling systems to work, and greatly enhances the significance of the institution. The structure of AIOU distance teaching systems is detailed in Fig. 4.

iii) The Institute of Education

This is an outgrowth of NIE (National Institute of Education), which was established in October 1973 as an integral part of a Federal Ministry of Education with a view to improve education at school level in the country. Its main objective was to provide intensive in-service training to the teachers and supervisors of primary and secondary schools. This Institute was taken over by the AIOU in June 1975 and became an integral part of the University.  

1. Rashid, M., Distance Teaching as a Vehicle of Non-formal Education in In-service Primary Teacher-Training in Pakistan, Ph.D. Thesis, University of Wales, October 1982, pp.144-164.
FIGURE 4: ORGANIZATIONAL CHART ALLAMA IQBAL OPEN UNIVERSITY

Chancellor
(President of Pakistan)

Pro-Chancellor
(Minister of Education)

Vice Chancellor

Selection Board

Finance Committee

Campus Committee

Research & Educational Technology Committees

Academic Planning & Development Committees

Faculty Boards

Committees of Courses

Departments/Institutes

Pedagogy, Social Sciences and Humanities

Regional Tutorial Services

Operations

Administration

Regions (10)

Study Centres (150)

Overseas Cell

Pedagogy, Social Sciences and Humanities

Institute of Education, Institute of Arabic & Islamic Studies, Deptt. of Urdu, Department of Iqbaliat, Department of English and Deptt. of Social Sciences.

Pedagogy, Social Sciences and Humanities

Industrial Education & Business Management, Agricultural Sciences, Basic Sciences, Home Economics & Women Studies.

Institute of Education, Institute of Arabic & Islamic Studies, Deptt. of Urdu, Department of Iqbaliat, Department of English and Deptt. of Social Sciences.

Pedagogy, Social Sciences and Humanities

Institute of Education, Institute of Arabic & Islamic Studies, Deptt. of Urdu, Department of Iqbaliat, Department of English and Deptt. of Social Sciences.

Pedagogy, Social Sciences and Humanities

Institute of Education, Institute of Arabic & Islamic Studies, Deptt. of Urdu, Department of Iqbaliat, Department of English and Deptt. of Social Sciences.

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Pedagogy, Social Sciences and Humanities

Institute of Education, Institute of Arabic & Islamic Studies, Deptt. of Urdu, Department of Iqbaliat, Department of English and Deptt. of Social Sciences.
The functions of the Institute of Education could be summarised as:

- serving as a resource centre for the development, production and evaluation of the courses for in-service education of teachers at all levels;

- providing advanced education to planners, managers, and supervisors in the principles and practices of Educational Planning and Management;

- developing and conducting training programmes for key personnel engaged in rural development;

- orienting and training teachers, educators and school supervisors;

- developing an interest and insight for the application of educational principles in day-to-day life and for better understanding and communication in the learning process at Intermediate and B.A. level;

- carrying out research in education to improve the academic programmes of Allama Iqbal Open University, in particular, and the system of education in general.

The main efforts of the Institute of Education have been concentrated on the following programmes:

1. Ibid, pp.61-62.
• Master's Degree Programme: M.A. Educational Planning and Management;

• Diploma in Educational Planning and Management;

• Certificate of Teaching (C.T.);

• Primary Teachers' Certificate (P.T.C.);

• Primary Teachers' Orientation Course (P.T.O.C.);

• General Education Courses;

• Functional Education.

In future, the Institute of Education intends to:

• launch the Certificate/Diploma course in Adult Education;

• introduce M.Phil (Education) and Ph.D. (Education) programmes;

• establish a Population Education Foundation Course for schoolteachers.

iv) The Institute of Arabic and Islamic Studies

This Institute was established in 1974 as part of the foundation of the University. It is the prime agency at national level engaged in organising courses and activities
for the promotion of the Arabic language and Islamic studies. The range of courses offered comprises:

- Al-Arabi Sahlun (A Radio/TV Programme introduced in 1975 which was conducted by an Egyptian scholar);
- Elementary Arabic (Al-Lisanul Arabi);
- Certificate/Diploma course in Arabic;
- Intermediate Arabic Course;
- Arabic Teachers'Orientation Course: Intermediate level;
- Islamiat (Compulsory) B.A. Level;
- Islamiat (Compulsory) Intermediate Level.

In future, this Institute plans: B.A. Arabic Courses; functional Arabic Courses; Islamiat (Elective) for Degree Level; Islamiat (Elective) for Intermediate; Arabic Teachers' Orientation Course. 1

v) The Department of Home Economics and Women's Studies

The Department of Home Economics and Women's Studies was established in the AIOU with the following aims and objectives: 2

1. Ibid, pp.98-99.
2. Ibid, p.103.
"the development of a sound educational programme for women (both literate and illiterate) as they comprise half of the total population of the country, and their level of education and skills plays a very important role in the economic and social development of the nation." 1

Among the courses offered are:

- Child Care and Development (Intermediate level);
- Food and Nutrition (Intermediate level);

The Department is planning further skill and vocational training programmes for literate women. In the context of a relatively fundamental-Islamic country, this will be a radical educational programme.

vi) The Department of Iqbaliat

The Department of Iqbaliat was developed from the Department of Urdu in 1981. Since then, it has operated as an independent unit within the Faculty of Pedagogy, Social Sciences and Humanities, and aims to organise and conduct studies and research on Iqbal, the poet-philosopher of Pakistan, disseminating his message in order to strengthen the basic ideology of Pakistan in the interest of national integration and unity.

1. Ibid, p.103.
The last named department illustrates one of the important potential functions of a distance learning university in a relatively young and developing country. That is to say the politico-cultural imperatives, as perceived by the national leadership need to be evident, and transmitted, widely throughout the population.

vii) Other Components of AIOU

As Fig. 4 shows, there are a number of other components of this university, in particular:

- the Department of Urdu;
- the Department of English;
- the Department of Agricultural Sciences;
- the Department of Social Sciences;
- the Department of Basic Sciences;
- the Department of Industrial Management and Business Management.

viii) The National Context for AIOU Development

In Pakistan, there is almost complete radio coverage reaching over 90 per cent of the population. Such radio stations as Karachi, Quetta, Lahore, Rawalpindi and Hyderabad have separate channels for educational broadcasts, and Allama Iqbal Open University's programmes are broadcast
Television in Pakistan also has a coverage of about 90 per cent of the population living in areas supplied with electricity. Pakistan television initiated educational programmes in 1973. The Allama Iqbal Open University also uses this medium for its mass education programmes, but because of its high cost it is less extensively operated than radio broadcasting. Rural areas, in particular, tend not to have access to television broadcasts.

Allama Iqbal Open University has:

"ten regional offices, as follows: Pashawar, Gilgit, Faisalabad, Quetta, Mirpur, Rawalpindi, Lahore, Multan, Hyderabad, and Karachi." 2

As the infrastructure has developed in the regions, so there has been devolution of some important functions of the university. In particular, each region provides essential study support to the students in its care, and conducts tutorial meetings, workshops and examinations. 3

The locations of the regional offices and study centres are shown in Map 1.

Each regional office provides a library service of course books, as well as other recommended reading in the

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relevant fields. All university publications, including newsletters, course brochures and reports are made available at each regional library.

The various threads which constitute the logistics of the university's operation are held together by the Course Progress Coordination Unit which, in effect, links the production of academic content and materials to the delivery systems throughout Pakistan. This is done through the help of the servicing departments:

- the Institute of Educational Technology;
- the Directorate of Regional Services;
- the Print Production Unit;
- Library Services.

One important aspect of AIOU that is not always present in distance education universities, but is fundamental to the idea of a university, is its commitment to research and development:

"the university is deeply concerned with the application of viable, modern techniques to the acquisition and communication of knowledge, with its attitudes and objectives based firmly on the imperatives of development in Pakistan." ¹

¹. Ibid, p.50.
ix) The Development and Achievements of AIOU:

The development of AIOU represents a major achievement in distance teaching in the Third World. Its growth has been in accordance with national targets and the three development schemes 1973-75, 1975-80/1976-81 and 1976-83. The number of courses has increased from four in 1979 to more than 50 in the mid 1980s, and standards of content and production have risen, giving both a qualitative and quantitative improvement. 1

To try and meet the needs of rural areas in Pakistan, the AIOU has initiated some significant programmes and projects. The first was initiated in 1976 in IRDP Markaz Daultala, Rawalpindi District, in a cluster of 20 villages. Encouraged by the outcome of this project, similar projects were launched in the other provinces of the country. These projects were concerned primarily with basic literacy and numeracy.

According to Hassan:

"during its pioneering years, the University has done a remarkably good job in setting up a suitable structure, creating study materials, organising material distribution, developing assessment and examination procedures, etc. Problems which are fast becoming apparent include the balance between central control and evolution of regional authority; the level and method of market research; the need for coordination of course planning." 2

1. Alec Fleming, op.cit., p.133.
It is clear from this comment that despite its achievements, AIOU is meeting difficult problems in maintaining and developing its service. Allama details what he sees as the most crucial issues to be dealt with usefully, namely:

- it was felt that the objectives of distance education were becoming obscure in the prevailing conditions of the university;
- the quality of distance education being provided to students was deteriorating;
- continued discontent prevailed among academic and administrative staff who had reached the stage of stagnation for want of due promotion;
- a good number of them had languished for years in suspense working on an ad hoc basis;
- a lack of active involvement of staff in the distance teaching programmes was very obvious;
- various services of the university were either ineffective or denied to recipients in far flung areas of the country;
- expansion of university services to remote areas of the country was neither planned nor given serious thought.

As a result of these criticisms, various reorganisational measures are being carried out in academic, administrative
and service departments of AIOU and the process still continues in 1987. In particular, a planned schedule has been formulated to expand distance teaching programmes in remote areas of Pakistan.

Given some environmental comparability, and the cultural nature of Pakistan as a profoundly Islamic state, there could be considerable significance for Egypt in considering the structure, operation and development of AIOU in detail before planning her own higher education distance learning facility. There is also the significance for the writer that the development of AIOU was assisted by a team from the British Open University, and as will be seen below, he sees this institution as an important exemplar for distance education planning in Egypt.

5.4 Distance Education in Australasia and Oceania

Australia, Fiji, New Zealand and Papua New Guinea are all using distance teaching methods and techniques in their national education systems; only the first two named will be considered here:

a) Selected Aspects of Australian Distance Education

Distance education is usually described in Australia as "external studies", and has a long history in the universities there. Since the mid 1960s, there has been
very considerable development in the 'public sector' tertiary institutions, such as Colleges of Advanced Education. Indeed, since:

"the University of Queensland established a Department of Correspondence Studies in 1911, it (distance education) has become a very significant feature of Australian higher education generally."  

The tertiary dimension of distance education in Australia is, of course, based on generations of experience in the rival regions of the country where school-age students cannot attend conventional schools because of low densities of population and vast distances. Such students have educational services provided by correspondence schools and schools of the air located in each of the states and the Northern Territory. Two Australian universities that have developed strong policies and practices in this tradition are Deakin, and New England.

i) Deakin University

Deakin University was established on 10 December, 1974. It grew out of two sets of discussions in the early 1970s; one about a fourth University for Victoria, the


2. Taylor, P.C., "Illuminating Primary Distance Education in Australia", Programmed Learning and Educational Technology, vol.22, No.4, November, 1985, p.320.
other about an Open University for Australia. It was conceived as providing university level distance education for off-campus students.  

By 1983, student enrolments had grown to more than 5,500, of which about 3,500 were off-campus students; that is to say about 60 per cent. Students are categorised in three groups:

- 'Normal', i.e. students who have successfully completed either Higher School Certificate (HSC) or the Tertiary Orientation Programme (TOP);
- 'Advanced', i.e. with exemptions granted for recognised previous tertiary studies;
- 'Special', i.e. mature age students who have not completed secondary education and other students not included in the above groups, such as complementary enrolments by students enrolled at other universities who wish to study individual subjects with Deakin.

Courses offered off-campus include: Master of Business Administration; Diploma, Bachelor's and Masters in Education; Bachelors in Humanities and Social Sciences, and a Graduate Diploma in Computing.

1. Raggatt, E. and Harry, K. (eds.), Trends for Distance Higher Education; Part 1, Distance Education Research Group, DERG No.10a, The Open University, March 1984, p.1.
At Deakin, much reliance is placed on printed material though audio and visual facilities are highly sophisticated and well developed; for example, microcomputers and electronic mail. There is strong reliance on teamwork on the tutorial side, as well as counselling and tutorial support services for students.

All external work is carried out under the aegis of the Distance Education Unit (DEU), which is an academic unit dedicated to providing advice to course teams on instructional design and to teaching, research and consultancy in distance education.

ii) The University of New England

This institution was established in 1938 as a College of the University of Sydney, and became autonomous in 1954 as a result of the University of New England Act (December 1953) of New South Wales State Parliament. This Act gave the Council of the University the power to offer external courses through the establishment of a Department of External Studies. The first external courses (toward the B.A. degree) were offered in 1955 with 363 students enrolling.

External applicants should be over the age of 20, and those over 23 may apply for mature age admission, meaning that they have their work and educational experience
since leaving school considered.

The University of New England offers at least 25 programmes through distance education: six first degrees, twelve post-graduate diplomas, and seven masters' degrees. Correspondence texts are the main medium of instruction, plus face-to-face contact in compulsory residential sessions which are a key component. While audio-tapes are extensively used, no use is made of radio or television.

b) Fiji and the University of the South Pacific

In Fiji, the University of the South Pacific was formally established in 1970 in accordance with the wishes and to serve the needs of the Governments of Solomon Islands, Cook Islands, Fiji, Keribat, Nauru, Nieu, the Tokelau Islands, Tonga, Tuvalu, Vanuatu, and Western Samoa. Extension services began its operations with the School of Education in 1970 and became an autonomous unit of the University in 1974.

As Honeybone has illustrated, there was a distinct element of pioneering in respect of establishing a distance education network involving such widely scattered land areas within the world's largest body of water. He states:

1. Professor R.C. Honeybone was the first Professor of Education and Deputy Vice-Chancellor of the University of the South Pacific.
"The system was both unorthodox and flexible; and in February 1972, luck in the shape of an unexpected unorthodoxy intervened. Earlier, discussions about the possibility of installing a radio transmitter powerful enough to communicate effectively and consistently with all the ten territories had proved abortive. But luck in the shape of a remarkably simple and inexpensive device was invented by the University of Hawaii, another example of international cooperation. The device enabled me in February 1972, to speak from Laucala Bay to the President of the University of Hawaii through a microphone which bounced our voices off an "over-age" American satellite......and so the PEACESAT Programme was born. It enabled experimental seminars to be held between Laucala Bay and the three university centres but its greatest initial effect was that it publicised the extension services in general and helped to increase enrolment." 1

However, despite the capacity for cooperation in distance learning in the South Pacific region that has obviously become much more technically sophisticated since 1972, the full potential has been constrained by political considerations:

"A satellite system could help overcome the communications problems that face the Pacific Islands. The trouble that stands in the way of better communication between island nations is political and commercial rather than technological. The links exist and the governments can utilise them if the will is there." 2


This does introduce a fundamental question of who controls the potentially very powerful impact of distance education systems that operate internationally? This question can be equally important within a larger country operating its own internal system of distance education.

5.5 Aspects of Distance Education in North America

Needless to say, there are numerous examples of tertiary distance education in this part of the world. Particularly noteworthy in Canada is Tele-Université, a Quebec distance-education institution which was created in 1972, with similar aims to the British Open University and the University Without Walls in the United States.

The liberal sentiments and recommendations of the Faure Commission of 1972 was a significant motivator and Tele-Université emerged from lengthy analysis and evaluation of the findings of that Commission, which included:

1) doubts about the effectiveness of existing educational systems;

ii) the evident need for wider accessibility to education;
iii) concern about the rising costs of education;

iv) awareness of the impact of the new communication technologies;

v) evidence of the increasing number of adults in the educational system;

vi) the impact of research into the cognitive learning process. 1

Another example, this time from the United States of America, of reaction to the impact of the British Open University is that of the three American universities joining with Educational Testing Service in 1972 on a one-year project designed to examine the appropriateness of British Open University methods and materials for American colleges and university. The three participating universities were the University of Houston, the University of Maryland and Rutgers, the State University of New Jersey. The main conclusion of the final report of the experiment was that Open University methods and materials were generally appropriate for use in institutions of higher education in the United States. Since the U.S.A. is an anglophone country, at least in respect of most instruction media, there was little problem of direct use of OU materials.

The report on the experiment does not suggest that the Open University model can be implemented in the United States without certain difficulties, but was, in overall tone and conclusion, very positive:

"For example, we learned that some students found that course materials developed in Great Britain for British students were not to their liking, that a certain degree of adaptation in faculty behaviour is essential, and that such programmes are not necessarily less expensive than traditional ones. Nevertheless, on balance, our evidence suggests that the British Open University methods and materials are appropriate for use in this country and deserve careful consideration by American institutions...." 1

Given its overall lower population density, it is not surprising to find that Canada has the more interesting new foundations in distance learning, and of particular note, in addition to Tele-Université, are Athabasca University (AU) established in April 1978, and The Open Learning Institute (OLI), established in June of the same year. In fact, Athabasca University was originally established in 1970 as a 'traditional' university, but re-established with a mandate distinctly different in 1978. This change of policy towards open admission and using distance education methods was based directly on the

observed success of the British Open University, with North American flexibility of entry and withdrawal built in.

The new Athabasca University was established with four types of courses: preparatory; junior; senior; general interest psychology courses. By contrast, the more radical Open Learning Institute, located in British Columbia offered three sets of programmes: first degree in Arts and Science; technical and vocational education for employment skills; basic adult education courses.

While AU has an 'open admissions' policy, with no academic requirements for entry, (the students had to be 18 years of age or older and live in Canada), the OLI was set up to accept mature students, especially in the 25-44 age group, persons with special family or work responsibilities, the geographically or socially-isolated, and the physically disabled.

In both Canadian cases, the whole range of distance education methods and media are used through networks of regional services. However, the printed word is the major medium of instruction, with audio cassette tapes in strong support. Television plays a minor role: (see Table 15 for other points of comparison).
5.6 Distance Education in South and Central America

Almost every country in South and Central America has some form of distance education operating at one level of education or another. ¹ For the purposes of this discussion, the Universidad Estatal a Distancia in Costa Rica and the Universidad Nacional Abierta in Venezuela, have been selected to illustrate some features of distance education operating in this part of the world. The former (UNED) was established in 1977, the latter (UNA), in the same year.

UNED aims particularly to provide opportunities for agricultural and other working communities who have the necessary ability for university work but who, for economic, social or geographic reasons, could not enter one of the traditional university institutions. While this is also true to some extent of UNA, in Venezuela, there are additional aims, such as: the training of professionals to meet the higher level manpower needs of the nation; experimentation and research into new teaching learning strategies; the reduction of unit costs in higher education.

UNED Costa Rica offers courses at the following levels: basic cycle; general studies; professional studies;

extension studies; secondary school (Bachillerato) programmes; free studies programme. UNA's courses are in: administration, education, engineering, and mathematics.

Whereas UNED targets secondary school leavers who have failed to obtain a place at a conventional university, and those who are for one reason or another unable to attend a campus-based institution, UNA students must have a secondary leaving certificate (Bachillerato) before they can register even on the Introductory Course. Like their Canadian counterparts mentioned above, the basic teaching medium is the printed course book with limited use made of cassettes and television and radio programmes. In the case of UNED, there are 22 Academic Centres in which frequent and regular tutorials take place. UNA courses are more multi-media, and strong on self-instructional learning, but television programmes are brief and radio-based only for making announcements to students. UNA has 21 local or regional centres.

In the period leading up to the establishment of Open University systems in many Latin American countries, there has been a movement to reform the structures and educational techniques relating to the psychology of learning, especially in respect of the development of technology and systems of communication. Many educational
experiments have been designed at all levels, but most
have not been completed or remain at the theoretical
stage. Nonetheless, new education systems in Latin
America have generated ideas and programmes inclined
towards greater access and vocational usefulness. ¹
These trends require more research to enable distance
and open educational systems to play their full part,
possibly together with traditional institutions, but
also in new initiatives. Some institutions in Latin
America, which are worthy of mention in respect of
such developments, are:

- The Instituto Tecnologico y de Estudios
Superiores (Institute of Technology and Higher Studies)
in Monterrey, Mexico; also in Mexico, the Universidad
Nacional Autonoma (National Autonomous University);

- The Universidad Nacional Abierta de Venezuela
(National Open University of Venezuela), and the Simon
Rodrigues University, and the Zulia University.

- The Projectos de Universidades Desescolorizadas
(De-schoold University) in Colombia, also the University
of Antioquia in Medellin and the Javeriana University.

¹ Miguel, Angel Escotet, "Adverse Factors in the
Development of an Open University in Latin America",
Programmed Learning and Educational Technology, Vol.17,
No.4, November 1980, pp.262-263.
In Brazil the Council of Presidents of the Brazilian Universities have proposed the creation of an Open University with national coverage, which, given the tremendous population and geographic extent of Brazil, will be a massive enterprise. Considerable use has been made in Brazil of the methods and materials of the British Open University.

5.7. **Distance Education in Europe**

a) **Introduction**

The 1960s witnessed the rapid development of distant study systems in Europe. Some of these were at the secondary level such as the German Telekolleg, the French RTS Promotion, and the Italian Telescuola, but most were in further or higher education. Most of these initiatives have led to the establishment of systems which have lasted.

However, the context for distance education today differs from that in which the experiments were launched:

"to take just one example, there is a new requirement for technical literacy in the passive and active use of information technology. It is often hard for continuing education schemes to satisfy that need, especially as it arises to differing degrees at many different levels of potential users."

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Many bodies in the public and private sector, faced with the need to impart technical literacy, may well view distance-training channels as useful. The "informatix" programme produced in Belgium is a good example. Another instance of the changing context is the proliferation of public and private radio and television stations in some countries, offering fresh potential for distance education. All this is leading to renewed interest in distance training and its range of potential for new applications; it may well pave the way for further cooperation between the public and private sector, especially in the European Community.

There is, in fact, considerable variation as to the development of distance learning in Europe, as Table 18 shows.

b) The Organisers and Participants in European Distance Studies

In almost all European countries studied, the organisers of distance studies can be divided into three groups:

1) First: State institutions like the Open University in the United Kingdom, the Hagen Fernuniversität in the Federal Republic, the Universidad Nacional de Educación a Distancia in Spain and the Centre National de Tele-Enseignement in France; they also include authorities, military institutions (e.g. Forsvarets brevskolan in

### TABLE 18: DISTANCE LEARNING IN WESTERN EUROPE

<table>
<thead>
<tr>
<th>Country</th>
<th>Millions of inhabitants approx.</th>
<th>Participants per 100,000 inhabitants up to</th>
</tr>
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Source: Karow, W., "Distance Studies in Europe", Distance Learning, Vocational Training Bulletin, European Centre for the Development of Vocational Training, No.15, Germany, September 1984, 111, p.3.
Sweden) and state schools (e.g. The Land Vocational Schools in Schleswig-Holstein) and, in some cases, radio and television stations.

ii) Second: Private, non-profit-making institutions, run by professional organisations, religious communities, trade unions, industrial associations or large firms to provide their target groups with what is usually very specialised continuing training (e.g. the training of master craftsmen or specialist salesmen).

iii) Third: Commercial firms offering a very wide, but very specialised range of courses. This is the largest of the three groups in terms of both the number of firms providing such courses and the number of participants.

c) Selected Cases

Within this typology, the writer has selected a number of cases for discussion.

