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THE ROLE OF BROADCASTING WITHIN
THE BRITISH OPEN UNIVERSITY

Dissertation
Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

by

Susan Raynor Olson, B.A., M.F.A.

The Ohio State University
1972

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Adviser
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ACKNOWLEDGMENTS

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I also wish to express appreciation to Lady Jennie Lee for it was her tenacity that helped transform the idea of an "Open University" into a reality.

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CHAPTER I
INTRODUCTION

Our formal educational system staggers under the pressures of excessive numbers, demands for reform and modernization, and inadequate funds—all at the same time.¹

That statement appears to reflect the rising concern for quality and quantity education in America. Proposals for "external degree programs," "university without walls," and similar, non-traditional approaches have illustrated the need for a change within our educational structure.

This study has focused upon the application of broadcasting as a learning resource for higher education. The investigator studied the function of the British Broadcasting Corporation in the Open University system.

Purpose of the Study

In our modern technological society, a crucial question is, "How can the quality of higher education be maintained and extended while serving greater numbers of heterogeneous students, with minimum expenditure of funds?"

This pressing national problem may have a corresponding solution in the resourcefulness of the broadcasting media.

The study focuses upon the British Open University, the most ambitious attempt to date to enlist the broadcast media in the service of higher education. The investigator undertook an independent, descriptive-evaluative study to ascertain: What is the unique function of broadcasting in the Open University?

To accomplish this objective, several descriptive and evaluative questions were asked. The descriptive questions include:

1. What is the strategy of broadcast utilization within the Open University's approach to learning?

2. What are the organization and function of the BBC staff allied to the Open University?

3. What are the organization and function of the Course Teams in the development of the broadcasts' content and presentation?

4. What is the step-by-step planning procedure of a radio and television broadcast of the Open University?

5. What are the characteristics of the production process for the radio and television broadcasts?

6. How are these broadcasts financed and distributed?

7. What is the relationship of the faculty presenters to the broadcasts and what training was needed for them to utilize the media of radio and television?

8. What is the specific relationship between the broadcasts and the correspondence materials?
Evaluative research was accomplished by asking:

1. What conditions appear necessary for the successful partnership between the BBC and the Open University?

2. How is the effectiveness of the broadcasts measured and by what criteria?

3. What do the BBC producers identify as the instructional strengths and weaknesses of television and radio?

4. How effective is the Course Team strategy in planning, producing, and evaluating the broadcasts?

5. Are the responsibilities of the BBC producers well defined in relation to their roles in the Open University broadcasts?

6. What kinds of decisions are required by the Open University staff and the BBC staff in the planning and production of the broadcasts?

**Significance of the Problem**

A study that evaluates a partnership of broadcasting to higher education seems justified.

With rising costs, population expansion, and increased demands of higher education upon a technological society, our educational institutions have been experiencing a crisis.

It has often been said that American education is in a state of constant crisis. In the 1950's we experienced the crisis of quality, and during the 1960's we have been weathering the crisis of increasing enrollments. It is very likely that in the 1970's we shall face the crisis of equalizing educational attainment. The makings of the crisis are already upon us.

---

The recent Carnegie Commission report on Higher Education states:

None among the many causes of the higher education crisis is more powerful and emotion laden than the necessity now to provide workable degree programs to adults whose capacities cannot be fully used, and opportunities to renew the learning and often the careers of millions who already have degrees.\(^3\)

The rising demand for education and training is evidenced by the following figures:

There are 30 million Americans who have no more than a grammar school education and 50 million over the age of 25 who do not have a high school diploma.\(^4\)

In light of these perplexing educational problems, much attention has been directed to instructional and educational broadcasting. The assistance of media technology to higher education has been repeatedly recommended.

Given the importance to American society of higher education, continuing adult education, and public broadcasting, the interlocking relationship that ought to exist among them seems obvious: in today's college context, the continuing education function should enjoy a status at least co-equal with that of resident instruction, and broadcasting as a medium of teaching should be integral to both.\(^5\)


Likewise, U. S. Commissioner of Education, Sidney P. Marland, Jr., has stated:

Finally, it seems that the time is now to make a strong affirmative decision that technology will no longer be simply an interesting curiosity in education--to be wondered at, to be extolled in rhetoric as possessed of a great future, but not to be relied upon this year. I should like to move now, nationally, through whatever influence my office can exert, to establish educational technology as a dependable resource to be used widely and regularly--one might say routinely--to effect significant and revolutionary improvement in existing forms of education.