1) The German Fernuniversität:

The Fernuniversität was founded subsequent to the Open University (U.K.), beginning work in 1975. It operates exclusively at the university level, and applies strict formal entrance requirements for those aiming at degrees. Nonetheless, large numbers of students have been enrolled. The flexibility of self-paced learning seems to have been ignored for:
"The Fernuniversität applies a rigorous pacing system allowing students to submit specified assignments during pre-determined periods only, and the course materials are distributed according to timetables set by the various faculties and completely unrelated to the progress or wishes of individual students."  

Not surprisingly then, there is very little two-way communication as students' papers are merely ticked and marked often without comment before being returned to the individual students.

The academic standards of the Fernuniversität are as high if not higher than those of the older traditional German universities. It applies the same semester system as other universities and is, on the whole, based on traditional patterns as developed by the older German universities. There is little real innovation here. The failure of the Fernuniversität to provide didactic two-way communication by means of assignments for submission is, in Holmberg's view, 2 its greatest weakness and constitutes the most obvious difference between its procedures and those of the British Open University.

ii) Distance Education in Swedish Universities:

The Swedish Universities' distance education systems are profoundly different from the Fernuniversität.

In using the same textbooks as traditional universities, the mode of contact between the student and the teacher in the Swedish distance model is highly decentralised. The fundamental difference arises from the policies behind their foundations.

For example, the purpose of Swedish distance-learning institutions was, and is to increase access to higher education, making recurrent education available even for employed adults. New university entrance requirements have been introduced enabling some adults who do not meet the traditional levels on paper. 1

In Sweden, distance education is regarded as a supplementary form of study parallel to various other forms and operating in conjunction with them. The courses are mostly the same as those studied by on-campus students. However, allowance is made for distance students in that single-subject courses at a distance are offered at a "slow-pace", whereby one semester's course is offered over two semesters. Taken gradually, one by one, these courses can accumulate the necessary qualifications for a degree. In Sweden, distance education is offered in the following areas at university level: law, theology, health care, social sciences, natural sciences, technology, forestry,

1. Willen, Birgitta, Distance Education in Swedish Universities", in: Raggatt, P. & Harry, K., Trends in Distance Higher Education, Part 1, Distance Education Research Group, Paper No.10a, (Milton Keynes: The Open University, March 1984), p.34.
journalism, and teacher-training. Uppsala University even offers distance programmes overseas.

Because self-paced study is increasingly used in the traditional mode of higher education, there is no invidious distinction between distance students and others. In any case, in the decentralised Swedish model, the contact between student and teacher is central. Meetings at the university and use of the telephone service have become routine methods of establishing contact. Efforts are made to provide long-standing tutorial relationships giving moral support to students.

Responsibility for undertaking distance education in Sweden lies with the same individual university departments, which at the same time, organise traditional forms of study.

This is the strength of the Swedish approach, especially as since 1977 overall responsibility for distance education has been devolved to regional authorities. This provides flexibility to relate to different local needs.
Despite the variety of distance learning systems evident in higher education, there is no doubt that many of them have regarded the British Open University as a most important innovation and model. This institution was therefore excluded from the global resume as the writer will now concentrate the next chapter on it.
CHAPTER SIX

THE OPEN UNIVERSITY OF THE UNITED KINGDOM

6.1 Introduction

Distance education opens new paths for education and training beyond the traditional forms and methods of teaching and learning. The present chapter deals mainly with the British Open University and its role and contribution in the fields of higher and continuing education as an innovation that could help other countries in the reform and development of their national education systems. It will be succeeded by a discussion of the possibilities of setting up an Egyptian Open University for the reform and development of the Egyptian higher and continuing education system.

6.2 The Establishment of the Open University

According to William H. Draper:

"Universities are living institutions capable of extension in various directions and in more ways than one. But in England during the period of the past fifty years the term University Extension has come to stand for a movement in the sphere of education that has a definite connotation, and of which the main feature is the spreading of knowledge of such subjects as are treated in universities to other places than towns or cities where universities already exist." 1

Clearly these sentiments of nearly a century ago formed the seeds from which the formative movements of the British Open University gained their strength. In its own introduction to itself the early Open University stated that it was set up to pioneer:

- the development of advanced, multi-media distance teaching methods;

- the introduction of degree courses for home-based students without formal educational qualifications;

- a comprehensive continuing education programme to meet the training and technical updating needs of industry, commerce, the professions and individuals. ¹

Designed primarily for adults who study part-time in their own homes, the Open University required no normal university entrance qualifications, and in fact still operates on a 'First come - first served' basis.

The headquarters of the University were established at Milton Keynes, a new city being developed in North Buckinghamshire some fifty miles from London. At first sight, the campus looks much like any other university, but there is a major difference - no students are in residence - instead, many of the complex

¹. The Open University, An Introduction to the Open University, (Milton Keynes: The Open University Press, n.d.), p.3.
operations involved in producing the teaching materials are carried out there in art and photographic studios, print shops, a publishing and marketing department, and a large mailing area. In addition to the headquarters campus at Walton Hall, the Open University has thirteen regional offices throughout the U.K. which are responsible for the local organisation of students in their respective areas.

In fact the idea of a university teaching by television or radio or both was not new. According to Hawkridge:

"Richard Hooper (1974) has discovered a 1922 reference, in an American radio magazine, to a university of the air. Grattan (1974) points out that when the B.B.C. appointed its first Director of Education, the Radio Times of June 13, 1924 carried the headline: 'The Broadcast University'. MacArthur (1974) says that a wireless university was proposed within the B.B.C. by a Mr. J.C. Stobart in 1926, who considered it a 'phantasy ...... a Wellsian sketch of possibilities'. Iowa State University probably holds the records for the first televised courses in art, engineering and botany in the 1930s and Pennsylvania State University used close circuit television on a massive scale in the 1950s (Hooper, 1974)." 1

However, from the distance education point of view, the British Open University operates a teaching system that has fundamental differences from these early broadcasting systems at university

1. Hawkridge, D.G., Setting up the Open University, Monograph No.5, (Milton Keynes: The Open University, Institute of Educational Technology, December 1976), pp.3-5.
level; that is to say in its integrated methods of teaching and feedback, which will be described below.

On September 8, Mr. Harold Wilson, the then Leader of the Opposition in the British Parliament, announced that his party was working on plans for a 'University of the Air'. This new institution would provide through television and radio programmes, reinforced by correspondence tuition, tutorial classes and short residential courses, a new way of obtaining formal qualifications of university standard.

In 1964 Mr. Wilson became Prime Minister and the British Government set up an Advisory Committee to consider the idea of such a university. The Chairman appointed for this Advisory Committee was Miss Jennie Lee. Eventually, in 1967 the Secretary of State of Education appointed the Planning Committee for the Open University with the following terms of reference:

"To work out a comprehensive plan for an Open University, as outlined in the White Paper of February 1966, 'A University of the Air', and to prepare a draft charter and statutes." 1

On January 27, 1969 the Government announced its acceptance of the Planning Committee's proposals for the Open University

and a Royal Charter was duly granted to it as an independent autonomous institution under a Council and Senate like other universities of the United Kingdom. The scene was set for the first student enrolments in 1970 and the first courses to commence in 1971.

As this study concentrates on the distance teaching systems of the Open University, reference may be made elsewhere for more information on the early problems and ideas in setting up the Open University of the United Kingdom.  

6.3 The Educational Philosophy of the Open University

The Open University distance education system has two main dimensions:

a) the theoretical dimension, encompassing the aims, values, objectives and theories of distance education;

b) the methods, operations, organisation and the other ways in which the theoretical objectives may be realised.

1. See for example:

With reference to the British Open University system, we can find clearly the harmony between the theory and practice of distance education in that:

a) there is clearly a physical separation between the learner and the teacher;

b) multi-media systems are utilised;

c) there is a wide range from which to select courses of study, whether to obtain a degree or to follow other continuing education programmes;

d) the courses are prepared in such a way as to realise the best sequence for self-learning but with no difference of academic standard from that of a conventional university;

e) the organisation of the university itself is well integrated with the requirements of operating the educational process at a distance;

f) the study centres throughout the United Kingdom provide the necessary support for the learner operating from his own home;

g) summer schools and home experiment kits support the learning process in practical ways, both personal and material;
h) the British Open University degree carries the same status as those awarded at the orthodox universities of that country.

This situation of harmony between theory and practice is rooted in the aims and objectives of the institution as clearly stated by its first Vice-Chancellor:

"The concept of the Open University evolved from the convergence of three major post-war trends. The first of these concerns developments in the provision for adult education, the second the growth of educational broadcasting and the third, the political objective of promoting the spread of egalitarianism in education." ¹

In fact, the objectives of the Open University had been laid down by its first Chancellor, Lord Crowther, in 1969 when he said that the University should be open "as to people, as to places, as to methods, and finally as to ideas." ² Writing a few years after its opening, Jeremy Tunstall claimed that the Open University was already meeting the high aims of its founders:

"It can claim to be open in the sense of being flexible for the differing requirements of different students; it is possible to go fast or slow, to stop or start, to take unusual combinations of courses, to retake failed courses, or to


'drop in' again after having 'dropped out'. The broadcasts go out over public national networks. The basic course materials (the 'units' and 'blocks' of 'correspondence' material) are available on general sale and vigorously marketed."

It is also important to note that the establishment of the British Open University did not imply competition with existing institutions, but rather an attempt on a national scale to complement their efforts. Indeed it was hoped that it would increase the demands upon traditional universities and colleges as students, stimulated by the experience of part-time study, were led to seek opportunities for full-time study.

From the above mentioned objectives, the aims of the Open University could be described as being:

a) to offer an opportunity of higher education to adults who, for any reason, could not or did not take advantage of the limited opportunity to enter an institution of higher education immediately upon or shortly after leaving secondary school;

b) to provide a basis for continuing higher education throughout an adult's life;


2. Rumble, G., The Open University of the United Kingdom, An Evaluation of an Innovative Experience in the democratization of higher education, Distance Education Research Group No.6 (Milton Keynes: The Open University, May 1982), pp.9-20.
c) to experiment with new teaching methods and hence reverse the traditional conservatism of the existing universities. ¹

6.4 Modus Operandi

As hinted above, it can be said that the distance teaching methods used in the British Open University system effectively translate the theoretical dimensions into practice. These practical dimensions comprise the use of multi-media systems with the correspondence material, kits and summer schools, just as envisaged in the original planning documents:

"The presentation of courses will variously involve a combination of television, radio, correspondence courses, programmed instruction, tutorials and practicals, short residential courses, and study and discussions at community viewing or study centres." ²

This statement may be justified by moving directly from 1969 to 1987 and quoting from the 'Open University, Guide for Applicants for 1987 B.A. Degree Courses':

"Studying at home requires a lot of will-power and, if possible, the support of your family and friends. You will have to plan your studies to fit in with your home life and your working life. Courses

last for nine months, from February until October. During that time, for a full-credit course, you may spend up to 14 hours a week studying. Each week you read some of the correspondence material and set books, follow broadcasts, carry out practical exercises and prepare 'assignments'.

With respect to correspondence material, the 1987 B.A. students guide makes it clear that:

"at intervals during your course you receive packages through the post containing specially written and designed paperback texts: these are called 'course units'. There are also notes on broadcasts, assignments and exercises, and in some cases, audio-visual materials such as records, cassette tapes and slides. Many science and technology courses also have a returnable home experiment kit which contains equipment and materials to enable you to carry out experiments in your own home."

and on books and background reading it advises that:

"on most courses you will also use set books; these are normally paperback editions and we recommend that you buy rather than borrow them, since you will need them through the course. Before the course begins you will be sent a list of set books with the names of booksellers who stock them. Your course material may also list books recommended for background reading, but you are not expected to buy any or read all of these."
It is clear then that the printed word remains the most accessible and easily used means of communication and is at the heart of the Open University. It does not need a power supply, it can be transported easily and can be used in a variety of ways. It also provides credibility and comparability in respect of the standards and customs of traditional universities. Correspondence texts written by members of the course teams are therefore the central component of OU courses. These "units" are designed to motivate the independent learner and to make studying easy, with photographs, diagrams, large margins for notes and self-assessment questions.

However, despite the core of relatively conventional materials and methods, the **broadcasting dimension** is a crucial and distinctive component of the Open University's operations. In fact the first Open University programme was broadcast on BBC 2 at 11.00 a.m. on Saturday, January 3, 1971. 1 It was a general television programme, aimed at students on all courses, giving information about the university's methods of teaching and organisation, but it was the beginning of an immensely successful cooperative effort between the BBC and the Open University which continues into the late 1980s and owes much to the nature and objectives of the BBC itself. This is a significant point that needs to be understood by any other country seeking to emulate the model of the British Open University.

The existing accessibility of BBC TV was praised by the Russell Report as being an example of one of the "chief criteria by which a well-developed system of adult education can be judged." This uniquely favourable aspect of broadcasting in Britain was one of the reasons why the Russell Committee called for the creation of a lower level institution along the lines of the Open University, and which has since come to pass in the form of the Open College in the mid 1980s.

The use of radio and television in the Open University multi-media teaching system is made possible by a formal agreement between the University and the BBC, and the report of the Open University Planning Committee in January 1969 specified how the relationship would work:

"The University will prescribe the academic objectives and general character of the broadcasts, in relation to the other component parts of each course, while the BBC will provide the necessary presentation and production skills. In the overlapping area - where the inter-relationship of content and presentation is worked out - a reasonable degree of flexibility on both sides is essential in order to secure the proper concern of the academic staff and fullest use of the experience of the broadcasting staff."

The degree to which the broadcasting element had succeeded in the first few years of the Open University may be gauged

from a survey of 10,537 students carried out in November, 1974 by Bates. He stated that: 1

"The main conclusion that I would draw from this study is that television has been, on balance, a very successful component of the Open University teaching system up to now, but from 1976 onwards, there will be major problems for students and the University in using broadcasting successfully. Indeed, it may well turn out to be that conditions for the successful use of broadcasting within the University are at their maximum at this moment in time, but from 1976 onwards it will become more and more difficult to continue to use broadcasting successfully for Open University teaching. If broadcasting is to remain a major and integral part of Open University courses in the future, I believe that some radical changes in current University policy will be needed."

Several years later, Bates highlights rather different issues in respect of the problems of fitting the broadcasting element into the overall operation of the Open University:

"The overall philosophy of the University is that students should be independent and primarily home-based. Face-to-face tuition, for instance, is a support service, rather than the main teaching medium, so is the correspondence text, for two reasons. Firstly, most of students study time in most Open University courses is deliberately meant to be spent studying the text - about six hours per week out of a total of twelve hours. Secondly, most students, rightly or wrongly, see their assessment questions

as being based on the texts, rather than on the broadcasts. It is natural, therefore, that students see the programme's role as being supplementary to the texts. In practice, though, the course designers often see the programmes as having other, more important, roles to play than merely repeating or further elucidating difficult parts of the texts.  

What Bates is identifying is the tendency for the high level of visibility attached to broadcasting, and television in particular, to emphasise the importance of this dimension of provision, but as we have seen it is really a support service with printed material remaining at the core of the learning process. Nonetheless, broadcasting is a vital dimension of the Open University and we must consider its role in a multimedia operation.

a) The Cost of Television in the Open University

The television and radio programmes are designed to support, enrich, illuminate, demonstrate or otherwise strengthen the learning experience of the various courses. There are three broad categories of learning that television can service: a) instruction/demonstration; b) case material/description; c) experience/imagination.

In recent years the Open University has moved into the video age with a loan service from central facilities. This

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enables the servicing of small student numbers on some courses without raising operational costs too high. Cost is obviously a major problem with television. In 1982 the total cost of a 25 minute Open University broadcast television programme averaged around £35,000, though the marginal cost of producing extra programmes beyond this basic figure was around £6,000-£10,000, dependent on the nature of the production, especially its staffing implications. ¹

Because of its relationship with the BBC the Open University programmes are merely added on to normal transmission operations with the result that, for the Open University, national transmission costs are very low.

b) The Place of Radio

The proportion of students listening to radio programmes is lower than for television, but radio broadcasts have certain potential not shared by television. They may be used together in order to maximise the value of each medium, but in general the use of radio in Open University courses has been diminishing despite its being relatively cheap. In fact the level of work, and the cost, of developing audio material is similar to that for printed material.

c) Production Procedures

The BBC Open University Production Centre has produced well over 200 television programmes in partnership with the University (including programmes distributed on video cassette) and up to 300 sound programmes per year (some for radio, some for audio cassettes). These programmes are transmitted nationally on BBC 1 and BBC 2 TV channels and VHF Radio 3 and 4. In 1985, the BBC transmitted 2,077 television and 523 radio programmes (including repeats). 1

In this unique educational partnership, the BBC provides the methods and techniques of making and transmitting programmes in close co-operation with the University's academic staff. In 1986 the Open University agreement with the BBC allowed six hours per week transmission on radio and 22 hours 05 minutes on television. But because the University's students represent a minority audience (there may be only 200 students on some higher-level courses), programmes are transmitted at 'off-peak' times. 2

The production of the course programmes is made by a BBC producer acting as a full member of the course team. Courses and programmes are planned together since the printed and audio-visual media are designed to offer different perspectives on the particular content involved. The Production Centre is a fairly self-contained facility comprising a film

1. The Open University, Broadcasting, Fact sheet produced by Public Relations Department, The Open University, 1986.
2. ibid.
section with cutting rooms; viewing and dubbing theatres; a large graphics department; a special scenic design section; and photographic and video animation units. Although high levels of technical expertise are required in such a context, it is essential that producers understand the educational objectives of the courses. Consequently it has been the policy of the BBC Open University Unit to recruit technical personnel with good academic backgrounds and then train them in broadcasting. Some BBC/OU producers have in fact been drawn from among the academic staff, and they have mastered the technicalities.

Different subject areas tend to operate broadcasting in special ways. The science faculty uses television to take students on field trips or to demonstrate experiences that would be too costly or complex to be performed independently in student's homes, while the Social Sciences, including Education, often presents case-study material, so that students have the opportunity to analyse 'real-life' situations. Broadcasting the 'sets' can obviously bring works of the performing arts direct into students homes - through video loan.

Some cassettes, in any subject area are in the form of tutorials, sometimes in close conjunction with the written text and sometimes combined with film strips or experiments, while radio is particularly useful in respect of dealing with
topical issues and current affairs. In this particular area it is difficult for the printed work to compete. It needs a longer life to justify its production.

The whole operation is highly sophisticated and professional:

"The Open University experience shows the critical and complex relationship between course life, production levels, repeats and the quality and quantity of transmission times. These factors must be in balance to ensure high-viewing levels, if there are large numbers of programmes to be transmitted. Furthermore, that balance must be maintained and the initial quality and quantity of times for the agreed life-span of courses."

The obviously successful relationship between the BBC and the Open University reflects a unique level of co-operation that is illustrated in Figure 5.

6.5 New Technology and the Open University Distance Teaching System

There are obviously ongoing developments in distance education based on important technological changes. Throughout its existence the Open University teaching system has responded to such changes.

In addition to 'basic' tools of the teaching system such as printed material, radio and television broadcasts, home experiment kits, and audio and video cassettes, there are major

FIGURE 5: LINE OF COMMUNICATION BETWEEN THE O.U. AND THE BBC

developments in distance education through the Open University to add new media such as video discs, cable and satellite television and telephone, microcomputers, viewdata and teletext systems. According to Bates:

"the new media is giving students greater control over their learning and greater interaction - this is the most significant pedagogic development. While broadcasting is uninterruptable by the student, new media provides greater opportunities for revision, in-depth thinking and integration. New media increases the amount and level of interaction between a student and learning materials, and in some cases gives more opportunity for human interaction. This means that audio-visual media should, in theory, become more effective in developing learning."

We may briefly consider some of the technical innovations taken on by the Open University in recent years:

a) Texts and Word Processors:

At the Open University, computers and word processors have been used for drafting some course texts since the mid-1970s, and the number of academic staffing with both the necessary skills and access to microcomputers has increased considerably during that period.

"using dedicated word processors just for copy typing and for input to typesetting equipment can save time and money. Further savings can result

"if microcomputers with word processing programmes are made available to all staff in their normal place of work and if it is possible, to send material freely between those machines and word processors." 1

b) Video Cassettes

Video cassettes can make the role of television in the Open University much more flexible as a teaching and learning aid since they have the advantage of increased student control of the medium. The student can view and repeat on demand. This improves the efficiency of the system in respect of individual capacities and rates of working.

c) Videodisc

Interactive videodisc in Open University undergraduate courses began as an experiment in 1983. Videodiscs can store tremendous amounts of information in the form of textual material, slides, photos, tapes and films. One side of a disc can store the equivalent of a small encyclopaedia. 2


d) Computer-Assisted Learning (CAL) in the Open University

CAL is, among other things, a way of reducing the isolation of the distance learner, and is therefore very relevant to the operations of an Open University. CAL systems have a number of specific capacities in this respect:

i) the capability for interacting adaptively with individual students and providing instant feedback;

ii) the simulation capacity - enabling students to watch, for instance, computer animations of nuclear reactions;

iii) the ability to store and retrieve large amounts of data quickly and flexibly;

iv) input and output devices which make it a useable medium for disabled and blind students;

v) motivational: harnessing some of that motivation to educational purposes can make computers a very powerful and exciting educational medium;

vi) their potential for use at home. ¹

As early as 1970 the Open University established a network of support in computing for the Mathematics foundation course, and this innovation has developed subsequently into other areas of the University's provision. It is a feature

¹ Jones, A., "Computer-assisted Learning in Distance Education", in: A.W. Bates (ed), 1984, op.cit., pp.77-78.
of this institution that it evaluates its experience and how it can realise its potential in the distance education field.

e) Audio-Cassettes

Student feedback on Open University courses suggests that tutors who adopt a friendly, personal approach in their cassette teaching are very highly regarded. Such a style appears to be educationally effective for the way it can evoke the sense of a one-to-one tutorial, and the audio-cassette is vital in enabling the distant students to become active participants rather than passive listeners.

f) Distance Teaching by Cyclops in the Open University

For many years, the Open University has been researching to develop advanced electronic audio-visual systems to support the work of its students. As a result, the cyclops device was produced. This is an extremely versatile audio-visual teaching system based on the conventional T.V. set, standard audio cassettes and microcomputer technology.

"In face-to-face teaching, CYCLOPS can be used as an audio-visual aid, for displaying pre-prepared diagrams and other graphics which have been produced in the CYCLOPS studio at Walton Hall and stored on one channel of a stereo audio cassette. By synchronising sequences of pictures with a spoken track, a self-instructional package can be produced for students' personal use."


The system enables handwriting, simple diagrams, sketches and simple animations to be displayed on a standard television screen. Instead of needing broad-band television frequencies, both audio and visual signals can be transmitted by telephone lines as well as radio and audio-cassettes. The system is compatible with international viewdata standards. If transmitted live via the telephone, two-way communication between student and tutor would be possible, and this has obvious advantages for learning at a distance. 1

The cyclops system as an education device could have an important contribution to make to solving the problem that time and cost of travel are obstacles to frequent face-to-face tutorials for students. Telephone tutoring can be used to provide the necessary first-hand contact by:

a) home-based conference calls, linking up to seven students with a tutor;
b) study centre-based calls, which link students at one or more study centres to a tutor;
c) one to one tutor-student calls. All calls can use the public telephone service.


6.6 Two Basic Services

a) Home Kits

A major problem faces the Open University's teaching of science and technology subjects adequately to home-based students who, apart from a week at residential school and the occasional weekend meeting, have little opportunity to undertake practical experiments. It is of course possible to demonstrate experiments in television programmes, but it is also necessary to provide students with kits which they can use to conduct their own experiments at home.

"By 1981 there were some 42 different kits, with a value ranging from £2 sterling to £250, the various items in the kits are classified as durable or consumables - the latter being written off each year, while the former are lent to the student for the duration of the course, and must be returned at the end of it, for reissue to another student in the following year." 1

Home kits are also provided for courses in social science, mathematics and arts, indeed about a quarter of all Open University courses have home kits.

The first home experiment kit was sent in 1971 to 6,000 students taking the Science foundation course. It included 272 pieces of equipment which provided a complete home laboratory. 1971 was the University's first teaching year.

By 1986 the number of home kits despatched had doubled to about 40,000.

Kits vary in their complexity and level of sophistication. The Science foundation course uses a 'high resource kit', comprising about 220 items, ranging from a spectroscope to a razor blade, and from a chemical balance to filter paper. In addition, about 60 chemicals are issued. Other home kits include software which enables students to carry out home-based experiments. For example, audio cassettes may be included to talk students through experiments that use routine domestic items. Kits vary greatly in terms of cost. Some are very expensive. For example, on a course designed to teach microcomputing it was decided to provide every student with their own (identical) microcomputer. This single kit item cost £125 per student at 1983 prices. Low cost kits are not necessarily small. They often contain basic items such as plastic straws, ping-pong balls, tarred string, gridded tracing paper, cheap protractors and dividers.

Kits are not just for the obvious 'hands on' experience. They are there also for the reinforcement of theory and the development of appropriate skills. Some are designed to include the development of aural perception and teaching musical score reading.

1. The Open University, Home Experiment Kits, Fact sheet, Public Relations Department (Milton Keynes: The Open University, 1986).
It seems to the writer that home kits can be used in all levels of education, and are basic to the success of an Open University.

b) **Summer Schools**

Summer schools are an essential element in the teaching system of the Open University providing the only face-to-face interaction with tutors in a university setting. For the Open University hires the campus of a traditional university for this purpose.

Summer schools are run for all foundation courses and some higher level courses and students have to attend according to the regulations of their particular course. They take part in laboratory work, fieldwork, seminars and informal discussions, as appropriate. The schools fall into two categories: i) **course-based**: one summer school week is an essential and integral part of any course (all the summer schools an undergraduate student attends in the first year are of this kind); ii) **discipline-based**: discipline-based summer schools enable the essential academic objectives of more than one course to be achieved without requiring summer school attendance separately for each course.

1. The Open University, *Summer Schools*, Fact Sheet, Information Services Department, (Milton Keynes: Open University, 1986).

With the schools being held throughout the months of July and August, any Open University student has a range of options in respect of both time and place for his or her particular programme. Tutor Counsellors help students to select wisely from among the various options available, especially making sure that early registration (to get the location of one's choice) is not overlooked. They may also be eligible for grants available from Local Education Authorities or employers and, where necessary, from the Open University's Financial Assistance Fund.

It is still absolutely compulsory for Open University students to attend Summer School and any failure to do so must be backed up by firm evidence of incapacity. For any country, like Egypt, considering using the Open University model in their country, the seriousness with which the British Open University takes its summer schools is very important to note. They provide something that it is impossible for distance learning on its own to give to a student, especially a mature student.

6.7 Academic Structure

The Open University provides for three levels of study: undergraduate, postgraduate and post-experience.

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1. The Open University, Teaching for the Open University, (Milton Keynes: Open University, 1982), p.35.
Undergraduate courses lead to BA (Ordinary) or BA (Honours) degrees, and operate at four levels: foundation, second, third and fourth. They have a system of full or part credits. Two credits must be at foundation level, the remainder at any of the higher levels. For an honours' degree, two credits must be at third or fourth levels. In all, six full credits are needed for an ordinary degree and eight for an honours' degree, but students may have up to three exemptions in respect of previous studies. Each full credit course is spread over an academic year and credit awards are based on continuous assessment and written examinations. Students may enrol for a maximum of two credits, but most are expected to take five years to secure an ordinary degree or six years for an honours' degree. Foundation courses normally require attendance at a one-week summer school.

Postgraduate work comprises research opportunities to be supervised for the preparation of a BPhil, MPhil or PhD thesis. Unlike traditional British universities there are taught components of these programmes.

Post-experience courses are taken outside of the degree programmes but are at undergraduate level. They provide an opportunity to students to extend their knowledge for career purposes or to acquire knowledge of a new field.
The importance of the credit system to part-time students, and even more so, the recognition of OU credits outside in the wider system was recognised from the very start. The Advisory Committee (February 1966) in its White Paper recommended that:

"...It is essential that students should be given the opportunity of obtaining intermediate qualifications which should be nationally recognised. Thus, certificates and diplomas should be awarded to mark the successful completion of a part or stage of the course, and "credits" should be awarded for component elements of a course which would cumulatively lead to recognised qualification."

White transfer of credits and the obtaining of exemptions from parts of the programmes of other institutions is important, the main operation remains focussed on the academic viability of the course structure of the Open University itself, and the granting of its own degree under its own Royal Charter. To date, the Open University has awarded over 75,000 degrees.

a) **Undergraduate Courses**

No entrance qualifications are required. Open University students are adults, aged 18 and over, studying at home in their own time. Most students are in full-time employment or bringing up a family while they study, and this is taken

1. A University of the Air, *op.cit.*, p.5
into account. Undergraduates have a choice of over 130 courses which are produced by six faculties: Arts, Mathematics, Science, Social Sciences, Technology and Education. This is illustrated in Table 19. Unlike most other British universities, the Open University does not require students to decide from the beginning which particular line of study they are going to follow. The range of options is incredibly wide and the student can put together a first degree from a range of about 130 courses, choosing whatever is desired from year to year, provided that the credit rating of the courses adds up to what is required in the regulations.

A credit is awarded on completion of a one-year course (the 34 week academic year runs from February to November) on the basis of continuous assessment and a 3-hour final written examination, plus the fulfilment of certain summer school requirements.

b) Research and Higher Degrees:

The Open University Planning Committee in 1969 stated that:

"68. We differentiate postgraduate courses into three main types. There is first, the "postgraduation" course that follows immediately after a first degree. This can, and often does, lead to a higher degree or diploma and may

1. The Open University, Undergraduate Courses 1987, Table 1, p.4."
<table>
<thead>
<tr>
<th>FACULTY</th>
<th>DISCIPLINES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>Literature, Philosophy, History,</td>
</tr>
<tr>
<td></td>
<td>Fine Arts, Music, History of Science.</td>
</tr>
<tr>
<td></td>
<td>Educational Administration.</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Pure Mathematics, Applied Mathematics</td>
</tr>
<tr>
<td></td>
<td>Computer Science, Statistics, Maths. Education.</td>
</tr>
<tr>
<td>Science</td>
<td>Physics, Chemistry, Earth Sciences, Biology.</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Psychology, Sociology, Government, Economics, Geography.</td>
</tr>
</tbody>
</table>
re-orient a student from one discipline to another in preparation for employment. Secondly, there is the "post-graduate post-experience" course, which may be of two kinds. First the courses which are required by those who, after practising their profession for some years, are called upon to make a significant change in their activities, such as from the scientific into the management side of industry. Secondly, there are "updating" or "refresher" courses which enable a professional man to keep up with recent advances in his own field of work, whether scientific, technological or managerial." ¹

The majority of the Open University postgraduate students are external, studying part-time and using facilities in their home areas with external supervisors appointed from local institutions of higher education. There is, however, also a small number of full-time research students at Walton Hall, supervised by members of Open University academic staff.

As mentioned above, higher degrees are offered: BPhil, MPhil and PhD, the Master of Philosophy awarded on examination of a thesis after the satisfactory completion of one, two or three years study respectively, minimum. Study may be spread over longer periods for part-time work, by arrangement with the University. A taught element is now coming in, for example in 1986, courses in Mathematics and Educational and

Social Research were opened up and further courses of this type are planned. In 1986 there were 1,100 higher degree students, of whom 700 are taking research degrees and 400 taught master's degrees.

In addition to individual research in any area of academic study covered by the expertise of the staff of the Open University, the OU has established three special groups for collaborative research.

i) The **Brain Research Group**: this group's main areas of enquiry are into biochemical and neurophysiological correspondents of brain development, learning and environmental change. A major part of the work is funded by the Medical Research Council and there are links with laboratories in Warsaw, Prague and Budapest.

ii) The **Energy Research Group**: this has grown rapidly, with studies into many different aspects of energy - in the home, in agriculture and transport. It is frequently consulted on energy matters by both government and industry.

iii) The University's **Oxford Research Group** has attracted funds for work into irreversible processes, biophysics design and blood-sugar regulation from such bodies as the Science and Engineering Research Council, Medical Research Council and the U.S. National Institute of Health.
c) Continuing Education Programmes

The Continuing Education programme offers a range of single courses and packs aimed at adults who wish to increase their knowledge in vocational areas or to explore new fields of interest. For example, in the commercial and industrial fields, there are courses on management education and the use of microprocessors. A similar range of courses and packs is available to teachers and health and social welfare workers. In addition, nearly all the undergraduate courses are available to people who wish to study single credit courses as part of their own personal professional development. In this way they can earn credits which can be subsequently transferred towards a degree if they decide to take their studies further. Continuing education courses are resourced and serviced with self-contained 'learning packages' which have no broadcasts, tutoring or assessment but often include cassettes and kits to supplement written texts. Continuing education students are known as Associate students.

An important aspect of the operations of the Open University in the area of continuing education is the community education programme which has two principal aims: 1

i) the improvement of personal competence in community activity and private life and general education;

ii) the extension of personal horizons in the arts, sciences and literature.

Table 20 indicates the four subject areas in which community programme courses are located: "Stages in Life", "Individual Activity", "Activity-Related to Policy" and "General Interest", and it shows how they relate to the overall academic structure of continuing education provision at the Open University.

This component of OU provision has been examined by Calder and Farnes:

"Community Education is concerned with the learning of adults in their roles of parent, consumer, employee and citizen in the context of their family, work place and community. It helps people to reflect on their experience through a process of dialogue, become aware of alternatives, decide what they want and take appropriate action to achieve this. It is also concerned with community development in that it can facilitate, inform and enable participation and help people take action to influence the direction of social, cultural, environmental or economic changes that affect individuals and their communities." ¹

### TABLE 20: COURSES IN CONTINUING EDUCATION PROGRAMME

<table>
<thead>
<tr>
<th>In-Service Education for Teachers (Undergraduate to Graduate Level)</th>
<th>Health and Social Welfare (Undergraduate to Graduate Level)</th>
<th>Community Education (Sub-degree Level)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reading Diploma:</strong></td>
<td><strong>Professional In-Service Courses:</strong></td>
<td><strong>Stages of Life:</strong></td>
</tr>
<tr>
<td>Reading Development</td>
<td>The Handicapped Person in the Community.</td>
<td>The first years of life.</td>
</tr>
<tr>
<td>Reading and individual development.</td>
<td>Psychiatric Care and Rehabilitation in the Community.</td>
<td>Planning Retirement.</td>
</tr>
<tr>
<td><strong>Professional In-Service Courses:</strong></td>
<td>Post-Graduate Refresher Therapeutics.</td>
<td>Individual Activity</td>
</tr>
<tr>
<td>The Handicapped Child in the Ordinary Classroom.</td>
<td></td>
<td>Activity Related to Policy.</td>
</tr>
</tbody>
</table>

**Community Education (Sub-degree Level):**

- The Handicapped Person in the Community.
- The Handicapped Person in the Community.
- An Ageing Population
- Conflict in the Family.
- Psychiatric Care and Rehabilitation in the Community.
- Post-Graduate Refresher Therapeutics.
- Supervision of Social Work Trainees.
- Stages of Life:
- The first years of life.
- The Pre-school Child.
- Childhood 5-10.
- Planning Retirement.
- Individual Activity
- Consumer Decisions.
- Health Choices.
- Energy in the Home.
- Activity Related to Policy.
- School Governors
- Water Conservation
- Government & Industry
- General Interest
- Doing History.
- Industrial Archaeology.
Community education is fundamental to the objects of the Open University as stated in its Charter:

"The University shall be the advancement and dissemination of learning and knowledge by teaching and research, by a diversity of means such as broadcasting and technological devices appropriate to higher education, by correspondence tuition, residential courses and seminars and in other relevant ways and shall be to provide education of university and professional standards for its students and to promote the educational well-being of the community generally."

and the objectives of the University's programme of community education may be described as follows:

i) to meet the learning needs of individuals at various stages in their lives: in their roles as parents, consumers, employees and citizens, in the context of their family, workplace and community;

ii) to reach as wide a range of learners as possible, regardless of prior educational achievement, through appropriate learning materials and support for their learning;

iii) to collaborate with national and local organisations, in defining needs, developing learning materials, sharing resources, publicising and promoting learning opportunities, organising support for learners and in evaluating the provision;

1. Open University Charter, paragraph 3.
iv) to finance this work, within the rules laid down by the university, from student fees, external grants and other sources of income.  

In addition to the major community education programme, students over the age of 16 may enrol for 'short community courses' lasting from 8 to 10 weeks, and offered twice in each academic year (in January and October). These courses are serviced with learning materials like any other programme.

6.8 The Open Tech Experiment

The Open Tech is:

"A collaborative scheme currently proposed (1981) by U.K. Government to apply Open University methods of Distance Teaching to Technical and Vocational Education."  

As Ralph Smith describes it:

"In 1979, the Secretary of State pressed the Manpower Services Commission (a creature of the Department of Employment) to provide a blueprint for the Open Tech, a task which it took on somewhat reluctantly at the time but which has recently been completed in the form of the Open Tech. Task Group Report."  

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The Open Tech. Task Group Report was approved by the Manpower Services Commission in July 1982 and activities derived from it are now under way, reinforced by strong support from Open University part-time counsellors and tutors. However it is not part of the Open University as such. Nonetheless it is important to mention here because it represents a significant "spin-off" from the establishment and experience of the OU, and its objectives are similar, albeit at a 'lower' level, that is to say:

i) to open and widen access to existing education and training provision by providing opportunities for open learning;

ii) to make possible new education and training provision for needs which could best be met through open learning. 1

6.9 Course Teams at the Open University

The course team approach, with clear specification of objectives, and the identification by the course team of the appropriate media required for achieving these objectives is fundamental to the Open University system. The design and planning of courses is a very high level of integration is necessary not only to ensure integration of the media but

also because of the actual production processes such as television rehearsal and recording, graphics, selections for reader, editing and printing, that require the courses to be designed and produced many months before their operation.

The importance of the course team in the Open University is also reflected in the financial structure. While staff are appointed to Faculties, the budget for course development, production and maintenance is not allocated to the Faculties or disciplines, but directly to the course teams. Furthermore, course team chairmen have considerable flexibility in the way the money is spent, thereby giving them considerable freedom in the choice of media to be used. 1

In principle, the course team approach should encourage the integration of the various parts of a course, if only by encouraging greater communication between those teaching it. Team working necessitates a more explicit declaration of the objectives for student learning and more careful definition of the subject matter of the course than is normally the case in traditional institutions. 2


The initiative for a new course team usually stems from an informal group of lecturers with a strong interest in a particular subject. If the faculties concerned approve, a formal proposal is made for inclusion in the university's overall academic programme and if this is successful, a budget is allocated to the team and a date is set for the course to be ready for students' use. The two most important criteria within these overall constraints are the number and status of academic staff supporting the proposal and the estimated demand from students to take such a course. The main core of the team will be drawn from Open University central academic staff; some also have some full-time regional academic staff as members. In addition, most teams have several more loosely associated members from the BBC and from Open University Institute of Educational Technology (IET), Design Studio, Project Control Group and Publishing Section. Every team is given a course assistant to act as Secretary to the group; this is a distinct graduate grade of staff. ¹

Most course teams are between 10 and 20 members, though linking with other staff and services in the university, such as data processing and clerical staff. Outside consultants may be engaged for particular tasks but they are not normally full members of the team.

¹. Ibid, p.58.
The basic task of a course team, that of producing teaching materials for their students is usually a two or three-year job. Some teams meet for discussion, others come together in a workshop atmosphere, and others use meetings to ratify decisions that have been arrived at informally beforehand. Each meeting of a course team is usually based on consideration of a great many papers and notes. At an early stage these may be proposing aims for the course and suggesting the range of concepts, theories and skills to be taught. Once an overall course syllabus has been agreed, each academic will prepare an outline of his particular part for criticism, suggestions and integration with the rest of the course. The course teams try to take these outlines beyond a mere summary of subject matter, in order to make it easier to integrate the separate contributions, and ask, for example:

i) what is the justification for including the unit in the course;

ii) whether it presupposes any particular knowledge or skills;

iii) what kinds of materials are proposed (e.g. written text, worksheets, and broadcasts); and
iv) what variety of student activities are involved (such as making their own notes, collecting data, attending discussion meetings, writing essays or using self-assessment questions).

There is no doubt that the course team is the pivotal structure on which the whole academic strength of the Open University depends.

6.10 The Open University Regional Services

The Open University has divided the United Kingdom into thirteen regions to provide a tutorial and counselling service to its students (see Map 2). Each region with a regional office aided and developed by a central office at the University's headquarters in Milton Keynes. The regional offices offer a range of services to students at a local level. Regional distribution: The geographical boundaries of the 13 regions are fixed, but the number of students in each region changes year by year. Regional distribution of students is affected by an admissions policy which ensures a spread of students across the country in line with population density and numbers of applicants.
Around 5,000 part-time tutor-counsellors and course tutors are employed by the University in the various regions to maintain personal contact with students at local levels. They are typically employed full-time by other universities, polytechnics and institutions of higher and further education. The part-time staff provide a vital link between individual students learning at a distance, often in isolation, and the highly centralised organisation at Milton Keynes.

Study Centres are obviously necessary within the regions. Each student is assigned to a centre where they can attend for tuition and counselling, and meet informally with other students. The Open University has established about 250 study centres throughout the country by arrangement with Local Education Authorities, other universities and similar bodies.

In order to operate a national network for the Open University, more than 600 staff are employed in regional offices. Each office has a core of academic and administrative staff supported by secretarial, clerical and ancillary staff. Part-time tutor-counsellors and course tutors are also appointed and supervised regionally. The regional office is responsible for scheduling teaching time in study centres, allocating students to tutor-counsellors, to course tutors and to study centres. Course tutors in
particular act as mediators between students and the course team.

6.11 Assessments and Examinations

Most courses taken by undergraduate students, and many taken by associate students, have continuous assessment based on written work submitted during the academic year and a final end of course examination. Certain undergraduate courses require students to undertake project work. The weighting given to continuous assessment and examination grades is determined by the Examination and Assessment Board for each course. 1

In the Open University there are three main forms of assessment:

i) Tutor-marked assignments (TMAs): TMAs mainly take the form of essay-type or short-answer questions. Some post-foundation level courses also require extended essays or projects;

ii) Computer-marked assignments (CMAs): CMAs are made up of objective questions for which you have to select specific answers from a range of responses offered to you.

iii) End-of-year Examination: Each degree-level course has an end-of-year examination which normally lasts three hours.  

TMAs and CMAs are submitted throughout the teaching year and the marks obtained from both will form the student overall continuous assessment grade. Some courses do not have CMAs, in which case the student continuous assessment grade is based solely on the student TMA grades. This continuous assessment grade is combined with the student end-of-year examination grade to give the student a final result for the course. As a rule the overall continuous assessment grade and the examination grade carry roughly equal weighting.  

The Open University uses the following six-point scale for marking assignments and examinations:


Excellent A or 9.00 - 10.00 Bare Pass D or 4.50 - 5.49
Good Pass B or 7.00 - 8.99 Bare Fail F or 3.00 - 4.49
Clear Pass C or 5.50 - 6.99 Bad Fail R or 0 - 2.99

And from 1986, every course will follow the '100 per cent' assessment strategy. This means that all the summative tutor-marked and computer-marked continuous assessment components are used for assessment. 1

While on the theme of assessment, it should be noted that the Open University is constantly evaluating its own performance and not just that of its students individually. This applies to all aspects of its work: course design; costing; distance learning operations; other operational aspects; evaluating the new technology; especially in recent years Computer-Assisted Learning and non-broadcast video provision both of which have been priority developments in recent years. 2

6.12 The British Open University and International Co-operation

It has been said that:

1. Ibid, p.13.
"since its inception the Open University has been inundated by academic colleagues and education officials from other countries. A number of countries have sought institutional links or have requested advice in using university materials or in setting up similar projects." 1

One index of the great deal of interest in the British Open University among many countries and organisations throughout the world, is the number of visitors officially received at Walton which has risen dramatically year by year. Indeed, the writer is indebted to the Visitors Department at Walton Hall for their co-operation in this study.

Another measure of international interest is the regularly increasing sales of Open University materials through its Marketing Division, to individuals and organisations throughout the world.

A third measure concerns the number of requests being addressed to the Open University for advice and technical assistance connected with the development of distance-learning systems in other countries. These requests either come directly from the governments concerned, or through national and international agencies involved in educational development (e.g. UNESCO, The World Bank, the Inter-American

Development Bank, the British Council, the Ministry for Overseas Development, the Inter-University Council, and so on). Occasionally, such requests are addressed to individuals within the University who are already known as specialists in particular aspects of the design of distance-learning systems.

As early as 1974 a Consultancy Service was established:

"The primary objective of this service is to deal with requests for advice on the creation and development of distance-learning systems by drawing on the large pool of expertise and skills amongst the University's central and regional staff. Financial resources for this work must come predominantly from outside the University - either from the national and international agencies already mentioned, or from the client country or organisation formulating the request." 2

Nowadays, the Consultancy Service attempts to provide technical assistance and advice for distance education projects through a number of links of different dimensions:

1) organised familiarisation visits to the University;

2) short-term visits by teams of Open University staff to carry out general or specialised feasibility studies or analyses (studies of this type have been done for institutions in Kenya, Colombia, Venezuela, Pakistan, Iran and Saudi Arabia);

1. Kaye, A., How Can Other Countries Learn From The Open University?, (Educational Imperialism or International Co-operation?), Teaching at a Distance, No.8, March 1977, The Open University, p.34.