We in education need what you in broadcasting and other technologies have to offer, very badly indeed. Employment of technology in education can no longer be thought of in terms of the future. . . .

To determine its role in adult education, the Corporation for Public Broadcasting is sponsoring a proposal known as ALPS, an acronym for Adult Learning Program Service. The project proposes to address itself primarily to adults 25 to 44 years old who can read at a 6th grade level.

Currently, the research phase of ALPS is attempting to define the need for an education effort by public broad-


casting in several target areas. In addition, questionnaires have been sent to public television stations to determine the ability of the broadcasting media to meet the need.

The relevancy and appropriateness of broadcast utilization in education is evidenced by two very recent examples: the Kentucky Educational Television project and S-U-N. The Appalachian Regional Commission has given Kentucky Educational Television a grant to design a televised series to prepare adults for the GED high school equivalency exam.

Also utilizing its state ETV network is the proposed State University of Nebraska, or S-U-N. It will offer first and second year college courses for credit in the home. Each course is to be developed by a team of outstanding teachers, an educational psychologist, and a media technologist.

---


10"Help to a Degree," NAEB Newsletter (March 1, 1972), p. 4.

11State University of Nebraska: A Multi-Media, Off-Campus Approach to College, pamphlet, n.d.
Modern media technological advances such as transmission by microwave, laser beam, and cable television will also have an impact upon broadcasting's role in education. Leland Johnson's study of cable at Oregon State University and the University of Oregon is one example.\textsuperscript{12}

With increased emphasis upon the broadcasting media as instructional technology, research is needed to identify those factors contributing to a successful alliance between broadcasting and education. Now that the Open University has been functioning since January, 1971, its actual involvement of the broadcast media to its learning system should have important implications for the future of broadcast utilization in higher education.

**Delimitations of the Study**

This study examines the involvement of the British Broadcasting Corporation in the Open University system. It was not considered appropriate to trace the historical development of the BBC's "educative" programming. Motivational studies of the Open University adult population and curriculum evaluation were not feasible. Also not within the framework of the study was experimental research

\textsuperscript{12}Leland L. Johnson, *Cable Television and Higher Education: Two Contrasting Experiences* (Santa Monica: Rand Corporation, 1971), R-828-MF.
comparing the Open University with other British or American universities.

**Review of Research Relevant to This Study**

Because the Open University has been in existence since 1971, there has been no research as yet completed on its effectiveness. A descriptive thesis study has been undertaken which "develops a model incorporating the Open University idea as applied to the California educational system."\(^{13}\)

A review of the relevant literature found in international and domestic sources suggests that instructional radio and television can facilitate learning.

The *International Compendium of Multi Media Systems* provides evidence of West Germany's Telekolleg program, the C.N.A.M. experiment in Paris, and the Polish TV Project.

In operation since 1967, the Telekolleg program is open to all persons, irrespective of age, who have completed elementary school. It is a teaching system combining daily television programs, correspondence material and weekly group instruction at "Telekolleg Days." The State of Bavaria and the Bayerischer Rundfunk contracted to design

this project with the Bayerischer Rundfunk producing the television broadcasts.

From the results of surveys to the Telekolleg students, it was concluded:

The decisive educational advantage of a Telekolleg or of future possibilities of exploiting TV facilities within the organized public education system in a way similar to the Telekolleg method, is the short realization period linked herewith.