2. Ibid, p.34.
iii) relatively long-term associations involving a variety of different types of support (such as the arrangements with the Free University of Iran and the Allama Iqbal Open University of Pakistan);

iv) At the Open University itself three courses on distance teaching methodology have been developed.

One is an 'Open University Style' course equivalent to about three course units in length, on the Open University. It includes correspondence text materials, assignments, a radio and television component and so on. This course has been translated into Spanish for the Inter-American Development Bank for use in Central and South American countries.

A second course, developed in the Institute of Educational Technology for the Consultancy Service, is a basic "educational technology literacy" package, aimed at providing academic and other subject-matter experts with the rudiments of the design and monitoring of printed and audio-visual materials for use in distance-learning situations.

The third course, produced initially for the British Council for presentation over a two-week residential period on the Walton Hall campus in May 1976, is on the Design, Organisation and Administration of Distance Learning Systems. At its first presentation, the course was attended by senior academic and administrative staff from institutions in thirteen different countries, including such widely differing backgrounds
as Norway, Canada, Nigeria, Iraq and Venezuela. ¹

A particular important innovation has been the establishment in 1983 of The International Centre for Distance Learning at the Open University. Its first activity was the project 'Computerised Database' which:

"is now accessible to everyone with an involvement or an interest in distance education. It contains basic information on distance teaching institutions and projects throughout the world. The database has been developed in the International Documentation Centre for distance learning with funding from the United National University (UNU) and in co-operation with the International Council for Distance Education and the Open University." ²

The International Documentation Centre on Distance Learning serves users both within the Open University and outside. Its collection is organised in four main areas:

i) theoretical and general works on distance education;

ii) course materials produced by distance teaching institutions;

¹ Kaye, A., How can other countries learn from the Open University?, op.cit., pp.35-36.
² Harry, K., "United Nations University/International Centre for Distance Learning - Distance Teaching Institutions: A New Computerised Database", in: Peter Raggatt and Keith Harry (eds), op.cit., p.49.
iii) documents produced by and about distance teaching institutions and projects;

iv) documents on education provision in all countries.

The aim is to monitor all distance teaching everywhere. There is no overall catalogue, but a new accessions list is produced 3-4 times per year and distributed to many individuals and institutions throughout the world. ¹

International co-operation between institutions of distance learning was a major theme at the 1979 Conference on the Education of Adults at a Distance (CEAD) held in Birmingham and organised by the Open University (UKOU). ² Certain basic conclusions emerged from the Conference. Firstly distance learning institutions needed information about one another on a continuing basis and this was still not being supplied; secondly that information being available, effective collaboration between such institutions would be useful and should be encouraged and facilitated. Hence the establishment of the International Consultancy Service at the British Open University and its Documentation Centre.

1. Ibid, p.50.

2. See: M.W. Neil (ed), Education of Adults at a Distance, op.cit., pp.142-186.
The Vice-Chancellor's Report of 1984 included a section about the activities of the International Documentation Centre, which pointed out to:

"A further sum of $50,000 was received from the United Nations University to continue the work of the International Documentation Centre during 1984. An assurance also received of the continuation of funding at the same level during 1985 and 1986. Over 1,000 institutions in 80 countries were approached for information relating to their distance teaching programmes. 400 institutions responded and contributed a total of over 60 entries. During the period April to December 1984, 36 printouts were produced in response to requests for information for the database."

6.13 Conclusion

There is no doubt that the establishment and operation of the British Open University has been a great success both within the United Kingdom, and as perceived from overseas. The OU has already carried out many services and consultancies for other countries, both developed (e.g. USA) and developing (e.g. Pakistan).

It is for this reason that Egypt also requested such links as a contribution to assessing the implications and possibilities of establishing its own Open University. This is the subject of the following chapter.

CHAPTER SEVEN

ON ESTABLISHING AN OPEN UNIVERSITY IN EGYPT:

A SURVEY OF SELECTED OPINION

Before examining the results of a survey conducted by the writer on this matter it is first necessary to provide some background on Egypt in general and its higher education provision in particular.

7.1 The Geographical Context

It is necessary to state this context, however briefly, because the establishment and operation of a distance learning institution will obviously become part of the human geography in itself, and will be seeking to serve widespread clusters of Egypt's population.

a) Location and Climate

Egypt lies astride Africa and Asia, with the Suez Canal constituting simultaneously the dividing line and the vital link both between the two continents and between north and south. The country covers an area of 1,200,000 square kilometres (386,000 square miles, and comprises four major regions: the Nile Valley and Delta, where the vast majority of the population live; the Western Desert; the Eastern Desert and the Sinai Peninsula. These four major regions are divided into twenty-six local Governorates. The
plateaux, known respectively as the Eastern and Western Deserts, cover some 95 per cent of the country, while in the Nile Valley, a narrow strip of life-giving land joining Upper and Lower Egypt and the Nile Delta, plus several islands in the Gulf of Suez and the Red Sea, account for the balance of the national territory.  

The climate is of Mediterranean type in the Delta and along the north coast but arid and sub-tropical in the rest of the country. July is the hottest month in Cairo, and January the coldest, the range being from 40°C in summer to January 9°C in terms of average temperatures.  

b) Population  
The inhabited area is mainly the Nile Valley, the Nile Delta and certain points along the Suez Canal and the 2,500 miles of coast line on the Red Sea, the Mediterranean and the Gulf of Aqba. The total population is about 50 million in 1987, of which an estimated 7 million live in the capital city, Cairo. This was founded in 969, and the other main cities, Alexandria (founded in 330 B.C), Giza, Aswan, Luxor, Tanta, Helwan and Port-Said (see map 3). The population of Egypt is growing rapidly and therefore becoming younger in age profile.

c) Economy

Despite the rapid growth of other sectors of the Egyptian economy, agriculture remains the country's most important wealth-generating activity, accounting for nearly 65 per cent of the value of merchandise exports and employing some 45 per cent of the total labour force. The main industries are iron and steel, fertilizers, food, textiles, chemicals, mining and quarrying, electronic products and petroleum industries.¹ The crude oil exports, tourism revenues, Suez Canal dues and workers' remittances represents the main resources for generating foreign exchange.

d) Communications

Internal travel by air links the main cities; also by roads of which there is a good network between Cairo and main cities. There is a frequent bus service between Cairo and Alexandria; also between Cairo, Port Said, Suez and the main cities. There is also a rail network in the north linking Cairo to Alexandria and Cairo to Aswan. Tanta City lies in the middle of El-Delta and it is considered a main function for railways to diverge to various cities and towns. The telephone services in Egypt have improved considerably over the last five years and this is vital for the operation of an Open University.

It was estimated that in 1979 there were already near
access to national domestic and foreign services in
numerous languages and local broadcasting
three terrestrial stations, one of which
integrated in the Specialty Section.
by Middle Eastern Broadcasters
an open-education policy is being
at the moment, the government operates on the
students graduates. These policies have
problem and at the moment, the
unqualified for admission. However, the
high educational standards are maintained.
It was estimated that in 1979 there were already near 7 million radios and 1.1 million televisions. In fact there is access to national domestic and foreign services in numerous languages, and there are 12 local broadcasting services. There are three television channels, one of which is operative only in the Cairo area.

7.2 The Educational Context

a) The general system of education in Egypt is illustrated by Figure 6. Within this, we are obviously particularly interested in the tertiary sector.

b) Higher Education in Egypt at Present

During the last two decades, Egypt has been following an open admissions policy in higher education. At the same time, the government policy in the employment sector was to guarantee an employment scheme for all the university graduates. These policies have created a long term employment problem and at the same time the capacity of the universities became inadequate for all the secondary school leavers qualified for admission. Recently, the scheme to guarantee graduate employment was modified by allowing the graduates to find their own jobs in the private sector up to 3 years after graduation. On the other hand, the capacity increased as Regional Universities appeared as a new element in
Source: (Ministry of Education, Cairo)
Egyptian higher education and helped to meet the enormous increase in secondary school leavers who in turn would become students trained to take part in community development programmes.

The open admission policy, coupled with the fact that salary structures were related to the length of studies pursued by a graduate, attracted more and more students into university education. So, it is not the cultural and social profile of education that attracts students to higher education institutions, but also the economic benefits that they subsequently receive. 1

To look at this rapid expansion in higher education during the last two decades in more detail, we find:

i) higher education in Egypt has been increasing at an annual rate of between 10 and 20 per cent;

ii) the number of universities has increased from the five older universities, named: Al-Azhar University (1970); Cairo University (1908); Ain-Shams University (1924); Alexandria University (1942); Assiut University (1957), to a total of thirteen with the following regional universities - Tanta University (1972); Mansoura University (1973); Zagazig University (1974); Minia University (1976); Al-Menoufiah University (1976); Suez-Canal University (1976);

Helwan University (1975). In addition there is the American University in Cairo.

In addition to the eight regional universities, other regional faculties were established and affiliated to the nearest university and to form later a nucleus for an autonomous university. Table 21 shows the expansion of regional universities and faculties in different locations all over Egypt, while Table 22 deals with the total number of students admitted annually to all universities.

Obviously, major problems were created by the open admission policy such as:

i) the problem of the provision of human resources which including: shortage of teaching staff; shortage of administrative staff;

ii) the problem of the provision of material resources which include: lack of adequately equipped libraries; lack of adequately equipped laboratories; shortage of buildings; lack of ancillary services; lack of accommodation for both staff and students. 1

An aspect of this problem is illustrated by Table 23, which deals with aspects of teacher shortage in higher education.


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<tr>
<th>CITY</th>
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## Table 22: The Growth of Student Numbers in the 1970s

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<td>22,625</td>
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Source: Ministry of Education, Cairo and UNEDBAS (UNESCO Regional Office, Beirut).
### TABLE 23: STAFF SHORTAGES IN SOME REGIONAL FACULTIES: 1976-77

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<th>FACULTY</th>
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<th>No. of Students</th>
<th>No. of Staff</th>
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**SOURCE:** The Supreme Council of Universities, Expansion of Universities in Egypt, Cairo, 1978.
during the period of expansion.

7.3 The Idea of Setting Up an Open University in Egypt

The enormous increase in secondary school leavers year by year, created a problem for the educational planners, and at the same time the provision of these universities badly affected the value of the degrees awarded, as the standards of the new regional universities was lower than the older institutions. On the other hand, there was a clear need to develop professional manpower for the economic and social growth of Egypt. Even with increased access, some students have to abandon their studies to earn their living and so, a 'second chance' should be made available to them. Furthermore, this renewed opportunity for higher education should be open to applicants not reaching the traditional qualifications required to start their university education under the normal system. There is also the need for shorter, vocationally orientated courses in higher education. Obviously new, more flexible models of delivery had to be considered.

In 1978 a meeting of the National Council for Education, Research, and Technology reported that:

"The British Open University represents a remarkable experiment. We should start thinking about it, since it could open new opportunities in higher education for all those who had some social, economic, geographical circumstances preventing them from having university degrees." ¹

and proceeded to make recommendations for the setting up of an Open University in Egypt. In considering the case of the United Kingdom Open University, the Council realised that it was established for some factors and considerations which would not necessarily operate in Egypt. The crisis in Egyptian higher education was the main motivation, whereas in the United Kingdom, broader social policy was operating in the 1960s as already indicated in the previous chapter.

Nonetheless, the Council recommended studying the possibilities of applying the idea of an Open University for Egypt, with reference to the British Open University model. Initially the recommendations included:

a) sending some scholarship members to study the idea as it is applied for the United Kingdom;

b) carrying out the idea with strict relation to the priorities as perceived by the government;

c) the admission to this Open University if it is established should be from both:

¹. ibid, p.240.
i) secondary school leavers.

ii) professional secondary school leavers who had already spent a limited number of years in employment.

d) using the Open University idea in upgrading teachers qualifications and developing their knowledge about the environment, population, and the present developments in education and science;

e) studying the expected role of radio and television in introducing programmes for the public in some subjects;

f) studying the possibilities of applying the Open University idea through non-governmental bodies.

The Council was aware that such an idea would require research in order to ascertain:

a) the desirable aims and objectives in view of the present situation of Egyptian society;

b) which studies would be required for inclusion in an Egyptian Open University educational system;

c) the methods and means of carrying through such a project in respect of:

i) the problem of finance;

ii) the desirable limits for admission;
d) the qualifications that would be awarded by the Egyptian Open University and the relationship between it and national and regional employment policy.

7.4 The Writer's Survey

As the above mentioned issues have not really been addressed, the writer decided to formulate a questionnaire of an open-ended nature for a sample of the academic staff at 11 Egyptian Universities, the Egyptian Radio and Television sectors, and the National Council for Education, Research and Technology. From the 29 copies distributed, 21 copies were collected, as illustrated in Table 24. The full questionnaire comprises pages 372 - 395 of this thesis. It was carried out in 1987.

The result of the survey are set out in the following pages, largely in the form of tables but with some additional comment where this was provided by respondents. As the questions and responses are clearly stated in the tables, the writer sees no need to repeat the same information in textual form underneath each one as is sometimes done in certain styles of presentation.

It should be noted that each table has to do with a particular question in the survey (Appendix 1). The notation of the relevant section in the questionnaire is shown in parenthesis after each of the titles listed below, and also appearing above their respective tables. The list of tables comprising the results of the survey is as follows:
TABLE 24: THE DISTRIBUTION AND COLLECTION OF THE QUESTIONNAIRE

<table>
<thead>
<tr>
<th>NO. OF COPIES SENT</th>
<th>NO. OF COPIES RECEIVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Universities</td>
<td></td>
</tr>
<tr>
<td>(1) Al-Azhar</td>
<td>(2)</td>
</tr>
<tr>
<td>(2) Ain-Shams</td>
<td>(5)</td>
</tr>
<tr>
<td>(3) Alexandria</td>
<td>(2)</td>
</tr>
<tr>
<td>(4) Assiut</td>
<td>(4)</td>
</tr>
<tr>
<td>(5) Tanta</td>
<td>(2)</td>
</tr>
<tr>
<td>(6) Mansourah</td>
<td>(3)</td>
</tr>
<tr>
<td>(7) Zagazig</td>
<td>(3)</td>
</tr>
<tr>
<td>(8) Helwan</td>
<td>(1)</td>
</tr>
<tr>
<td>(9) Menoufiah</td>
<td>(1)</td>
</tr>
<tr>
<td>(10) Alminia</td>
<td>(2)</td>
</tr>
<tr>
<td>(11) Suez-Canal</td>
<td>(1)</td>
</tr>
<tr>
<td>2. Radio and</td>
<td></td>
</tr>
<tr>
<td>Television Sectors</td>
<td>(1)</td>
</tr>
<tr>
<td>(1) Radio</td>
<td></td>
</tr>
<tr>
<td>(2) Television</td>
<td>(1)</td>
</tr>
<tr>
<td>3. Council for</td>
<td></td>
</tr>
<tr>
<td>Education, Research, and Technology</td>
<td>(1)</td>
</tr>
<tr>
<td>represented two responses</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>
a) Prospects for the Aims and Objectives of an Open University (1.2).

b) The Policy on Undergraduate Student Admissions (1.3.1).

c) The Policy on Age of Admission (1.3.2).

d) The Admission of Associate Students (1.3.3).

e) The Admission of Handicapped Students (1.3.4).

f) The Admission of Students from the Armed Forces and the Prisons (1.3.5).

g) Aspects of Degree Structure Preferred (1.4).

h) Preferences for Study Regime (1.5).
   - Academic Sessions (1.5.1).
   - Summer Schools (1.5.2).
   - Correspondence Texts (1.5.3).
   - Delivery Systems (1.5.4).
   - Home Experiment Kits (1.5.5).
   - Policy for Radio and Television Broadcasts (1.5.6).
   - Tutoring and Counselling (1.5.7).

i) The Preparation of Study Material (1.6).
   - Course Team (1.6.1).
   - Stages of Course Preparation (1.6.2).
j) Appointment of Teaching Staff (1.7).

k) University Faculties (1.8).

l) University Finance (1.9).

m) University Administration (1.11).
   - location of Headquarters (1.11.1).
   - Regional Offices and Study Centres (1.11.2).

n) Prospects for the Proposed Open University to Resolve Educational Problems in Egypt (1.12).
   - Absorbing the Demand for Education (1.12.1).
   - Resolving the Problem of Staff Supply (1.12.2).
   - Resolving the Gap between Graduate Qualifications and Employment (1.12.3).
   - Helping to Resolve the Problem of Overcrowding at the Conventional Universities (1.12.4).

o) The Role of the Proposed University in Other Fields (1.13).

p) A Survey of Educational Broadcasts on Radio (2.1).

q) A Survey of Educational Broadcasts on T.V. (2.2).
**TABLE 25: PROSPECTS FOR THE AIMS AND OBJECTIVES OF AN OPEN UNIVERSITY (1.2)**

<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. to give the chance to the adults who can not attend higher education for some reasons such as social, economic, geographical and etc.</td>
<td>15</td>
<td>4</td>
<td>2</td>
<td>71.4</td>
</tr>
<tr>
<td>2. to take part in solving the problems of huge numbers of students pressure for admission on university education in spite of the inadequacy in the facilities and the staff.</td>
<td>13</td>
<td>6</td>
<td>2</td>
<td>61.9</td>
</tr>
<tr>
<td>3. to take part in solving some problems of Regional Universities; such as inadequacy in the buildings, laboratories, facilities and academic staff.</td>
<td>13</td>
<td>4</td>
<td>4</td>
<td>61.9</td>
</tr>
<tr>
<td>4. to contribute in solving the drop-out rate; where as the students dropped out could work and admit at the proposed university.</td>
<td>8</td>
<td>11</td>
<td>2</td>
<td>38.1</td>
</tr>
<tr>
<td>5. to offer new courses similar to those called self-contained post-experience courses at the U.K. Open University (associate student programmes)</td>
<td>16</td>
<td>3</td>
<td>2</td>
<td>76.2</td>
</tr>
<tr>
<td>6. to decrease the pressure of associate students at the conventional universities by offering new courses designed on distance teaching basis.</td>
<td>6</td>
<td>13</td>
<td>2</td>
<td>28.6</td>
</tr>
<tr>
<td>7. to facilitate the admission for the remote areas adults who can not join university education for geographical reasons.</td>
<td>11</td>
<td>8</td>
<td>2</td>
<td>52.4</td>
</tr>
<tr>
<td>8. to develop the present training programmes for graduates at distance teaching basis.</td>
<td>12</td>
<td>7</td>
<td>2</td>
<td>57.1</td>
</tr>
<tr>
<td>9. to make a significant contribution on environmental education programmes and community education as well.</td>
<td>12</td>
<td>7</td>
<td>2</td>
<td>57.1</td>
</tr>
</tbody>
</table>

It is clear that about three quarters of respondents recognise the compensatory role of an Open University and also approve of the British Open University model. There is much less support for the short-term objective of merely solving the student numbers problem.
Table 26: The Policy on Undergraduate Student Admissions (1.3.1)

<table>
<thead>
<tr>
<th>Possibilities</th>
<th>Yes</th>
<th>No</th>
<th>% for</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. G.C.E. graduates and equivalents but who spent a number of years in their jobs.</td>
<td>15</td>
<td>4</td>
<td>71.4</td>
</tr>
<tr>
<td>2. The admission priority should be given the employers then the other categories.</td>
<td>5</td>
<td>14</td>
<td>23.8</td>
</tr>
<tr>
<td>3. The admission priority should be to the remote area students.</td>
<td>11</td>
<td>8</td>
<td>52.4</td>
</tr>
<tr>
<td>4. Admission priority should be given to the oldest then to the youngest age persons considering the other roles of admission.</td>
<td>5</td>
<td>14</td>
<td>23.8</td>
</tr>
<tr>
<td>5. Admission priority should be given to the youngest then the oldest age persons, considering the other roles of admission.</td>
<td>5</td>
<td>14</td>
<td>23.8</td>
</tr>
<tr>
<td>6. Admission should be given to any person without stipulation the date of graduation.</td>
<td>8</td>
<td>10</td>
<td>38.1</td>
</tr>
<tr>
<td>7. The total grades number should be considered.</td>
<td>3</td>
<td>14</td>
<td>14.3</td>
</tr>
<tr>
<td>8. The total grades number should not be considered.</td>
<td>14</td>
<td>5</td>
<td>66.6</td>
</tr>
<tr>
<td>9. Admission policy should consider: classifying the candidates categories to make a balance between the different categories so one professional group in one category can not occupy a large number of places.</td>
<td>7</td>
<td>12</td>
<td>33.3</td>
</tr>
<tr>
<td>10. Conventional universities students could be possible for them to study with the proposed Open University after making some arrangements for their transformation and with some certain regulations like getting a job.</td>
<td>10</td>
<td>8</td>
<td>47.6</td>
</tr>
</tbody>
</table>

Clearly a preference is shown here for the admission of students who have some basic educational qualifications but who have also been in the world of work for some time. Some respondents felt that five years experience should be required and that the student should return to the same field after graduation.
<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 18 years</td>
<td>1</td>
<td>19</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>- 19 years</td>
<td>0</td>
<td>20</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>- 20 years</td>
<td>2</td>
<td>18</td>
<td>1</td>
<td>9.5</td>
</tr>
<tr>
<td>- 21 years</td>
<td>3</td>
<td>17</td>
<td>1</td>
<td>14.3</td>
</tr>
<tr>
<td>- 22 years</td>
<td>0</td>
<td>20</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>- 23 years</td>
<td>1</td>
<td>19</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>- 24 years</td>
<td>10</td>
<td>10</td>
<td>1</td>
<td>50.0</td>
</tr>
</tbody>
</table>

The preference of respondents is clearly for the Open University to be serving the needs of mature adults rather than those of normal undergraduate age.
<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. the candidate should be qualified at the first university degree level.</td>
<td>10</td>
<td>9</td>
<td>2</td>
<td>47.6</td>
</tr>
<tr>
<td>2. the candidate could be technically qualified with 5 years experience in his job at least.</td>
<td>11</td>
<td>8</td>
<td>2</td>
<td>52.8</td>
</tr>
<tr>
<td>3. the candidate could be managerial qualified with 5 years experience in his job at least.</td>
<td>6</td>
<td>13</td>
<td>2</td>
<td>28.6</td>
</tr>
<tr>
<td>4. housewives qualified with the first university degree level.</td>
<td>9</td>
<td>10</td>
<td>2</td>
<td>42.9</td>
</tr>
<tr>
<td>5. the candidate could be qualified with the pre-university degree level.</td>
<td>7</td>
<td>12</td>
<td>2</td>
<td>33.3</td>
</tr>
</tbody>
</table>

Once again a preference is shown for candidates with some previous qualifications and work experience.
**TABLE 29: THE ADMISSION OF HANDICAPPED STUDENTS (1.3.4)**

<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>- the candidate should be G.S.C.E. or its equivalent graduate.</td>
<td>11</td>
<td>9</td>
<td>1</td>
<td>52.8</td>
</tr>
<tr>
<td>- there is no stipulations for their admission.</td>
<td>10</td>
<td>10</td>
<td>1</td>
<td>47.6</td>
</tr>
<tr>
<td>- the total grades in their qualifications and their ages should be considered to accept the number required from them.</td>
<td>5</td>
<td>15</td>
<td>1</td>
<td>23.8</td>
</tr>
</tbody>
</table>

Further suggestions and comments:

- create some sort of co-operation between the proposed university and the handicapped education schools.

Opinion seems fairly evenly divided between requiring the same qualifications as for other students and making an open admissions policy for handicapped students.
TABLE 3.0: THE ADMISSION OF STUDENTS FOR THE ARMED FORCES AND THE PRISONERS (1.3.5)

Armed Forces (about their acceptance)

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>14</td>
<td>4</td>
<td>3</td>
<td>66.6</td>
</tr>
</tbody>
</table>

Prisoners (about their acceptance)

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17</td>
<td>2</td>
<td>2</td>
<td>80.1</td>
</tr>
</tbody>
</table>

Both these categories of potential student are favoured by respondents.
### TABLE 31: ASPECTS OF DEGREE STRUCTURE PREFERRED (1.4)

<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. credits system should be used</td>
<td>10</td>
<td>9</td>
<td>2</td>
<td>47.6</td>
</tr>
<tr>
<td>2. study the university should be for the first degree level.</td>
<td>3</td>
<td>16</td>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td>3. one credit per one academic year should be allowed.</td>
<td>5</td>
<td>14</td>
<td>2</td>
<td>23.8</td>
</tr>
<tr>
<td>4. two credits per one academic year should be allowed.</td>
<td>3</td>
<td>16</td>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td>5. three credits per one academic year should be allowed.</td>
<td>3</td>
<td>16</td>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td>6. study at the university should be shortened at the first stage of the university setting up to the first degree studies.</td>
<td>7</td>
<td>12</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>7. first degree studies and associate student programmes should be the limits enough at the first stage of the university setting up.</td>
<td>4</td>
<td>15</td>
<td>2</td>
<td>19.0</td>
</tr>
<tr>
<td>8. associate student programmes should be established by three years - for example - after the university setting up.</td>
<td>10</td>
<td>9</td>
<td>2</td>
<td>47.6</td>
</tr>
<tr>
<td>9. no transformation should be allowed from the other universities at the first stage of the university setting up.</td>
<td>14</td>
<td>5</td>
<td>2</td>
<td>66.6</td>
</tr>
</tbody>
</table>

There is a mixed reaction here, but with some support for the radical possibilities of the credit system approach and provision for associate students.
TABLE 32: PREFERENCES FOR STUDY REGIME (1.5)

a) The period of study per an academic session 36 weeks with 12-14 hours a week at the same basis used at the British Open University system (1.5.1).

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>1</td>
<td>1</td>
<td>90.5</td>
</tr>
</tbody>
</table>

b) Summer Schools: (The basis used at the British Open University is the suitable one) (1.5.2).

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>7</td>
<td>3</td>
<td>52.4</td>
</tr>
</tbody>
</table>

While the basic weekly study regime of the British Open University is clearly favoured, feeling on the UKOU summer school model is more evenly divided. There may be logistical problems envisaged by some respondents.
c) The Period Preferred for Summer School (other than the one week model of the UKOU) (1.5.2)

<table>
<thead>
<tr>
<th>PARTICIPANTS PERIOD SUGGESTED</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 weeks</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>4-6 weeks (with 3 hours per day)</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>6 weeks</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>6-12 weeks</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

d) Do you agree with 36 correspondence texts per session as per the model of the British Open University (1.5.3)

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>2</td>
<td>1</td>
<td>85.7</td>
</tr>
</tbody>
</table>
## TABLE 32' (cont'd)

### e) Possibilities for Delivery Systems for Study Materials (1.5.4)

<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. by mail from the H.Q.</td>
<td>4</td>
<td>15</td>
<td>2</td>
<td>19.5</td>
</tr>
<tr>
<td>2. could be distributed directly to the student from the H.Q.</td>
<td>2</td>
<td>17</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>3. distribution first from the H.Q. production centre to the local study centres, then the student can collect it.</td>
<td>12</td>
<td>7</td>
<td>2</td>
<td>57.1</td>
</tr>
</tbody>
</table>

There would seem to be a distinct reluctance to utilise long distance mailing systems in the Egyptian context. More confidence is expressed in student collection.
f) Possibilities for the Provision of Home Experiment Kits (1.5.5)

<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. the kit's production line at the British Open University could be the main resource for importing it.</td>
<td>3</td>
<td>16</td>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td>2. importing the kits at first stage of establishing the University, then produce it later.</td>
<td>8</td>
<td>11</td>
<td>2</td>
<td>39.0</td>
</tr>
<tr>
<td>3. with the co-operation between the British Open University and Egyptian production team, it could be produced in Egypt.</td>
<td>11</td>
<td>8</td>
<td>2</td>
<td>52.4</td>
</tr>
</tbody>
</table>

While the British Open University model is respected, respondents on balance prefer cooperation with the British OU in establishing an home experiment kit production facility in Egypt, rather than direct importation.
### TABLE 32: (cont'd)

E. Policy for Radio and Television Broadcasts (1.5.6)

<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. about one hour a week for one course credit unit seems to be the suitable for the broadcasting material.</td>
<td>7</td>
<td>12</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>2. more than one hour a week for one course credit unit.</td>
<td>4</td>
<td>15</td>
<td>2</td>
<td>19.0</td>
</tr>
<tr>
<td>3. broadcasting times should be on a weekend and the other peak days and times.</td>
<td>10</td>
<td>9</td>
<td>2</td>
<td>47.6</td>
</tr>
<tr>
<td>4. certain television channels should be specialised for university broadcast times, and the same with the radio.</td>
<td>9</td>
<td>10</td>
<td>2</td>
<td>42.9</td>
</tr>
<tr>
<td>5. questionnairing the Egyptian people and the experts about the T.V. and radio transmission times are the best for university broadcasting.</td>
<td>15</td>
<td>4</td>
<td>2</td>
<td>71.4</td>
</tr>
</tbody>
</table>

A clear preference is given here for consulting the Egyptian people before proceeding to plan in this area.
### TABLE 32 (cont'd)

**h) Policy for Tutoring and Counselling (1.5.7)**

<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. meetings and forums at the study centres should be held between the students and tutors every week.</td>
<td>8</td>
<td>10</td>
<td>3</td>
<td>38.1</td>
</tr>
<tr>
<td>2. meetings and forums at the study centres should be held between the students and tutors every two weeks.</td>
<td>8</td>
<td>11</td>
<td>2</td>
<td>38.1</td>
</tr>
<tr>
<td>3. meetings and forums at the study centres should be held between the students and tutors every three weeks.</td>
<td>3</td>
<td>16</td>
<td>2</td>
<td>14.3</td>
</tr>
<tr>
<td>4. tutors should be appointed on a part-time basis between the academic staff and assistant lecturers from nearest universities to the study centres.</td>
<td>7</td>
<td>11</td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td>5. tutors should be appointed on a part-time basis between the other universities academic staff only.</td>
<td>10</td>
<td>9</td>
<td>2</td>
<td>47.6</td>
</tr>
<tr>
<td>6. providing the students with enquiry forms about the courses, the methods of teaching and any comments about or questions they like to enquire about. These forms should be provided as early as the student collecting his study material package.</td>
<td>14</td>
<td>5</td>
<td>2</td>
<td>66.6</td>
</tr>
</tbody>
</table>

Preference is here expressed for providing the students with an ongoing individual and direct mode of contact rather than timetabled formal meetings.
TABLE 33: ASPECTS OF THE PREPARATION OF STUDY MATERIAL

a) **Course Team**: The course team approach and methods at the British Open University represents the model selected to the suggested university (1.6.1): do you agree?

<table>
<thead>
<tr>
<th>YES</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>2</td>
<td>90.5</td>
</tr>
</tbody>
</table>

b) The stages of preparing the courses as it is followed by the British Open University represents the stages agreed for the Egyptian equivalent model (1.6.2): do you agree?

<table>
<thead>
<tr>
<th>YES</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>2</td>
<td>90.5</td>
</tr>
</tbody>
</table>
TABLE 34: POLICY FOR TEACHING STAFF APPOINTMENTS (1.7)

<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. appointment of teaching staff should be at the basis of the similar at the conventional universities.</td>
<td>7</td>
<td>11</td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td>2. regulating some other basis for teaching staff appointment.</td>
<td>4</td>
<td>14</td>
<td>3</td>
<td>19.0</td>
</tr>
<tr>
<td>3. the appointments should be on the basis of the perfect academic experience, designing course, books and written materials production which represents the suitability to the characteristics of distance teaching and its nature.</td>
<td>15</td>
<td>3</td>
<td>3</td>
<td>71.4</td>
</tr>
<tr>
<td>4. appointments of counsellors should be by advertisement between the professors and assistant professors at the conventional universities.</td>
<td>11</td>
<td>7</td>
<td>3</td>
<td>52.4</td>
</tr>
</tbody>
</table>

While respondents show a strong preference for requiring good traditional academic qualifications, they also see the need for the special skills of distance teaching to be met.
### TABLE 35: PREFERENCES FOR FACILITIES TO BE INCLUDED (1.8)

<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Faculty of Arts</td>
<td>7</td>
<td>11</td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td>- Faculty of Technology</td>
<td>8</td>
<td>10</td>
<td>3</td>
<td>38.1</td>
</tr>
<tr>
<td>- Faculty of Religious Studies</td>
<td>5</td>
<td>13</td>
<td>3</td>
<td>23.8</td>
</tr>
<tr>
<td>- Faculty of Commerce and Management</td>
<td>8</td>
<td>10</td>
<td>3</td>
<td>38.1</td>
</tr>
<tr>
<td>- Faculty of Law</td>
<td>4</td>
<td>14</td>
<td>3</td>
<td>19.0</td>
</tr>
<tr>
<td>- Faculty of Educational Studies</td>
<td>15</td>
<td>3</td>
<td>3</td>
<td>71.4</td>
</tr>
<tr>
<td>- Faculty of Science</td>
<td>5</td>
<td>13</td>
<td>3</td>
<td>23.9</td>
</tr>
<tr>
<td>- Faculty of Social Sciences</td>
<td>8</td>
<td>10</td>
<td>3</td>
<td>38.1</td>
</tr>
<tr>
<td>- Faculty of Arabic Language</td>
<td>10</td>
<td>8</td>
<td>3</td>
<td>47.6</td>
</tr>
</tbody>
</table>

This response would seem to show a recognition of general rather than specialist educational role of an Open University using distance teaching.
<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. the government should finance the university with a small proportion</td>
<td>4</td>
<td>15</td>
<td>2</td>
<td>19.0</td>
</tr>
<tr>
<td>representing 15% students fees.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. the government should finance with a proportion 75% of the University</td>
<td>5</td>
<td>14</td>
<td>2</td>
<td>28.8</td>
</tr>
<tr>
<td>budget and the 25% from student fees.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. the government should finance with proportion of 50% of the University</td>
<td>7</td>
<td>12</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>budget and 50% from student fees.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. the government should finance the University on the basis of full finance</td>
<td>5</td>
<td>14</td>
<td>2</td>
<td>28.6</td>
</tr>
<tr>
<td>at the first stage of its setting up and for a limited number of years, with</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the radio and television board contribution inclusively towards the costs of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>production and transmission of broadcasts material.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. the contributions of the people, different sectors of the community.</td>
<td>15</td>
<td>4</td>
<td>2</td>
<td>71.4</td>
</tr>
<tr>
<td>6. the governmental printing divisions could contribute in the printed</td>
<td>14</td>
<td>5</td>
<td>2</td>
<td>66.6</td>
</tr>
<tr>
<td>materials production with a small rate of costs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Responses favour community support - and presumably therefore control - rather than direct government funding, though the heavy cost of printing and materials production should, it seems, be subsidised by government.
### TABLE 7: PREFERENCES FOR THE ORGANISATION AND ADMINISTRATION OF THE PROPOSED OPEN UNIVERSITY (1.11)

#### a) The Headquarters (1.11.1)

<table>
<thead>
<tr>
<th>H.Q. SUGGESTED</th>
<th>YES</th>
<th>NO</th>
<th>Some other suggested cities and places</th>
</tr>
</thead>
<tbody>
<tr>
<td>TANTA</td>
<td>7</td>
<td>4</td>
<td>1. Kafrel-Sheikh</td>
</tr>
<tr>
<td>ASSIUT</td>
<td>1</td>
<td>9</td>
<td>2. Al-Fauom</td>
</tr>
<tr>
<td>BANHA</td>
<td>2</td>
<td>10</td>
<td>3. Cairo</td>
</tr>
<tr>
<td>ALMANSOURAH</td>
<td>0</td>
<td>12</td>
<td>4. Sohag</td>
</tr>
<tr>
<td>SHEBEEN-EL-KOUM</td>
<td>0</td>
<td>12</td>
<td>5. Al Zkazeek</td>
</tr>
<tr>
<td>AL MINIA</td>
<td>0</td>
<td>12</td>
<td>6. NEW CITIES</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7. ANY PLACE</td>
</tr>
</tbody>
</table>

#### b) Regional Offices and Study Centres (1.11.2)

Should Regional Offices and Study Centres be on the British Open University Model?

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>0</td>
<td>2</td>
<td>90.50</td>
</tr>
</tbody>
</table>
a) Increase of social demand for open admission of secondary education leavers to attend the university education. (1.12.1).

The Open University can contribute in solving this problem by:

<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. giving the chance to all secondary education leavers to attend the University but on the basis of work and study at the same time.</td>
<td>13</td>
<td>5</td>
<td>3</td>
<td>61.9</td>
</tr>
<tr>
<td>2. giving the chance to conventional universities students to study at the University after applying a suitable system for transformation from the conventional universities.</td>
<td>10</td>
<td>8</td>
<td>3</td>
<td>47.6</td>
</tr>
<tr>
<td>3. giving the chance to G.S.C.E. students recently graduates to study at the University for some selected courses.</td>
<td>6</td>
<td>11</td>
<td>4</td>
<td>28.6</td>
</tr>
</tbody>
</table>

An open policy is supported, reflecting an opinion that an Open University could help to solve the problem of absorbing school leavers and contributing to their personal development once they are in work.
b) The University can contribute to solving the problem of inadequate staff supply by:

(1.12.2)

<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. the facilities and distance teaching methods and its technological devices</td>
<td>8</td>
<td>10</td>
<td>3</td>
<td>38.1</td>
</tr>
<tr>
<td>could be used in providing the regional universities and faculties with courses and study materials by setting up a co-operation link between the proposed University and these Universities and faculties.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. supposing that the proposed Open University idea postponed for one reason or others, it is effective to use distance teaching methods and techniques in the regional universities and faculties to solve this problem.</td>
<td>14</td>
<td>5</td>
<td>2</td>
<td>66.6</td>
</tr>
</tbody>
</table>

There is more support for the radical possibility of the new institution to resolve this problem on its own rather than involving the traditional universities in it.
The University contribution could help to resolve the gap between graduate qualifications and employment by:

(1.12.3)

<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. preparing and production for post-experience self-contained courses for the conventional universities graduates and this could be realised in such a way like conducting a scheme for co-operation between the proposed university and different work sectors.</td>
<td>12</td>
<td>6</td>
<td>3</td>
<td>57.1</td>
</tr>
<tr>
<td>2. supposing that the proposed open university idea postponed for one reason or others, the associate student courses and programmes prepared on those basis used at the British Open University could be used in the training programmes for the graduates and employers.</td>
<td>9</td>
<td>9</td>
<td>3</td>
<td>42.9</td>
</tr>
</tbody>
</table>

The proposed University system could contribute to resolving the problem of large numbers of undergraduate students at the conventional universities by:

(1.12.4)

<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. giving the chance to this students category to study at the University without dropping out from their work sectors to join the study at their faculties.</td>
<td>15</td>
<td>4</td>
<td>2</td>
<td>71.4</td>
</tr>
<tr>
<td>2. giving them the chance to study new courses and new fields other than available at the conventional universities.</td>
<td>15</td>
<td>4</td>
<td>2</td>
<td>71.4</td>
</tr>
</tbody>
</table>
TABLE 39: THE ROLE OF THE PROPOSED UNIVERSITY IN OTHER FIELDS (1.13)

<table>
<thead>
<tr>
<th>POSSIBILITIES</th>
<th>YES</th>
<th>NO</th>
<th>NO RESPONSE</th>
<th>% FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. in-service teachers training.</td>
<td>13</td>
<td>5</td>
<td>3</td>
<td>61.9</td>
</tr>
<tr>
<td>2. taking part in some programmes of adult education and illiteracy teachers training.</td>
<td>17</td>
<td>2</td>
<td>2</td>
<td>80.9</td>
</tr>
<tr>
<td>3. vocational training at a distance for some employment sectors.</td>
<td>11</td>
<td>8</td>
<td>2</td>
<td>52.4</td>
</tr>
<tr>
<td>4. the proposed university programmes not to be restricted or mobilised for specific category or certain sectors of the community but it is open for all the people and gain some new knowledge and expertise.</td>
<td>15</td>
<td>3</td>
<td>3</td>
<td>71.4</td>
</tr>
<tr>
<td>5. teaching languages at a distance.</td>
<td>15</td>
<td>4</td>
<td>2</td>
<td>71.4</td>
</tr>
<tr>
<td>6. farmers training and rural development at a distance.</td>
<td>13</td>
<td>5</td>
<td>3</td>
<td>61.9</td>
</tr>
</tbody>
</table>

Here again the general educational potential of an Open University is recognised, especially in respect of language and literacy.
Further to the information provided in the tables above, a number of additional comments were made by respondents in respect of the sections of the survey dealt with so far. They are:

i) "It is a good proposal to apply distance teaching methods in Egypt, and the proposed Open University idea is acceptable. However, there are three factors which should be considered: a) the planning process; b) the financial situation; c) integration with the other sectors concerned."

ii) "It is a good proposal. The Open University system is needed in Egypt and it should prove to be a positive element in the national education system. This proposal, if it is successfully applied, could be helpful in solving some higher education problems. It is obvious that the costs of the educational process within the proposed open university system is cheaper than those of conventional university education. Therefore the economically deprived groups could be admitted to university education in Egypt in the Open University form."

iii) "The proposed university idea needs some sort of familiarisation and popularisation, either in the public sector or the higher education sector, because many people do not know about it. Open University systems and methods require understanding of distance teaching methods, organisation and systems over the world wherever they occur. I hope that the planning
philosophy and operating system used are to be original, and not just taking the same form as other Egyptian Universities. I want it to be with special features. So I suggest that a community should be authorised to start preparing for applying this proposal and to agree on the needs to be met plus the initiatives required to meet them.

iv) This is a needed proposal within the university system of Egypt and I hope my comments and views could help in this respect:

- the assessment methods should be designed in a way that could help in accurately tracking the students' progress and deciding which action should be taken against any unprogressive students.

- optimum relations between the students and the tutors, at the proposed university should be one of its main features. This would help in the success of university teaching throughout the country.

- the routine and complex bureaucracy that pervades Egyptian education should not be part of this prospective university as it would act negatively on the teaching process. Fair regulations and fair relations should be established in an ideal way before running the system. This should be the main concern of any committee preparing for establishing the proposed university.
the T.V. and Radio educational broadcasts in all their aspects must be studied in economic terms before operation begins because the proposed university is expensive and this could be one of its disadvantages.

it is true that the regional universities in Egypt have some problems. The present Open University proposal could help in solving some university education problems and re-establishing the regional centres. The proposal for the Egyptian Open University could be put in action by the following suggested steps:

a) closing down some of the regional universities or the regional faculties and replacing them with the proposed regional offices and study centres of the Open University. This could be done after specifying some means of gradual closure for some of these regional faculties and universities;

b) so, in this way, finance could be arranged for the proposed university by transferring the funds of the closed universities or faculties to the budget of the Open University.

c) closing down some of the old faculties at some universities, especially those not recruiting well, could be source for financing the proposed university and could easily be arranged.
d) the present programmes for qualifying primary school teachers to the university education level by using face-to-face teaching in the faculties of education, plus radio and T.V. broadcasts and distributed texts could be the nucleus for an Educational Studies Faculty at the proposed Open University. However, this programme needs some modification to be equivalent in stature with the existing university system.

e) careers and professional sectors of private or governmental industries, companies, trades, etc. should contribute to the proposed university budget.

v) the proposal introduced in the present questionnaire represents a reasonable objective for an Egyptian Open University. I would like to introduce the experiment of Alexandria University in its broadcasts programme called "University of the Air" produced and broadcast by Alexandria Local Radio. This programme includes introducing the courses which are taught at the university faculties but put in a simple way. From my view, this experiment could be easily modified and flexible according to whatever distance teaching methods are used at the proposed Open University.

vi) I have some comments on the present facts included in this questionnaire, and these are:
a) mailing the university material to students' homes must be by express delivery, not the ordinary mailing used in Egypt;

b) general programme at Cairo Radio and Tanta Local Radio could be specialised for the proposed University broadcasts;

c) the Third Channel of the Television could be used for the proposed University broadcasts and after suitable reinforcement of the signal so as to be received in all parts of the country;

d) the university staff with the highest levels of practical experience should be appointed as full-time staff at the proposed university with new rules for appointment;

e) B.A. and B.Sc. degrees should be the degrees awarded by the proposed university at the first stage of its establishment and operation;

f) a special account for the proposed Open University project should be opened now with contribution from the Government. Then the Egyptian people can make donations, be associated with it, and international agencies will be more likely to assist;

g) a graduate affairs office should be set up within the university administration structure;

vii) I hope the proposed Open University programme can be given momentum and projected towards development projects in Egypt in different sectors of the economy, especially in industry and community education programmes.
With respect to the second part of the survey, respondents were invited to comment on aspects of radio and television broadcasting in Egypt.

Table 40 shows the responses received for information on educational broadcasts on radio in Egypt and the following responses were received in respect to sections 2.1.2 through 2.1.6 on the questionnaire.

The programmes produced for university education are in the area of qualifying primary school teachers to the university level with the contribution of the Ministry of Education and local radio transmissions (2.1.3).

The major difficulties encountered by the radio in producing educational programmes arise from the inadequacy in its financing (2.1.3).

Other authorities and sectors contributing to the product of educational radio programmes are (2.1.4):

- educational aids sector at the Ministry of Education.
- National Centre for Educational Research at the Ministry of Education.
- Ministry of Health.
- Ministry of local governorates.
- Ministry of Labour.
The present Educational Programmes Broadcasts on the Radio are

<table>
<thead>
<tr>
<th>Programme</th>
<th>Time</th>
<th>Date of first Broadcasting</th>
<th>Daily/Weekly/Monthly</th>
</tr>
</thead>
<tbody>
<tr>
<td>basic education (primary and preparatory)</td>
<td>15 minutes</td>
<td>18 Oct., 1986</td>
<td>Daily</td>
</tr>
<tr>
<td>secondary education, general</td>
<td>15 minutes</td>
<td>10 Nov., 1986</td>
<td>Daily</td>
</tr>
<tr>
<td>secondary education, industrial</td>
<td>15 minutes</td>
<td>10 Nov., 1986</td>
<td>Daily</td>
</tr>
<tr>
<td>secondary education, commercial</td>
<td>15 minutes</td>
<td>10 Nov., 1986</td>
<td>Daily</td>
</tr>
<tr>
<td>qualifying primary school teachers to the university level (first level)</td>
<td>15 minutes</td>
<td>November 1986</td>
<td>Twice a week</td>
</tr>
<tr>
<td>qualifying primary school teachers to the university level (second level)</td>
<td>15 minutes</td>
<td>November 1986</td>
<td>Twice a week</td>
</tr>
<tr>
<td>qualifying primary school teachers to the university level (third level)</td>
<td>15 minutes</td>
<td>November 1986</td>
<td>Four times a week</td>
</tr>
<tr>
<td>qualifying primary school teachers to the university level (fourth level)</td>
<td>15 minutes</td>
<td>November 1986</td>
<td>Four times a week</td>
</tr>
<tr>
<td>illiteracy</td>
<td>15 minutes</td>
<td>February 1969</td>
<td>Daily, except Fridays</td>
</tr>
</tbody>
</table>
while the range of receiving radio transmission is now covering all the country locations (2.1.5).