Thus, the usage of television can be recommended wherever critical conditions and bottlenecks within the education system must be overcome, which could not be eliminated by other means, as these would require a very much longer period of time until achieving an effective degree of success.\footnote{International Compendium of Multi-Media Systems: 11 Project Descriptions of Combined Teaching Systems in 8 Countries (Munich: Internationales Zentralinstitut fur das Jugend-UND Bildungsfernsehen, 1970), p. 38.}

Since 1963, the Conservatoire National des Arts et Metiers (C.N.A.M.) has conducted a series of experiments concerning the usage of television for teaching at the university level in the Paris area. The technical training courses are transmitted to the public over Channel 2 of the Office de Radiodiffusion et de Television Francaise (ORTF). In addition to the daily television broadcasts, the adults participating meet at a regional viewing center where a tutor exercises pedagogical supervision. Although the courses broadcast on ORTF are still transmitted live from the C.N.A.M. lecture room, several innovations have
been introduced, according to the subject material taught and the personality of the professor: "The programmes include more experiments, film strips and slide series. Letters received from the viewers and the contacts maintained with the Tele-C.N.A.M. viewing centre groups have also led to alterations and improvements."\(^{15}\)

From the findings of student questionnaires, and empirical data the report concluded:

An aspect of the experiments described here, which is by no means insignificant, is the fact that they were able to achieve a decisive step forward in the usage of television, despite certain difficulties.\(^{16}\)

With planning and technical assistance from UNESCO, the Ministry of Polish Education and its State Committees for Radio and Television organized a pilot project utilizing broadcasting at the university level. In 1966, it was launched for persons already employed and enrolled in a technical studies curriculum. The content of the Polish TV broadcasts is limited to only some of the technology compulsory subjects, and it is limited to the most difficult areas in these subjects. "In fact, the TV courses only provide 30% to 80% of the material in the courses treated."\(^{17}\)

\(^{15}\)M. Marcel Lesne, "Tele CNAM," International Compendium of Multi-Media Systems, p.73.

\(^{16}\)Ibid., p. 75.

\(^{17}\)Ibid., p. 93.
Other teaching resources are manuals, program scripts, exercise books, and consultation centers. In 1968, the courses were revised and expanded with the video recording improvements of Polish TV.

A sample survey by the Intercollegiate Institute for Research on Higher Education and the Polish Television Out-of-School Education Unit was generally positive and confirmed the success of the small Pilot Project. "The views expressed by the students regarding the quality, effectiveness, and success of the televised courses are bound to improve their future broadcasts."  

To determine the impact of the television courses on the degree of success in the entrance examinations at technical university level, a survey was conducted in 1968. From a sample group of candidates, it was concluded that:

1) Contrary to expectations, it proved impossible to determine a direct relation between participation in the television course and success in the exam. 68.1% of the candidates having viewed the courses passed the exam, as compared to 67.1% of the candidates who did not participate.

2) It would, however, be premature to assume that the television courses have no influ-

---

ence whatsoever on effective preparatory work for the exams. The students themselves have confirmed the effectiveness of television in this respect. Nevertheless, the final result of the preparatory work is not determined by the TV courses alone, but also by the lapse of time between leaving secondary school and starting to study, by the intensity of the students' personal efforts outside of the television course, and by other similar factors. 19

Japan has developed a University of the Air, which in early 1972 had not yet been operationalized. The University is a four-year degree-granting institution defined under the Law of School Education. Its purpose is "to provide a chance to take advantage of higher education for all people: young employees, housewives, and new graduates from high school; and to offer professional and technical training to working people in different industries." 20

Instruction through the NHK radio and television network occupies the most part of education in the University of the Air. Institutional schooling consisting of seminar, experiments, and practical experiences comprise the other instructional method, and it is obligatory for those taking University of the Air courses for credits. Its teaching strategy is exemplified in the following statement:


20 University of the Air in Japan, Report by the Preparatory Study Committee for the University of the Air, 1970, p. 2.
The primary purpose of institutional schooling is to secure for its students access to seminar, experiments, and practice, all of which can not be adequately performed by broadcasting alone, and to provide them with invaluable chances to nurture esprit-de-corps and to expose themselves to stimulating academic atmosphere through direct, mutual contact between teachers and students or among students themselves.\textsuperscript{21}

In Russia, television is used for a supplement in adult education. According to one source, in 1967 students did better with television and correspondence than with correspondence alone.\textsuperscript{22}

Television has also been utilized for non-formal, adult education. In 1954 France and UNESCO initiated a "teleclub" program among its farmers. The teleclub program, heavily relying on group reaction to the broadcasts, produced impressive results in attitude changes toward farm modernization.\textsuperscript{23}

The most ambitious application of television for national development is the India/U.S. ITV Satellite Experiment Project sponsored by NASA and India. Scheduled for 1974-75, its broadcasts will provide instruction on family

\textsuperscript{21}Ibid., p. 6.


planning, improving agricultural practices, and stimulating national integration.24

Instructional Broadcasting in the United States

Existing American studies have verified that learning by instructional media transmitted on open or closed-circuit systems is possible at all academic levels.