The priority considerations for selecting the educational programmes' broadcasting times are (2.1.6):

1) illiteracy programmes: by conducting a questionnaire between different sectors of the Egyptian people; and by field researchers concerning the convenient times for broadcasts.

ii) qualifying primary school teachers to the university level programmes by co-ordination with the Ministry of Education and the Universities.

With respect to present educational programmes on television in Egypt (2.2), the following is a summary of reactions received to questionnaire items 2.2.1 through 2.2.6.

In answer to the first question in this section (2.2.1) on the kind of educational programmes produced on Egyptian television, the information gained is in the next table.41

The priority considerations for selecting the educational programmes' broadcasting times are based on (2.2.6):

- the results of a questionnaire about the convenient times conducted between different selected samples, plus the co-ordination between the T.V. and concerned sectors.
### TABLE 41: WHAT EDUCATIONAL PROGRAMMES ARE BEING PRODUCED ON EGYPTIAN-TV. (2.2)

<table>
<thead>
<tr>
<th>PROGRAMME</th>
<th>TIME</th>
<th>COMMENCING DATE</th>
<th>DAILY/ WEEKLY/ MONTHLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Teaching English Language</td>
<td>15-30 mins.</td>
<td>1978-now</td>
<td>3 times a week</td>
</tr>
<tr>
<td>- Sciences simple (Adults)</td>
<td>15 mins.</td>
<td>1981-84</td>
<td>Once a week</td>
</tr>
<tr>
<td>- Teach Your Self (Career Teaching)</td>
<td>15 mins.</td>
<td>1979-85</td>
<td>Once a week</td>
</tr>
<tr>
<td>- Medicine in service to the community</td>
<td>30 mins.</td>
<td>1980-now</td>
<td>Once a week</td>
</tr>
<tr>
<td>- Traffic guidelines</td>
<td>15 mins.</td>
<td>1979-now</td>
<td>Once a week</td>
</tr>
<tr>
<td>- Qualifying the primary school teachers to the university level</td>
<td>30 mins.</td>
<td>1983-now</td>
<td>9 times a week</td>
</tr>
</tbody>
</table>
On the kinds of television programmes produced for University programmes (2.2.2), the main case is for qualifying primary school teachers to the University graduate level (4 levels) in specific areas.

The major difficulties encountered by the Television in producing educational programmes arises from the inadequacy of its financing (2.2.3).

Other authorities and sectors contributing to the production of educational T.V. programmes are (2.2.4):

- Ministry of Education
- Ministry of Labour
- The Universities
- Ministry of Health

while the range of receiving Television transmission (2.2.5) now comprises:

- The First Channel transmission covers all Egypt.
- The Second Channel transmission covers nearly all Egypt.
- The Third Channel transmission covers Cairo city.

The final section of the second part of the questionnaire (2.3) requested views on the proposed role of the Egyptian Broadcasting Corporation in respect of an Open University development in that country.
Respondents saw such a development as popularising the idea of setting up the proposed university, and involving producers and the present staff of the radio section in the educational programmes of the Corporation within the proposed university on the basis of their experience. However, new procedures would be required for producing Open University radio programmes.

Respondents favoured setting up links for co-operation and training of Egyptian staff in the BBC and/or the British Open University (2.3.1).

As far as the television section of the EBC is concerned (2.3.2), the general view was that the two main channels, covers the country and so it is fit for the transmission of materials in the context of an Open University.

However, they felt that there should be a reorganisation so that certain channels could be specialised for the proposed Open University programmes, and to be autonomous, that is to say, without any pressure from political or other pressures (e.g. the scheduling of popular sports programmes). EBC, it was considered, could have the technical role of producing and operating programmes.

As with radio, respondents favoured setting up links for co-operation and training, either with the BBC or the British Open University.

Wider views on the value and operation of broadcasting and related services as part of a proposed Egyptian Open University included the observation that it would be ideal for popularising the proposed university idea among the people of Egypt.
There could be considerable value in respect of such programmes in the task of upgrading the qualification of a primary school teacher to the University level; though for this and other OU objectives the broadcasting times should be adapted to be more suitable for the potential students.

All respondents felt that co-operation between the proposed Open University and the EBC direct and therefore free from the notirians and complex bureaucracy.

7.5 Additional Information and Views

As well as the organised questionnaire survey conducted by the writer, he also gathered information from interviews with a number of important figures in the field in question. From these, he discovered that before 1968 educational broadcasts by radio were already being shortened so as to be within the limits of timetabling in school. There already exist: geography lessons, languages teaching, and some coverage of competitions between schools as well as the merit students programme. These programmes were prepared in co-operation with the Ministry of Education. However, in television at that time there were no educational programmes at all. In fact, the importance of educational programmes came to light during the War with Israel in June 1967, when schools closed and students awaiting their examinations were assisted by special education programmes introduced by the radio. These programmes were obviously temporary as there was no autonomous department at the Egyptian Broadcasting Board dealing with such programmes.
In January 1968 Mrs Shokry took the first step towards developing real educational programmes on Egyptian Radio and T.V. They comprised merely:

a) lessons for language schools;
b) historical stories and some novels which could be played in a drama form;
c) lessons in arithmetic for primary, preparatory and secondary schools.

Included in this educational broadcasting process were text books.

In addition to the schools broadcasts, the Anti-illiteracy programmes began in February 1969 and are still provided by radio. To test the publicity and the effectiveness of the anti-illiteracy programmes, the Egyptian State Broadcasting, Planning and Follow-up Department, Research Section, conducted a Questionnaire in some areas. Projects included: field research on the experiment of combating illiteracy by radio; the view of Supervisors and students in the anti-illiteracy programme in order to assess their views on the benefit derived from the course. These questionnaire results were positive and some prizes were gained by the Egyptian Broadcasting Corporation such as the UNESCO Prize for very efficient work in the field of anti-illiteracy (1973) and the Japan prize for teaching adults by Radio (1977 and 1979). Expertise was consolidated when the T.V. section of EBC used the radio staff involved in the earlier experiment and trained them on the job for television.
These innovations were comprising not only the television programmes but also:

a) printed materials for the anti-illiteracy teachers (supervisors);
b) the use of study centres selected from primary school locations;
c) weekly meetings held at the Egyptian Broadcasting Headquarters in Cairo between programme staff, teachers (Supervisors), and some students as representatives.
d) regular (Thursday) meetings for teachers (supervisors) to explain methods and facts;
e) Assignment forms for the students to assess their own progress, that is to say, a self-evaluation exercise.

In addition to these explicitly educational programmes, there are some other general adult education programmes on the radio such as:

a) radio programmes forwarded to rural areas for doctors to be in co-operation with the Ministry of Health.
b) Workers' University programme in co-operation with the Ministry of Labour, on themes such as instructions for the industrial security; safe from fire, chemical gases, and so on.
c) Local Council programmes in co-operation with the Ministry of local governors.

Returning to the formal education front, the present programme of qualifying primary school teachers at the university level (in co-operation with the Egyptian universities and Ministry of Education), represents a remarkable project begun in 1983 with the co-operation of the Faculty of Education, at Ain Shams University. It was then generalised to other universities. The Egyptian television authorities took part in this programme, the first one in the field of higher education. A few facts about this programme could be supportive of the Open University idea:

a) there were 5,000 participants; the Faculty of Education at Ain Shams University governed the project in co-operation with the Egyptian Radio and Television services;

b) altogether, there were 32,000 participants among primary school teachers alone plus the Faculties of Education at 11 Egyptian Universities in co-operation with the Ministry of Education and Egyptian Radio and Television;

c) free books were distributed to the primary school teachers as well as other reference material;

d) the teachers had two days a week face-to-face tutoring at the Faculties of Education after working hours;
e) the Faculty of Education at Ain Shams University has the responsibility for designing the written courses and the examinations.

f) the Radio and Television departments of EBC produce the broadcast material in their own studios and the Media Department of the Ministry of Education also produces some;

g) the Centre for Educational Research at the Ministry of Education has a role in these programmes by co-ordinating and supervising the whole process and offering guidance;

h) study programmes and courses are divided into four levels and these include:

i) ten broadcasts per week, 15 minutes each by the radio (2 for the first level, 2 for the second level; 4 for the third level; and 4 for the fourth level.

ii) nine broadcasts per week, 30 minutes each, by the television.

i) the primary school teachers in this programme select their courses of study.

j) study centres are located in the nearest university or faculty to the students' homes; one of the teaching staff at these universities or faculties is appointed to be the Director of the Study Centre with another member of teaching staff to be the deputy in charge. There is also a team of professional
and administrative staff. So the students can attend these study centres, meet their tutors and discuss their problems on Fridays and in vacations, and have a study session of two months during Summer holidays to do their practical lessons and these for science and language courses.

k) the study period is for four years, each year having two 4 months semesters.

The existence of this scheme for primary school teachers provides an excellent back-up for the idea of an Egyptian Open University.

7.6 Some Considerations arising from the Writer's Survey

The main purpose of the questionnaire was to highlight the possible methods and styles of setting up a distance teaching University in Egypt. The essential model selected to help in the procedures of serving this purpose is clearly the Open University of the United Kingdom. Its mode of operations were supported by most of those responding. There is also something to be gained from the experience of other similar institutions, especially those in developing countries.

Apart from the upgrading primary school teachers course (1983) the Egyptian education system had little organised experience in this field and so there is a definite shortage of expertise. This obviously applies even more to the
secondary and tertiary sectors. There is a stated need for distance education to serve other sectors of Egyptian education. ¹

The outcome of the writer's survey was that:

a) the British Open University is generally acceptable as a model;

b) there is a particular need for offering new courses;

c) but associate students, and others having no or few qualifications, were not seen as the clientele of the Egyptian OU;

d) in consequence, the entry will be geared towards those holding the secondary school certificate, though not directly from school;

e) a period of work experience before the OU is deemed essential and so the respondents favour the entry model of 24+;

f) the 36 week period of study per annum, on the same basis as at the UKOU is agreed as being the most desirable

g) the course team approach, and other methods at the UKOU are seen as suitable models for a proposed OU in Egypt, with academic appointments being at least up to the standards of those at conventional universities;

h) the main areas of need for the proposed OU to address in the first instance were reckoned to be: Educational Studies (71.43%), Arabic Language (47.62%), Social Sciences, Technology, Commerce and Management Studies, (all 38.09%).

i) finances should be from public funding but not subject to the grip of existing bureaucracies.

j) Tanta City was selected as the University headquarters by 33 per cent of respondents.

It is clear from the writer's survey that, at least according to the educationists and other professionals surveyed, there is a need for an Egyptian Open University and that the British Open University is, in most respects, a suitable model. This information will be combined with the documentary evidence discussed in earlier chapters to service the conclusion of the thesis which now follows.
CONCLUSION

This comparative and international distance higher education study intended:

a) to concentrate on the characteristics of major distance higher education systems in a global perspective;

b) to give special reference to the Open University of the United Kingdom in view of its successful *modus operandi*;

c) to undertake a survey of selected view on the establishment of an Egyptian Open University;

d) to set out the geographical framework for such a university in Egypt.

Only item d) remains to be described along with a brief review of the findings of the study undertaken and written up in preceding chapters.

From a review of selected literature on distance education, certain fundamental principles and modes of operation were identified in the earlier chapters. It was possible to outline the various definitions that clarify the different components of distance education, to examine the economics of selected systems and undertake a global review of the 'open university phenomenon'.
From this review it became clear that, although not the longest established of the open universities, the Open University of the United Kingdom had been a major influence on many others and was widely regarded as a tried and tested model for this type of institution. It was therefore necessary to visit the headquarters of the British Open University and examine its operations both in terms of observation and also of documentation on it, internal and external.

Many developing countries face severe financial problems in providing higher education in a context of relatively poor transportation facilities and sometimes large distances. These distances may be within a country (India) or between a number of small countries sharing a higher education network (South Pacific). Distance education is less costly than the conventional forms of education, especially university education. Also distance education techniques have the capacity to dissolve the barriers of time, distance, age, and qualifications, giving it an attractive profile. On the other hand there are complicated organisational and logistical imperatives in the provision of a good distance network. The costs of such an operation may be compounded as:

a) the investment in media and materials which is high in relation to the number of students in the system; and in comparison with conventional universities;
b) the **direct student cost** which is a little above though roughly parallel with traditional operations;

c) the **variable cost per student** which is lower than in a conventional University. However, the number of students that can be serviced in relation to full-time staffing, plus the flexibility provided, enabling work and study at the same time, and the avoidance of large capital and operational expenditure on a monolithic campus are all favourable to the distance model. Nonetheless the study above shows that the best results, both economically and otherwise are achieved when the distance and traditional sectors of provision work together in some way.

Moving on from the question of economics it is clear that distance systems at the tertiary level are able to serve particularly sensitive needs such as:

a) providing a wider range of opportunities to adults who, for some reason whether social, economic or geographical, cannot attend university on-campus education: in particular they may not have had the chance to gain the normal pre-university qualifications;

b) providing higher education at a lower cost in the long run, specially for the developing countries;

c) providing education and training programmes for rural development;
d) providing professional self-contained post-experience courses;

e) enabling a democratisation of higher education by giving access to a larger population;

In respect of all these potential contributions to tertiary provision, with the possible exception of item c), it seems that the British Open University has succeeded, not only within Britain but in terms of its links with other countries. An examination of the history and operation of the British Open University educated the writer as to the careful consideration of certain essential components of planning that would be necessary in setting up an Egyptian Open University, such as: institutional objectives; the target audience; admissions criteria; study methods, media and timescales; local student support; institutional organisation and administration; institutional staffing; finance structure/system; relationship with other institutions; relationship with existing broadcasting and other communication facilities in the area to be served. It was on the basis of such a framework that the writer formulated his questionnaire to be used to gain the views of important professionals in Egypt as to the operational policy that would be preferable in setting up an Open University in that country.
In fact the idea of having such an institution was discussed as long ago as 1978 by the National Council for Education, Research and Technology and their ideas assisted the writer in formulating his study. In particular the Council recommended a study/link in respect of the British Open University. The results of the questionnaire, which support the idea of setting up an Egyptian Open University could be summarized as follows:

a) **Aims and Objectives:**

- to give a second chance for adults, who could not attend higher education institutions for some social, economic, geographical reasons;

- to take part in solving some problems of university education expansion in Egypt considering the inadequacy in the facilities available;

- to take part in solving some problems of regional universities;

- to offer new courses, in particular similar to those called self-contained post-experience courses at the UKOU;

- to develop the present training programmes for university graduates on the basis of distance education;

- to make a significant contribution on environmental and community education programmes.

b) **Students**

The results of the questionnaire show that undergraduate and associate students courses should be the only programmes at the first stage of establishing the proposed Open University.
1) **Admission:**
   - General Secondary School Certificate holders and their equivalents;
   - admission priorities should consider the 'remote area students';
   - the total marks in General Secondary School Exam, should not be considered.

ii) **Age of Admission:**
   - 24 years or over;

iii) **Other Students**
   - giving the chance to the armed forces and prisoners to study undergraduate courses on the same basis of admission.
   - Associate students, B.A. or BSc holders and who spent 5 years work.

c) **Teaching Staff**
   - the appointments of teaching staff should be on the basis of excellent academic experience, and ability in designing courses on a distance teaching basis with evidence of written materials and books;
   - counsellors' appointments should be in addition to the previous basis, by advertisement as between the professors and assistant professors at the conventional universities;
   - tutors' appointment should be on a part-time basis and from the nearest conventional universities to the proposed university regions and at least at lecturer level.
d) **The Proposed University Faculties**
   - Faculty of Educational Studies;
   - Faculty of Arabic Language;

   (at the first stage of setting up the University).

e) **Degrees and Courses**
   - first university degrees only at the first stage;
   - courses for associate students;
   - courses and programmes for vocational training;
   - courses and programmes for community and environmental education;
   - no transfer at the first stage should be allowed from the other universities until the regulations are adopted for that and the system can cope with it.

f) **Methods and Media**

   i) **Materials**
   - correspondence texts and other printed materials and recommended books list - the texts should be used throughout the academic year, meaning 36 texts over 36 weeks as per the system used in the UKOU.
   - texts should be distributed, with other printed materials by the local study centres after receiving it from the University H.Q. and to avoid some disadvantages of the mail delivery.
- Home Experimental Kits, for science courses and some other courses, could be used on any stage of operating these courses at the proposed university; the kits used in the UKOU could be adapted and manufactured in Egypt with the co-operation between the proposed university and the UKOU.

ii) **Teams of Tutors**

- course team approach is favoured as its functioning at the UKOU represents the suitable approach for preparing courses and materials;

- tutors and counsellors are required, working with the local study centres and on a similar basis to the UKOU;

iii) **Summer Schools** should be held as an integral part of the courses of the proposed university, with some considerations to the period spent at these schools, being between 2-3 weeks.

iv) - the Radio and Television role in teaching must be central to the new institution but some organising operations, especially the times of broadcasting and the role of the third channel at the Egyptian Television, need to be carefully rephased so as to cover all the locations of Egypt;

- the present programme of upgrading primary school teachers to the University level could be considered as a guide for the new radio and television programmes, plus an Alexandria University programme called 'University of the Air', plus broadcasts by the local radio in Alexandria and similar programmes by Tanta local radio and others.
g) **The Headquarters and Regional Offices Locations:** (see Map 4)
   
a) **Tanta City** selected to be the H.Q. as it is located in the middle of El-Delta, easy transport to it or from it to all the cities and towns of Egypt, and to decrease the pressure of highly populated areas like Cairo the capital.

b) **Regional Offices** locations could be distributed to cover all the Egyptian Governorates as the following:

i) Cairo, to cover the governorates of Al-Kahera, Al-Giza, and Al-Kaluobia.

ii) Alexandria, to cover the governorates of Alexandria, Al-Beheira, Marsa-Matrob.

iii) Tanta, to cover the governorates of Al-Gharbia, Kafr. E-L-Shiekh, Al-Mienofiah.

iv) Zagazeek, to cover the governorates of Al-Sharkiah, Al-Dakahliah, Dommitah.

v) Al-Esmaeliah, to cover the governorates of Al-Esmaeliah, Suez, and Port-Said.

vi) Al-Aariesh, to cover the governorates of Sini North, and Sini South.

vii) Bni-Swief, to cover the governorates of Bni-Swief, Fauom, and Minia.

viii) Assiut, to cover the governorates of Assiut, Sohag, Alwady Al Gadeed (New Valley) and (Al-Bahr Al-Ahm$r) Red Sea.

ix) Aswan, to cover the governorates of Aswan and Kenya.
h) University Administration (See Fig. 7)

The Fig. 7 system should form the organisation of the proposed University, with reference to the UKOU model and with some adaptation to be agreed.

i) Finance

- public finance is the best way of supporting the proposed university;

- the governmental printing divisions could in effect subsidise the printed materials production;

- certain support could be given locally, but too much dependence on this could lead to disparities which the system is being set up to reduce.

The writer feels that the international evidence of widespread distance education experience and development in tertiary distance education justifies the idea of the establishment of an Egyptian Open University. He believes that his thesis leads to the conclusion that such a university should be set up in Egypt as soon as possible. As it happens, just as he was concluding his empirical work, in fact in March 1987, the decision was taken to set up an Egyptian Open University:
MAP 4: THE EGYPTIAN UNIVERSITIES PLUS PROPOSED LOCATIONS FOR AN OPEN UNIVERSITY

KEY

Existing Universities
- Old Universities
- Regional Universities
- Regional Faculties

Proposed Open University

〇 Suggested HQ
1 to 9 Suggested Centres
(See following page for details).

SOURCE: Complied by writer
KEY TO THE NODES OF A PROPOSED EGYPTIAN OPEN UNIVERSITY NETWORK

1) CAIRO - including: AL-Kahera
   AL-Giza
   AL-Kaloubia

2) ALEXANDRIA - inc: Beheira
   Marsa Matt-Roh

3) TANTA (HQ) - inc: EL-Ghurbia
   Kafr-el-Shiekh
   Mienofiah

4) ZKAZEEK - inc: Al-Sharkia
   Al-Dakahlia

5) AL-ESSMAELIAH - inc: Essmaeliah
   Suez
   Port Said

6) AL-ARIESH - inc: Sinai North
   Sinai South

7) BNI-SWIF - inc: Bni Swief
   Fawom
   Minia

8) ASSIUT - inc: Assiut
   Sohag
   Wadi-Gadied
   Bahr Ahmar

9) ASWAN - inc: Aswan
   Kena
FIGURE 7: PROPOSED ORGANIZATIONAL STRUCTURE OF AN EGYPTIAN OPEN UNIVERSITY

- Chancellor (President)
- Council
- Vice-Chancellor Planning and Operations
  - International Co-operation Unit
  - Warehouse Unit
  - Publishing Unit
  - Engineering Unit
  - Marketing Unit
  - Distribution Unit
  - Production Unit
  - Planning Unit
- Vice-Chancellor Teaching Sector
- Vice-Chancellor Students Affairs
  - Graduate Affairs
  - Director of the Region
  - Students Affairs Director
  - Enquiry
  - Librarian
  - Regional Directors
  - Study Centres
- Associate Student Affairs
- Director Educational Technology Unit
- Deans
- Heads Course Teams
- Educational Broadcasting Unit
"The presidential council of Egyptian universities, in its meeting on 26 March 1987 under the Chairmanship of Dr. Srour, Education Minister, agreed on setting up an Egyptian Open University and the starting date will be the next academic year." 1

Hopefully the new institution will take account of the ongoing work of the British Open University and involve that university in its own detailed planning. The fact that yet another new distance system is to be created at the tertiary level, and one which will certainly have links with the British Open University, namely the 'University of the Commonwealth', 2 also has potential value for the Egyptian planners even though they would not be part of it. So the essential comparative and international perspective favoured by the writer must be one that Egyptian authorities take into account. There is plenty of international evidence and support on which to draw so as to avoid making the mistakes of earlier initiatives in this field.

APPENDIX 1: SURVEY QUESTIONNAIRE? ENGLISH TEXT

PROSPECTS FOR ESTABLISHING AN EGYPTIAN OPEN UNIVERSITY IN THE LIGHT OF THE BRITISH OPEN UNIVERSITY SYSTEM

Dear Member of University Staff

You are invited, on the basis of experience in University education in Egypt, to participate in this questionnaire about the possibilities of setting up an Egyptian Open University in the light of the British Open University System. It is obvious from present application and experience in the field of distance higher education worldwide that the UKOU represents the best model yet devised for enlarging access to higher education opportunities.

I should be grateful if you would answer all the items frankly. Your answers will be of immense value because they would enable me to explore fully the whole idea of Open University for Egypt.

Thank you

A. E. BAKR

October 1986
QUESTIONNAIRE

Study the Possibilities of Setting Up an Egyptian Open University in the Light of the British Open University System

1.1 Personal Data:
- Name
- Occupation
- University
- Faculty
- Others

1.2 Prospects for the Basic Ideas (Aims and Objectives):
Tick (✓) as appropriate (all the statements agreed with your opinions).

☐ to give a chance to the adults who cannot obtain admittance to university education for some reasons, such as social, economic, geographical, and etc.

☐ to take part in solving the problems of the large numbers of students. Pressure on university education caused by open admission policy in spite of the obvious inadequacy, either in the universities facilities or teaching staff.

☐ to take part in solving some problems of the Regional Universities; such as the inadequate buildings, laboratories, teaching staff, and other facilities.

☐ to contribute in reducing the drop-out rate at the University, whereas the students dropped can work and study at the proposed university.
to offer a new course similar to the U.K. Open University's self-contained post-experience courses for the associate student category.

to decrease the pressure of the associate students for undergraduate courses at some conventional university faculties, such as Arts, Commerce and Law by the means of introducing a new course designed on distance teaching basis.

to facilitate the admission of remote areas, geographical too far places to university education.

to develop the present training programmes for the university graduates on the basis of distance teaching.

to make a significant contribution in environmental education programmes and community education.

Write your other opinions and comments in the space below:

1.3 Students Admission:

1.3.1 Undergraduate Students:

Tick (✓) as appropriate.

G.S.C.E. graduates and their equivalents, but who spent a certain number of years in their jobs.
the admission at the proposed university should consider the employers' priorities than the other students categories.

the admission priority should be to consider the remote and far places areas students.

the admission priorities should consider the oldest students than youngest with reference to the other roles of admission.

the admission priorities should consider the youngest students than the oldest with reference to the other roles of admission.

the admission should be open to any person without considering the graduation date.

stipulation of the total number of marks at the G.S.C.E. or its equivalents.

without stipulation for the total number of marks at the G.S.C.E. or its equivalents.

admission policy at the proposed university should consider the candidates categories to make sure that the different professional groups do not occupy a large proportion of the places available.

the transformation between the conventional universities students and the proposed university should be regulated very carefully at the first stages of the establishment.
1.3.2 Admission Age:

Tick (√) as appropriate.

☐ 18 years  ☐ 19 years  ☐ 20 years
☐ 21 years  ☐ 22 years  ☐ 23 years
☐ 24 years

What do you think about the idea of no limits for the admission after 24 years?

☐ Yes  ☐ No

If your answer is NO, please state why?

1.3.3 Associate Students Admission:

Tick (√) as appropriate.

☐ the candidate should be qualified at the first university degree level.

☐ the candidate could be a technical qualified with 5 years experience in his work.
the candidate could be in an administration job with 5 years work experience.

housewives qualified at the first university degree level could study some selected courses.

the candidate could be accepted without the university first degree level.

Write your suggestions and comments.

1.3.4 Handicapped Students Admission:

Tick (√) as appropriate.

- the candidate should be G.S.C.E., or its equivalent, holder.

- there should be no stipulations for their admission.

- the total marks in their certificates and their ages should be considered for the number of places requirements.
1.3.5 Other Categories Admission:

1.3.5.1 Armed Forces:

Do you agree with the idea of armed forces students acceptance?

☐ Yes ☐ No

1.3.5.2 Prisoners:

Do you agree with the idea of prisoners students acceptance?

☐ Yes ☐ No

1.4 Degrees Structure

Tick (✓) as appropriate.

☐ credits system used at the U.K. Open University should be used.

☐ the first degrees level only should be the course of study at the proposed university.

☐ one credit per one academic session could be followed.

☐ two credits per one academic session could be followed.

☐ three credits per one academic session could be followed.

☐ the first degrees level should be the course of study at the first stage of the proposed university establishments.
the first degrees level, in addition to the associate students courses, enough for the study system at the first stage of the proposed university establishment.

associate students programmes could be run by three years. For instance, after the university establishment.

no transformation should be allowed from the conventional universities at the first stage of the university establishment.

Write your suggestions and comments.

1.5 The Study System:

1.5.1 The study period per one session could be 36 weeks with 12-14 hours per week on the same basis of the U.K. Open University system. Do you agree?

☐ Yes ☐ No
1.5.2 Summer Schools:

The summer school idea and basis used at the U.K. Open University is the suitable one. Do you agree?

☐ Yes ☐ No

Write your suggestions and comments.

1.5.3 Correspondence Texts:

36 texts considering the course length per one academic session on the same basis applied at the U.K. Open University is the way to be used. Do you agree?

☐ Yes ☐ No

Write your suggestions and comments.

1.5.4 Correspondence Texts and Study Materials Delivery System.

Tick (✓) as appropriate.

☐ by mail from the Headquarters (H.Q.).

☐ could be distributed directly to students from the H.Q.
to be sent to the study centres, then the students can collect.

1.5.5 Home Experiment Kit:
Tick (√) as appropriate.

- kits production lines at the U.K. Open University could be the main resource for it.

- kits could be provided at the first stage of establishment from the U.K. Open University production lines then it could be produced later.

- with the co-operation between the U.K. Open University and an Egyptian production team, it could be possible to produce the kits.

Write your suggestions and comments.

1.5.6 Radio and Television Broadcasts:
Tick (√) as appropriate.

- about one hour per week could be the suitable time for both the radio and television broadcasts material.

- more than one hour per week could be the suitable time for both radio and television broadcasts material.
1.5.7 Tutoring and Counselling:

Tick (√) as appropriate.

- Radio and television broadcasts times should be on the weekend and the after-work hours times.

- Meetings, study groups and etc. held at the study centres should be run every week.

- Meetings, study groups and etc. held at the study centres should be run every two weeks.

- Meetings, study groups and etc. held at the study centres should be run every three weeks.

- Tutors should be appointed on a part-time basis by the advertisement between the teaching staff and assistant lecturers at the nearest universities to the study centre.

- Tutors should be appointed on a part-time basis by the advertisement between the teaching staff (professors, assistant professors, lecturers) only.

- Providing the students with an enquiry form to include any questions or comments from the students as well as their views about the courses, methods and etc. These forms should be provided as early as the student accepted for the study.
Write your suggestions and comments.

1.6 Preparing Study Material:

1.6.1 The Course Team:

Course team approach and methods at the U.K. Open University represents the model selected for the proposed university. Do you agree?

☐ Yes  ☐ No

Write your suggestions and comments.

1.6.2 Stages of preparing and producing the courses at the U.K. Open University represents the model selected. Do you agree?

☐ Yes  ☐ No

Write your suggestions and comments.
1.7 Teaching Staff Appointments:

Tick (√) as appropriate.

☐ teaching staff appointments should be regulated on the same basis used at the conventional universities.

☐ another regulation for teaching staff appointments should be followed.

☐ teaching staff appointments should be on some other basis such as, perfect academic experience, the ability and high interest in designing courses, books and written material production which adjusts with the nature of distance teaching.

☐ courses counsellors should be appointed by advertisement between the conventional universities and academic centres academic staff (professors and assistant professors).

Write your suggestions and comments.

1.8 The University Faculties:

The following faculties represents the suggested ones to be as all or some of it the nucleus of the proposed university. Tick (√) as appropriate.
1.9 The University Finance:

Tick (✓) as appropriate.

☐ the government should finance the proposed university with a proportion of students fees representing 15%.

☐ the government should finance the proposed university with 75% of its budget and 25% proportion from student fees.

☐ the government should finance the proposed university with 50% of its budget and 50% proportion from student fees.

☐ the government should finance the university fully on the first stage of its establishment (limited number of years) with the radio and television contribution inclusively towards the costs of production and transmission of broadcasts material.
the contribution from the different community sectors, people and other boards should be the main source of the university finance and its setting up.

the governmental printing divisions could contribute at the first stage of the university establishment on the production of the printed texts.

Write your suggestions and comments.

1.10 The University Administration:

Figure (7) represents a prospectus for the university administration plan (adapted from the U.K. Open University equivalent).

Do you agree with this suggested administration structure?

☐ Yes ☐ No

Write your suggestions and comments.
1.11 The University Headquarters, Regions and Study Centres:

1.11.1 The Headquarters:

Tick (✓) as appropriate.

☐ Tanta  ☐ Assiut
☐ Banha   ☐ Almansoura
☐ Shbeen-El-Koum  ☐ Al Menya

Write your suggested places and cities in the space below and state your selection's reasons.

1.11.2 The Regional Offices and The Study Centres:

Figure (✓) represents a prospectus for the regional offices and study centres (adapted from the similar of the U.K. Open University). Do you agree?

☐ Yes   ☐ No

Write your comments.
1.12 Prospects for the Proposed University Role in Some Educational Fields and Problems:

1.12.1 It's supposed for the university to take part in solving some university education problems:

(i) With regard to the increase of social demand towards the government guarantee, open admission to all secondary school leavers to attend university education which represents a bad effect on the universities performance and the graduates efficiency and quality. The proposed university could contribute in solving this problem by:

Tick (✓) as appropriate.

☐ giving the chance to secondary education leavers to attend the proposed university but on the basis of work and study at the same time.

☐ giving the chance to conventional universities students to study at the proposed university but on the basis of establishing a convenience system for transformation from the conventional universities.

☐ giving the chance to G.S.C.E. recent holders to study some selected courses at the proposed university.

Write your comments.
1.12.2 Teaching Staff Inadequate in the Regional Universities and Faculties.

The University contribution in this problem could be represented in:

- [ ] the facilities of distance teaching methods and technological devices could be used in providing the regional universities and faculties with study materials as it is adapted for these universities courses.

- [ ] supposing that the proposed university idea does not come to the being or postponed for one reason or another. It is effective to use the distance teaching methods and techniques in these regional universities and faculties.

Write your comments.

1.12.3 The disintegration between graduates qualifications and their jobs requirements.

The proposed university contribution could be represented in:
Tick (√) as appropriate.

☐ preparation and production of post-experience courses especially for the universities and employment sectors need this sort of course for their employers improvements in their performance. The proposed university can run these courses with finance from these deprived sectors.

☐ supposing that the proposed university idea does not come to the being or is postponed for one reason or another. It is effective to use the associate student programmes and courses prepared for this purpose on the same basis used at the U.K. Open University could be used in training programmes for improving the performance at these sectors and to create the integration required.

Write your comments.

1.12.4 Undergraduate associate students at the conventional universities problems.

The proposed university system could contribute in:
Tick (✓) as appropriate.

☐ giving them the chance to study at home without pressure on the lectures rooms, staff performance, and etc.

☐ introducing new courses for them instead of the pressure on some theoretical courses only.

Write your suggestions and comments.

1.13 The Role of the Proposed University in some fields:
Tick (✓) as appropriate).

☐ in-service teachers training

☐ illiteracy programmes teachers training

☐ vocational training

☐ the widespread of knowledge between all the people whereas the proposed university courses and programmes open to all the people.

☐ languages teaching

☐ farmers training and rural development

Write your suggestions and comments.
1.14 University Academic Staff views in the Radio and Television Role.

1.15 Have you any ideas or suggestions about the proposed university. Please write it in the space below.
2.0 Prospects for the Egyptian Radio and Television Role at the proposed university.
(This part especially for the Egyptian Radio and Television participants).

In the Arabic texts, a brief explanation about the BBC co-operation with the British Open University as a background for the proposed role to the Egyptian equivalent.

2.1 The Present Educational Programmes at the Radio.

2.1.1 What kind of the educational programmes produced by the Radio?

Fill in the table below.

<table>
<thead>
<tr>
<th>Programmes</th>
<th>Period</th>
<th>Date of First Broadcasting</th>
<th>Daily/Weekly/Monthly</th>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.1.2 Which kind of programmes produced for University education?

2.1.3 What are the difficulties met by the Radio in producing its educational programmes?

2.1.4 What are the other authorities taking part or contributing in producing the educational radio programmes?

2.1.5 What is the range of receiving the transmission of radio broadcasts?

2.1.6 On which basis does the radio sector at the Egyptian broadcasts select the times of educational programmes broadcasts?
2.2 The Present Educational Programmes at the Television:

2.2.1 What kind of educational programmes are produced by the Television?

Fill in the table below.

<table>
<thead>
<tr>
<th>Programmes</th>
<th>Period</th>
<th>Date of First Broadcasting</th>
<th>Daily/Weekly/Monthly</th>
</tr>
</thead>
</table>

2.2.2 Which kind of programmes are produced by Television for university education?

2.2.3 What are the difficulties meeting the Television in producing its educational programmes?

2.2.4 What are the other authorities contributing in producing the educational programmes at the Television?
2.2.5 To what range could the Television transmission be received all over Egypt?

2.2.6 On which basis does the Television sector at the Egyptian Broadcasts select the times of educational programmes broadcasts?

2.3 The Proposed Role of the Egyptian Broadcasting Corporation:

2.3.1 With reference to your experience in educational programmes at Radio.

Write your suggestions in the space below.

2.3.2 With reference to your experience in educational programmes at Television.

Write your suggestions in the space below.
APPENDIX 2

SURVEY QUESTIONNAIRE: ARABIC TEXT

إعداد
عبد الجواد السيد بكر
المحاضر المساعد بكلية التربية بجامعة طنطا - جامعة هليسترا
عضو بعثة الدكتوراه في جامعتنا

أكتوبر 1986
التعليم عن بعد والتعليم الجامعي

ترمي السياسة التعليمية في الدول النامية إلى تلبية احتياجات المجتمع بالتدريس في
otts مراكز التعليم، وتعمل هذه المراكز في الحقيقة طموحاً كبيراً على
نظام التعليم الخاص وعلى نهج التدريس التربوي.

ومع ذلك، فإن الأدلة التي يظهر فيها بعض الأطراف في التدريس عن بعد، حيث يتسارع
في مدارسها الثانوية أعداد较多 من الطلاب تتجذر قدرة جامعاتنا على استيعابها (1)
ولعله من نافذة القبول أن تذكر في هذه الدراسة أن هذا النوع النقص من الخريجين
وكلم من تعلّم ما في الوقت نفسه لأنّه، فالنظام التربوي أو وضع
القرار يحدّن نفسه أمام خبرين كلما سمى:

أولاً: قبول هذه الزيادة تحتم وضع الرأي العام.
ثانياً: إعداد جامعات أو كليات تعليمية.

ولكن كل الخبرين يأثر على حساب العملية التعليمية، وكذلك على أثر ما تتأثر هذه
الجامعة والفيدارين من درجاً تعليمياً. وأشير إلى أن هذه الجيل في الجامعات والكليات
الانية التي تتعايش منها النقص في أعداد الخريجين في الماضي والتحديزات وما
يشترى على ذلك من نظر بالعملية التعليمية (2). ومن ثمّة أخرى، ناجم التوسع
في التدريس لا يمكن التقليل من فضّه وعُن يهاولاً ظاهرة الترف التي تعم أيضًا إلى
الجامعات. وتعمل أيضًا على النقل بالمكتبة.

ومن جهة أخرى، فإن الأدلة أن عدد الطلاب الذين ينخرطون في خبرية
التربية الجامعي لم يعمر أو لمحات جمالية أخرى وأتعدّ الأدوات في وجوههم
وأن ترحيم من التعليم الجامعي إلى الأبد، أو بعبارة أخرى أن نقل حاضم ما يشي
بالفرصة الثانية ولما بعدنا، دورًا في استنفاذ التعليم من

جديد.

وفرد، وُجد أنه يُستعمل في مجال التعليم الجامعي، وذلك نظراً للتعليم عن بعد
وقد تم في حل بعض هذه المشكلات أو تدريس، ومن هذه المنظومة المتوصفة البريطانيّة
وعدد أعداد من الجامعات ومكاسب التعليم عن بعد، وجلد عندما حول العالم إلى أكثر من
عشرين عاماً، وعُند

ويمكن القول بأن كلًا جامعًا مفتوحة للتعليم العالي في مصر، يمكن أن يقوم بدور
ابيض في حل بعض هذه المشكلات أو تدريس، كما أن وجود séjour بالقراءة على
العجز من قبل بعض الطلاب الذين ينخرطون بالجامعات، وكذلك التقليل من
التحريج على أعداد الجامعات، سواء بالالتزام بالأداة أو الاستخدام وتحريج عدد أكبر من الطلاب
بينما أن الأدوات التي يعمر جامعات والأدوات التي يعمر جامعات، وعمليّة التدريس في المعلمة
إلى الاتجاه بالمواد أو تمثّلها إنتاجية تُستخدم في زيادة الدخل القومي.

فإن كان هذا الاستنتاج تتعلّد جزءًا من دراية فإن الكليات ككل تمتد إلى أمر
على نظم متعددة للتعليم عن بعد في إطار من ثمّه مع إعطاء أهمية للاستعمال المتوصفة
البريطانيّة، وعُندما تزيد من نظمها في مصر، يمكن أيضًا القول بأن تطبيق فكرة

(1) تقرير الملي العريفي للتعليم والبحث العلمي والتكنولوجيا - الدورة الثانية -
(28 أكتوبر، 1988 - 20 يوليو 1989) - المجاليّة القومية المتخصصة - رئاسة الجمهورية
(2) Soliman, M., Planing For Reform Of University Education In Egypt With Reference To
The Role In National Development, Unpublished, Thesis Ph. D., In., of Education
London, 1980, P. 207
هذه الجامعة في مجال التعليم العالي أو الجامعى في مصر تعمل فرعيًا من وجهة نظر الباحث، فبعض الباحثين بالأيدي وتحليل بعض النظريات من ناحية التعليم الجامعى في مصر وخصوصًا فئة الأذاعة والتلفزيون . . . من ثم كان الدافع لبراء هذا الإحسان .

وفي اليد، في إجرايات هذا الاستبان، ستنقوم الباحث ببعض الأفكار والملاحظات حول الجامعة المفتوحة البريطانية:

(Open University)

هي معيّد رفيق من نوعه في نظام التعليم البريطاني، وقد أثبتت صحة ما تقدم نظرية التعليم الجامعي للكبار (21 سنة فما فوق)، الذين لم يتمكنوا من الاحتكاق بالتعليم الجامعى لأسباب من الأمور، لذا تعطي لهم الفرصة لاستكمال دراوسهم الجامعية في نفس الوقت الذي يقومون فيه بأعمالهم، وهي جامعة مستقلة أكاديمياً ويعكس للطالب الملتقي بها من الاحتراف على الدرجة الجامعية الأولى (B.A) وكذلك الابتعاذ في دراساتهم العليا، ويتم ذلك بالدراسة المنزلية.

"It's a home study university which could employ radio and T.V as an integral part of its system, and whose principal purpose would be to increase the number of graduate teachers and qualified scientists and technologists ."

ويمكن مشاركة الجامعة المفتوحة البريطانية فيما يلي:

1. تعتمد الجامعة على النظام المنعدم البينال وهي تعمل أول تجربة في بريطانيا تتبجي هذا النظام في نسق متكاملاً من خلال مواد Home Experimental، وبعض التدريس التقليدي (Home-based) وبذلك لم يتخلى نظام الجامعة التعليمي عن إفراط في التدريس وأهمها، وإن كان بصورة محدودة سواء في مراحل الدراسة middle or high school، أو المدارس المهنية.

2. الجامعات تنتمي ومعظم مناهج الدراسة بالجامعي حسب المواد الدراسية، وتعتمد الجامعة من ست كليات هي: الآداب والعلوم الإنسانية والعلوم الأولية، والإدارات التربوية والرياضيات، والعلوم والتقنية، وتنحن الجامعة الطلبة العلمية الخاصة بها.

3. يمكن للطالب الاحتراف على البكالوريوس من الجامعة المفتوحة أن يلتقي بالجامعات الأخرى للحصول على درجات الدراسات العليا، وكذلك يمكن التحويل بين كليات الجامعة والجامعات المنطلقة في مناطق الجامعات الأخرى.

4. أيضًا هيئة البكالوريوس بالجامعات المفتوحة:

- الأائدة الدائمة (Full-time Studies)، وهم يعملون سواء في مقر الجامعة بكتينهم، المختلفة أو في المكتبات الأكاديمية، ودورهم الأساسي هو وضع المناهج.
- الأائدة المتعدد (Part-time Studies)، وهم يعملون من كلياتهم أو ماهما، ويحكم عليهم القيام ببعض من قراءة، ويلتغل الأماكن المختلفة التي توزعها لهم الجامعة ومنهم الموجهين.

(i) Rumble, G & Hardy, M, The Distance Teaching University, (London: Open Hall, 1980), P. 170.
ومن أجل هذا الجديد الذي أverte الجامعة المفتوحة البريطانية، فإن يرجى أن نقف عند طريقة؛ حيث أنها تمتاز بالجودة الفائدة للتعليم الجامعي باستخدام وسائل وطرق تعليمية في توسع متكاملاً، كما أنها تمتاز بزيادة للدراسة الأكاديمية وكذلك ما كندها تقلع عابرات التعليم عن بعد إلى مجال التعليم الجامعي في جمهورية مصر العربية.

أو أن أخبر إلى أن: المجلس القومي للتعليم والبحث العلمي والتكنولوجيا في اجتماعه بتاريخ 21 نوفمبر 1988، قد أوصى برشوة أماكن تطبيق ذكرى الجامعة المفتوحة على نحو بتنفق وطرو مقرر ............................(1)

(1) تقرير المجلس القومي للتعليم والبحث العلمي والتكنولوجيا، (مرجع سابق)، ص 248
الجزء الأول

الجامعة المفتوحة المعترضة ونظرها

أولاً: الأسس التي يمكن أن تقوم في ضوء الجامعة المعترضة:

1- ضع علامة (✓) أمام ما يتفق وآليك من المقتراحات التالية:

- إزاحة النزاع التعليم الجامعي للطلاب الذين فاتتهم هذه الغرفة.
- تخفيف العبء عن الجامعات ممثلاً ذلك في الزراعة الكبيرة والنوية في إعداد الطلاب الملتحقين، مما يجعل ضغطًا كبيراً على استعدادات الجامعات سواء في المباني أو التجهيزات أو إعطاء هيئة التدريس، الإلهام في حل بعض مشكلات الجامعات الإقليمية من حيث المكانيات ونقى أعضاء هيئة التدريس، وذلك باستخدام نظم التعليم عن بعد لتحقيق البلغ الإجاهي لنظام التعليم في الجامعة المعترضة.
- الإلهام في القضايا على ظاهرة التحرر في الجامعات (بعض الكليات) من حيث رغبة بعض الطلاب في العمل، دون استكمال دراستهم، مما يمثل فاقدًا تعليميًا بالجامعات، ومن ثم يمكن للجامعة المعترضة أن توفر لهم إمكانات الدراسة أثناء العمل.
- فتح فرص جيدة للاستفادة من العلم والمعرفة للعاملين في كافة التخصصات مما يساعد في رفع مستوىهم التعليمية، وتكمل إمكانات مزيدًا من الدراسات.
- إتاحة فرص جيدة للطلاب المنتمين للتعلم عن بعد.
- إвшийة الظروف المكانية والجغرافية للطلاب الذين يعيشون في أماكن نائية من الوطن، وذلك بإعطائهم بعض الأولويات في الالتحاق بالجامعة المعترضة.