A landmark case study employing a large-scale closed-circuit television network occurred at Washington County, Maryland, from 1956-61.25 As the project developed, television as supplementary instruction was utilized at all grade levels and in most subject areas. After television had been installed in the Washington County School System, the performance of students was measured on the Iowa tests of Achievement.26 Ade's (1967) summary of the results against national norms appears in Table 1, page 15.

In reporting the effectiveness of the Washington County project, Brish (1965) stated among other conclusions that

1. Pupil achievement can improve significantly when TV is used consistently, and

24 Royal D. Colle, "The Indian Satellite Experiment: What Next?" (Prepared for the VII General Assembly of the International Association for Mass Communication Research, Constance, West Germany, September 1-4, 1970, p. 3. (Mimeographed.)


26 Ibid., p. 4.
TABLE 1  

EFFECTS OF TELEVISED LEARNING IN THE WASHINGTON COUNTY PUBLIC SCHOOL SYSTEM  

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<th>Grade 3</th>
<th>Grade 4</th>
<th>Grade 5</th>
<th>Grade 6</th>
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<tr>
<td>National Norm in May</td>
<td>3.90</td>
<td>4.90</td>
<td>5.90</td>
<td>6.90</td>
</tr>
<tr>
<td>1958 (before television)</td>
<td>3.59</td>
<td>4.43</td>
<td>5.26</td>
<td>6.49</td>
</tr>
<tr>
<td>1959 (first year of television)</td>
<td>4.06</td>
<td>4.97</td>
<td>5.77</td>
<td>6.83</td>
</tr>
<tr>
<td>1960</td>
<td>4.18</td>
<td>5.01</td>
<td>6.13</td>
<td>7.17</td>
</tr>
<tr>
<td>1961</td>
<td>4.30</td>
<td>5.08</td>
<td>6.19</td>
<td>7.28</td>
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2. TV does not replace the teacher or substitute for regular class learning activities and personal teacher-pupil relationships.  

Table 1 verifies the first conclusion of Brish. From 1958 to 1961, Grades 3 and 6, especially, show significant increases on the Iowa tests.

In their review of experimental instructional television research, Chu and Schramm investigated 207 published studies in which televised teaching had been compared with conventional teaching. Of the 421 separate comparisons made in these studies, 308 showed no significant differences, 63 showed television instruction to be superior, and 50 found conventional instruction better. Chu and Schramm

concluded:

All these summaries show that in the great majority of comparative studies, there is no significant difference between learning from television and learning from conventional teaching; and that where there is a significant difference, it is a bit more likely to be in favor of television than of conventional instruction.28

Similar findings were reported by Schueler and Lesser. In their 1967 summary of research in broadcasting and teacher education, they concluded:

Research on the use of television and other media to teach college courses resounds with the overall verdict of "no significant differences" between media presentation and conventional classroom presentation.29

Reid and MacLennan cite 333 research abstracts in instructional television and film. Of the 31 studies that relate to instructional television, it was concluded: "The vast majority of these studies has revealed 'no significant differences' in measured performance between students who were instructed via television and those who were taught directly."30

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Allen also concluded that from 1955 to 1964 research in educational television has largely consisted of evaluative studies. He contends a comparison of media versus conventional instruction negates the real potential and effectiveness of the media.31

Meaning of No Significant Difference

An analysis of the "no significant difference" results of televised instruction reveals several conclusions. First, certain variables in the teaching-learning environment have not been isolated and tested by matched group measurement.32

For example, Williams speculates that the attitudes, ability, and personality of the classroom teacher may be the most important missing variable.33