- تأجيل خروج الطالب بنوع المهن التي سوف يمارسها
- خروج الطالب بنوع المهن التي سوف يمارسها
- أن تقوم المناهج والدراسات بالجامعة على أسس خدمة البيئة
- ملاحظات إضافية أخرى تفترضها؟ (أذكرها) :

الجزء الثاني:

الجامعة المفتوحة المعترضة ونظرها

1- ضع علامة (✓) أمام ما يتفق وآليك من المقتراحات التالية:

- إزاحة النزاع التعليم الجامعي للطلاب الذين فاتتهم هذه الغرفة.
- تخفيف العبء عن الجامعات ممثلاً ذلك في الزراعة الكبيرة والنوية في إعداد الطلاب الملتحقين، مما يجعل ضغطًا كبيراً على استعدادات الجامعات سواء في المباني أو التجهيزات أو إعطاء هيئة التدريس، الإلهام في حل بعض مشكلات الجامعات الإقليمية من حيث المكانيات ونقى أعضاء هيئة التدريس، وذلك باستخدام نظم التعليم عن بعد لتحقيق البلغ الإجاهي لنظام التعليم في الجامعة المعترضة.
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- إتاحة فرص جيدة للطلاب المنتمين للتعلم عن بعد.
- إżyczة الظروف المكانية والجغرافية للطلاب الذين يعيشون في أماكن نائية من الوطن، وذلك بإعطائهم بعض الأولويات في الالتحاق بالجامعة المعترضة.

الجزء الثالث:

الجامعة المفتوحة المعترضة ونظرها

1- ضع علامة (✓) أمام ما يتفق وآليك من المقتراحات التالية:

- إزاحة النزاع التعليم الجامعي للطلاب الذين فاتتهم هذه الغرفة.
- تخفيف العبء عن الجامعات ممثلاً ذلك في الزراعة الكبيرة والنوية في إعداد الطلاب الملتحقين، مما يجعل ضغطًا كبيراً على استعدادات الجامعات سواء في المباني أو التجهيزات أو إعطاء هيئة التدريس، الإلهام في حل بعض مشكلات الجامعات الإقليمية من حيث المكانيات ونقى أعضاء هيئة التدريس، وذلك باستخدام نظم التعليم عن بعد لتحقيق البلغ الإجاهي لنظام التعليم في الجامعة المعترضة.
- الإلهام في القضايا على ظاهرة التحرر في الجامعات (بعض الكليات) من حيث رغبة بعض الطلاب في العمل، دون استكمال دراستهم، مما يمثل فاقدًا تعليميًا بالجامعات، ومن ثم يمكن للجامعة المعترضة أن توفر لهم إمكانات الدراسة أثناء العمل.
- فتح فرص جيدة للاستفادة من العلم والمعرفة للعاملين في كافة التخصصات مما يساعد في رفع مستوىهم التعليمية، وتكمل إمكانات مزيدًا من الدراسات.
- إتاحة فرص جيدة للطلاب المنتمين للتعلم عن بعد.
- إżyczة الظروف المكانية والجغرافية للطلاب الذين يعيشون في أماكن نائية من الوطن، وذلك بإعطائهم بعض الأولويات في الالتحاق بالجامعة المعترضة.

الجزء الرابع:

الجامعة المفتوحة المعترضة ونظرها

1- ضع علامة (✓) أمام ما يتفق وآليك من المقتراحات التالية:

- إزاحة النزاع التعليم الجامعي للطلاب الذين فاتتهم هذه الغرفة.
- تخفيف العبء عن الجامعات ممثلاً ذلك في الزراعة الكبيرة والنوية في إعداد الطلاب الملتحقين، مما يجعل ضغطًا كبيراً على استعدادات الجامعات سواء في المباني أو التجهيزات أو إعطاء هيئة التدريس، الإلهام في حل بعض مشكلات الجامعات الإقليمية من حيث المكانيات ونقى أعضاء هيئة التدريس، وذلك باستخدام نظم التعليم عن بعد لتحقيق البلغ الإجاهي لنظام التعليم في الجامعة المعترضة.
- الإلهام في القضايا على ظاهرة التحرر في الجامعات (بعض الكليات) من حيث رغبة بعض الطلاب في العمل، دون استكمال دراستهم، مما يمثل فاقدًا تعليميًا بالجامعات، ومن ثم يمكن للجامعة المعترضة أن توفر لهم إمكانات الدراسة أثناء العمل.
- فتح فرص جيدة للاستفادة من العلم والمعرفة للعاملين في كافة التخصصات مما يساعد في رفع مستوىهم التعليمية، وتكمل إمكانات مزيدًا من الدراسات.
- إتاحة فرص جيدة للطلاب المنتمين للتعلم عن بعد.
- إżyczة الظروف المكانية والجغرافية للطلاب الذين يعيشون في أماكن نائية من الوطن، وذلك بإعطائهم بعض الأولويات في الالتحاق بالجامعة المعترضة.

الجزء الخامس:

الجامعة المفتوحة المعترضة ونظرها

1- ضع علامة (✓) أمام ما يتفق وآليك من المقتراحات التالية:

- إزاحة النزاع التعليم الجامعي للطلاب الذين فاتتهم هذه الغرفة.
- تخفيف العبء عن الجامعات ممثلاً ذلك في الزراعة الكبيرة والنوية في إعداد الطلاب الملتحقين، مما يجعل ضغطًا كبيراً على استعدادات الجامعات سواء في المباني أو التجهيزات أو إعطاء هيئة التدريس، الإلهام في حل بعض مشكلات الجامعات الإقليمية من حيث المكانيات ونقى أعضاء هيئة التدريس، وذلك باستخدام نظم التعليم عن بعد لتحقيق البلغ الإجاهي لنظام التعليم في الجامعة المعترضة.
- الإلهام في القضايا على ظاهرة التحرر في الجامعات (بعض الكليات) من حيث رغبة بعض الطلاب في العمل، دون استكمال دراستهم، مما يمثل فاقدًا تعليميًا بالجامعات، ومن ثم يمكن للجامعة المعترضة أن توفر لهم إمكانات الدراسة أثناء العمل.
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- إتاحة فرص جيدة للطلاب المنتمين للتعلم عن بعد.
- إżyczة الظروف المكانية والجغرافية للطلاب الذين يعيشون في أماكن نائية من الوطن، وذلك بإعطائهم بعض الأولويات في الالتحاق بالجامعة المعترضة.
لا يوجد نص يمكن قراءته بشكل طبيعي من الصورة المقدمة.
مع إحدى الجامعات التقليدية القريبة ما يعرف باسم العدرا الصيفية (SUMMER SCHOOL)، حيث يقضي الطالب أسبوع من الدراسة المكثفة.

1. مارايك في طول العام الدراسي، حسب النظام السابق؟
   - مناسبة
   - غير مناسبة

كم عدد الأسابيع التي تقترحها؟

2. مارايك في فكرة العدرا الصيفية؟

3. مارايك في طول الأسابيع التي يقضيها الطالب في الدراسة الصيفية؟
   - مناسبة
   - غير مناسبة
   أرى أن تكون مدتها

4. لذلك الأسباب التالية:
   - غير مناسب

5. مصادر مواد العدرا: النص العباس موظف عن وحدة دراسية موزعة على أسبوع

6. الواقع أن يقيم النصوص الواحدة إلى 45 نصًا وذلك بعد المسابقات العام الجامعية وتسلسل هذه النصوص بالبريد عادة، وتحتوي حميات الدراسة إذا على قائمة الكتب التي سوف يحتاجها الطالب في دراسته، وكذا

7. على النصوص المصورة وغيرها.

8. مارايك في هذا التسجيل؟

اقتراح ما يلي:

9. مادولة التي تُراها لتوصيل مواد العدرا للطلاب؟
   - بالبريد من مقر الجامعة
   - يتصلها الطالب بالبريد من مقر الجامعة
   - توزع على مراكز الدراسة المحلية، ثم يتصلها الطالب من هذه المراكز.

10. أذكر أراو كلا الأشياء?

(ه) المعاملات المنزلية:

فيما يلي عدد من المقترحات حول كيفية الحصول عليها، مع علاقة (١٨) إمام

ما يوافق رأيك:

- استعراض كما يحدد الناتج السابق للجامعة المفتوحة البريطانية حيث
- صمموه وصوره
- استرداد بنها كما نماذج، ثم يتم تصميمهما فيما بعد عن طريق الجامعة
- المفتوحة المقترحة
- تكوين فريق من الأدبيين المتخصصين والفنيين لتصميمها حسب برامج الجامعة

آراء أخرى:

----------------------------------------
لا يمكنني قراءة النص العربي من الصورة.

إليك النص الذي قُرِّرته:

لا يمكنني قراءة النص العربي من الصورة.

إليك النص الذي قُرِّرته:

لا يمكنني قراءة النص العربي من الصورة.

إليك النص الذي قُرِّرته:
يأتي أعضاء هيئة التدريس في الجامعات المفتوحة، حسب وظائفهم:

- التدريس بالجامعة المفتوحة.
- ينتمي أعضاء هيئة التدريس إلى الجامعات التقليدية.
- ينتمي أعضاء هيئة التدريس إلى الجامعات التقليدية على أساس الخبرة الأكاديمية والمعرفة التلقائية. يتضمن المناهج التي تتضمن تدريس دراسة في الجامعة المفتوحة.
- أن يقوم الأستاذ بدور المستشار.

**ивают:**

- كليات الجامعة المفتوحة:
  - كلية تكنولوجيا
  - كلية الآداب
  - كلية التجارة والأعمال
  - كلية الدراسات الشرعية
  - كلية العلوم النفسية
  - كلية اللغة العربية

**ناميا:**

- تحلل الحكومة البريطانية الجامعة المفتوحة، ويمثل هذا العدد 8% من نتائج الجامعة.
- يتضمن دخل الجامعة 10% من دخل الطلاب 1% من تدريس الجامعة من تدريس العلوم، الذي يتضمن وظائف معينة.
- الجامعة المفتوحة تخرج طلابها بنقبات تقل كم مهارات الجامعات التقليدية.
- قد تصل إلى الربع، فتgangs تقليدية وحسب طبيعتها موزعة بالمدينة والمناطق وعمال الوكالات والمدن الجامعة. 
- وكلها تشهد نساء كبيرة من دخل الجامعة، بينما الجامعة المفتوحة وحسبbetha لتعمل م زاهياً مثل هذه النتائج، كما يساهم طلابها مباشرة في اقتصاديات الدولة.
- تحقق الجامعة المفتوحة البريطانية وفيراً كبيراً من خلال ألمانيا النتائج.
(ب) رئيس فريق تكنولوجيا التعليم:
(ج) رؤساء فرق وعمليات:
(د) رئيس وحدة مناهج الطلاب ذوي الخبرة:
(ه) رئيس قطاع الأئمة والتلفزيون بالجامعة:

4- نائب رئيس الجامعة للعمليات والتخطيط:

(ب) إدارة التخطيط:
(ج) إدارة الإنتاج:
(د) إدارة التسويق:
(ه) إدارة المتابعة:
(أ) إدارة العلاقات الخارجية:

عواصم: موقع الجامعات المقترحة:

1- ماهي الموقع الذي تقتراه لكي يكون مقر الجامعة؟
- مع علامة (✓) أمام ما يوافق رأيك.
  □ أسيوط
  □ طنطا
  □ المنصورة
  □ بنها
  □ المنيا

مدينة أخرى وموقع آخر تقتراه: 

سبب اختيار: 

2- توزيع المكتبات الألتفافية ومراكز الدراسة المحلية:

فيما يلي توزيع متفرق للمكتبات الألتفافية والمراكز الدراسية على مختلف أنحاء الجمهورية، متبوعا بغرض توضيح هذا التوزيع جغرافيا، وكذا مواقع الجامعات ومكاتبها:

(أ) مقر الجامعة المقترحة 
(ب) تقسم الجمهورية إلى تسع أقاليم جامعية تقوم المكتبات الألتفافية والمراكز الدراسية 

يعتبر توزيعها كما يلي:
- مكتب القاهرة الالتفافي: ويتبع هذا المكتب مراكز دراسية تغطي محافظات القاهرة و البرج والقليوبية.
- مكتب الإسكندرية الالتفافي: ويتبع هذا المكتب مراكز دراسية تغطي محافظات الإسكندرية و البحرية و مرسى مطروح.
- مكتب الف(PR) فاقز الالتفافي: ويتبع هذا المكتب مراكز دراسية تغطي محافظة الغربية و كفر الشيخ و المنوفية.
- مكتب الإزربال الالتفافي: ويتبع هذا المكتب مراكز دراسية تغطي محافظات الشرقية و الدمياط و الدقهلية.
- مكتب الأثيوبيا الإلتفافي: ويتبع هذا المكتب مراكز دراسية تغطي محافظات بورسعيد و الإسماعيلية و السويس.
THE EGYPTIAN UNIVERSITIES PLUS PROPOSED LOCATIONS FOR AN OPEN UNIVERSITY

MEDITERRANEAN SEA

KEY

- Existing Universities
  - Old Universities
  - Regional Universities
  - Regional Faculties

- Proposed Open University

- Suggested HQ

1 to 9 Suggested Centres

(See following page for details)
KEY TO THE NODES OF A PROPOSED
EGYPTIAN OPEN UNIVERSITY NETWORK

1. CAIRO - including: AL-Kahera
   AL-Giza
   AL-Kaloubia

2. ALEXANDRIA - Inc: Beheira
   Marsa Matt-Roh

3. TANTA (HQ) - Inc: EL-Ghrbia
   Kafr-el-Shiekh
   Miensofiah

4. ZKAZEEK - Inc: AL-Sharkia
   AL-Dakhlia

5. AL-ESSMAELIAH - Inc: Essmaeliah
   Suez
   Port Said

6. AL-ARIESH - Inc: Sinai North
   Sinai South

7. BNI-SWIF - Inc: Bni Swief
   Fauom
   Minia

8. ASSIUT - Inc: Assiut
   Sohag
   Wadi-Gadied
   Bahr Ahmar

9. ASWAN - Inc: Aswan
   Kena
لا يمكنني قراءة النص العربي من الصورة.
٤١٥

٣- بالنسبة للمستوى الثالث بين إعداداً للخريجين إكاديمياً ومطالبهم مهنياً.

٤- بعد التخرج:

يمكن للمجتمع المفتوح المحترم أن تسمح في هذه المواقع عن طريق:
- تقديم برامج للطلاب المشارك للاختيار الجامعات، ويمكن أن يكون ذلك
- عن طريق وضع خطط مشتركة بين المصالح والمؤسسات التي يلزمها ذلك وبين
- الجامعة المفتوحة.

٥- إذا لم يكن تطبيق فكرة الجامعة المفتوحة في الوقت الحاضر، فإنه يمكن
- الاستفادة من مناهج الطلاب المشارك في الكليات والجامعات التي يهمها ذلك
- وبعد دراسة كل ما يتعلق بهذه المناهج عن طريق المختصين.

٦- بالنسبة للطلاب المنتسبين بالجامعات:

يمكن للجامعة المفتوحة المحترم أن تقدم لهم:
- فرص الدراسة الجامعية عن بعد.
- فرص دراسة تخصصات جديدة.
- هل توافق على هذه المقترحات؟

٧- الآراء والمقترحات أخرى:

٨- ماهي المشاكل الأخرى التي يمكن للجامعة المحترمة أن تسمح في حلها من
- وجهة نظركم؟

٩- نادي عشر: دور الجامعة المحترمة في بعض الميادين الأخرى
- في ما يلي عدد من الدوائر التربوية التي يمكن أن تسمح فيها الجامعة بـ:
- لغة، أمام ما يتراوح وراءها:
- تدريب المدرسين أسرًا، الخدمة.
- الاتصال في برنامج تعلم الكبار، أو الأفكار، أو عدد معين من الطلاب ولكنها
- ببرامج الجامعة المحترمة، ليست حكراً على عدد معين من الطلاب ولكنها
- تتيح لكل مجمع أو مهنة، بدون أن تخرج من الميادين الجيدة.
- يمكن للجامعة أن تحمل دور في إعداد البرامج الخاصة للتدريب اللغات، مما
- يمكن للجهة المناسبة أن تسمح في برنامج تدريب المزارعين والعاملين في
- قطاع الزراعة عن بعد (راديو تلفزيون).

١٠- أدوار أخرى مقترحة:

١١- ناحية أيضًا المدلكة عند التكامل بين إعداداً للخريجين إكاديمياً ومطالبهم مهنياً.
ثالث عشر: آراءكم ومقترحات أخرى حول الجامعة المفتوحة المصرية المنتشرة:
أكتب آراءكم ومقترحاتك حول هذه الفكرة؟

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2. ما هي البرامج التي تنتجها الراديو في مجال التعليم العالي؟

3. ما هي المعوقات التي تقابل الأناذة في إنتاج البرامج التعليمية؟

4. ما هي الجهات أو الهيئات الأخرى التي تتوازن مع الأناذة في إنتاج البرامج التعليمية؟

5. ما هو وصول الأرسل الأذاعي إلى محافظات مصر؟

6. على أي أساس يتم اختيار أوقات إذاعة البرامج التعليمية؟

ثانيا: البرامج التعليمية التي يقدها التلفزيون:

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3 - ما هي البرامج التي ينتجها التلفزيون في مجال التعليم العالي؟

3 - ما هي المعوقات التي تقابل التلفزيون في إنتاج البرامج التعليمية؟

4 - ما هي الجهات أو الهيئات الأخرى التي تتعاون مع التلفزيون في إنتاج البرامج التعليمية؟

5 - مدى وصول الإرسال التلفزيوني إلى محافظات مصر؟

6 - على أي أساس يتم اختيار أوقات إذاعة البرامج التعليمية بالتلفزيون؟

ثالثاً: دور الإذاعة والتلفزيون المقترح:

ما هو الدور الذي تقتضيه من جهة تشارك لكل من الإذاعة والتلفزيون في الجامعة المفتوحة المصرية المقترحة في هذه الدراسة؟
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**Appendix 3: Second Term Curriculum: Upgrading Programme for Primary School Teachers**
APPENDIX 5: THE LOCATION AND CAMPUS OF THE BRITISH OPEN UNIVERSITY

THE CAMPUS

1. Walton Hall
2. Jennie Lee Library
3. Geoffrey Crompton Building
4. Refectory
5. Lecture Theatre
6. Meacham Building (Estates)
7. Preparation Laboratories
8. Academic Computing Service; shop and National Westminster bank
9. Mathematics Building, Nurse
10. Sports Pavilion and Pavilion bar
11. Venables Building (Science, Technology and Systems blocks)
12. Earth Sciences
13. Computer Centre
14. Chambers Building
15. Operations Building
16. BBC OU Production Centre
17. Visitors Centre: Reception
18. North Spur Building (Centre for Continuing Education)
19. General Building 1

THE OPEN UNIVERSITY

HOW TO GET THERE

The OPEN UNIVERSITY is situated in the new city of Milton Keynes, which is midway between Birmingham and London. The city is served by two major roads—the M1 motorway and the A5—and by the mainline railway station at Milton Keynes Central, on the London (Euston) to Birmingham line.

Inside are maps and details of how to reach the University's main campus at Walton Hall and its other premises in and around the city.
BY ROAD
From the M1, leave the motorway at either junction 13 or 14. From junction 13 take the A421 to Milton Keynes, and continue until you reach the second roundabout, at which the University is signposted. From junction 14 take the A5130. At the first roundabout, join the A421 and continue to the next roundabout, from which the University is signposted.

When travelling on the A5 from the South, take the turn-off indicating Milton Keynes South (A421) and then follow the signs to Walton, where you will find the University signposted. Similarly when using the A5 from the North, follow directions to Milton Keynes South, and then to Walton.

From North and Central Milton Keynes, take the A4146 (city road V8 Marlborough Street). Join the A421 (H Goveway) to Walton, from where the University is signposted.

On arrival at the campus, further directions can be obtained from the Visitors Centre (see 17 on campus map on back page).

BY RAIL
The University is four miles from Milton Keynes Central railway station, which is on the London (Euston) to Birmingham line. Journey time from London is about one hour and there are frequent trains from London.

BUS LINKS
There is a bus service between Milton Keynes Central bus station (which is adjacent to the rail station) and the University campus, as well as from surrounding areas. Routes and times can be obtained from the bus station (telephone Milton Keynes (0908) 668366).

APPENDIX 5 (continued)

OTHER PREMISES/ADDRESSES

Although the main University campus is at Walton Hall, there are other University premises in and around Milton Keynes. Their various locations are shown on the map above. Their addresses and telephone numbers are given below.

HEADQUARTERS CAMPUS:
The Open University, Walton Hall, Milton Keynes, MK7 6AA
Telephone Milton Keynes (0908) 74066

OPEN UNIVERSITY EDUCATIONAL ENTERPRISES LIMITED:
12 Colleridge Close, Stony Stratford, Milton Keynes, MK11 1BY
Telephone Milton Keynes (0908) 566744

CORRESPONDENCE SERVICES:
Golden Warehouse, Dane Road, Bletchley, Milton Keynes, MK1 1LG
Telephone Milton Keynes (0908) 71016

SUMMER SCHOOLS WAREHOUSE:
Gulf Warehouse, Ward Road, Bletchley, Milton Keynes, MK1 1JA
Telephone Milton Keynes (0908) 75771

WELLINGBOROUGH WAREHOUSE:
Pit 16,丁ennington Estate, Wellingborough, Northants, NN8 2RF
Telephone Wellingborough (0933) 224911
### Students
1. Adults, over the age of 21, dispersed throughout the U.K.
2. Study part-time from home
3. No formal qualifications required for entry

### Courses
1. Generalist degrees, obtained by accumulating course credits
2. Produced by course teams at central HQ - academics, 
   BBC staff, advisers, consultants, etc
3. Delivered as printed booklets, TV and radio broadcasts
4. Assessment by written work, computer-marked objective 
   tests and examinations

### Central Staff
1. Full-time academics attached to one of six Faculties
2. BBC staff, educational technologists and researchers
3. Administrative and technical staff: computer services, 
   registry, etc

### Regional Staff
1. Thirteen Regions, each with a Regional Office and 
   Regional Director
2. Staff Tutors and Senior Counsellors supervise part-time 
   staff
3. Part-time correspondence tutors, class tutors and 
   counsellors

### Study Centres
1. Rooms hired by the University, open each evening and in 
   reach of most students
2. Meeting place for students, tutors and counsellors for 
   tutorials, personal interviews etc
3. Often contain library of course materials, TV, radio, 
   replay devices

Thomas, A.B. *op. cit.*
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