Second, we may be asking the wrong research questions and analyzing, therefore, the wrong answers. Third, Kittross suggests the measuring instruments are inappropri-

Stickell's study also questions the adequacy of instructional television's research design. He analyzed 31 studies that made 250 comparisons between televised and conventional instruction. Using the criteria of comparability of control and experimental subjects, assignment procedures, comparability of instructions, and statistical measurement, he found that only 10 of the 250 comparisons were accurately interpretable on the basis of these standards.\footnote{David W. Stickell, "A Critical Review of the Methodology and Results of Research Comparing Television and Face-to-Face Instruction" (unpublished Ed. D. thesis, Pennsylvania State University, 1963), p. 210.}

Edling's review of "Media and Measurement" studies cites that improvement in methodology depends upon the adequacy of test stimuli, research design considerations, and development of appropriate external behavioral objectives.\footnote{Jack V. Edling, "Educational Objectives and Educational Media," Review of Educational Research, Vol. XXXVIII, No. 2 (April, 1968), p. 188.}

In 1967 the Division of Educational Technology of the National Education Association, in cooperation with the
United States Office of Education, undertook a nationwide survey of closed-circuit television (including 2500 MHz ITFS facilities) at educational institutions. Of the 1,000 institutions indicating a use of CCTV and or 2500 MHz ITFS, 717 institutions were classified as having operational television systems.\textsuperscript{37} The results of their questionnaire concluded that the most common subjects presented over CCTV for elementary and secondary levels were science, social studies, music, and English; in higher education they were education, speech, and drama.\textsuperscript{38}

Various data concerning educational television teachers were gathered by a 1971 National Association of Educational Broadcasters study. It was found that the five academic subjects taught by TV teachers are, in rank order, secondary social studies, elementary social studies, English-language arts, and music.\textsuperscript{39}

In review of the literature, four noteworthy case studies of instructional television for college credit were identified. These are the PACE Program, Chicago's TV College, New York's University of the Air, and Sunrise Semester.


\textsuperscript{38}Ibid., p. 31.

PACE began in order to make college education available to Navy personnel of the Polaris fleet. Since 1962 a television curriculum equivalent to two years of college-level education has been supported by the Special Projects Office of the Harvard University Commission on Extension Courses and WGBH-TV, Boston. In addition to the televised closed-circuit broadcasts at sea, live instruction and text materials are provided at the New London, Newport, Boston, and overseas bases. In addition, the PACE Program is conducted under the auspices of other institutions in other parts of the country. "The program has proved to be an effective and practical means of education for thousands of Navy men." 40

Three years after its inauguration, the Chicago TV College published an extensive report outlining student achievement, enrollment, procedures, curriculum, and costs. 41

In the first year, achievement comparisons were made for the at-home television students, the conventional


classroom students, and the classroom students receiving both telecasts and classroom instruction. In all the subjects taught, the television experimental group showed higher achievement, especially in biology.42

In the second year, achievement comparisons were made primarily between TV-at-home and evening adult conventionally taught students. No significant differences were found favoring the TV group except in humanities, biology, and in one instance, physical science.43

In the third year, variations were found in the three groups of students. The conventional control groups in physical science and humanities favored the TV-in-class groups. In social science and speech, the TV-in-class and conventional classroom groups did not differ significantly.44

The difficulty in analyzing these apparent variations lies in isolating the teaching method variable in the learning situation. There may be many interacting variables such as student motivation, variety of learning experiences, demographics of the student population, and amount of active student participation.45

42 Ibid., p. 11.
43 Ibid.
44 Ibid., p. 12.
In terms of the enrollment for Chicago's TV College, 80,000 students have registered for almost 115,000 courses for credit. There is also an "unseen audience" from 10,000 viewers per telecast in 1956 to an estimated 280,000 viewers per telecast in 1971. Approximately 2,150 students have been graduated with the Associate of Arts degree.

The Chicago TV College curriculum now includes special non-credit course series such as "Start Your Tomorrow Today," "The American Community College," and "Man and His Art."

The fourth report of 1964 verifies the Chicago TV College's continued success within the Junior College program. After eight years of televised instruction, the cost had fallen below that of conventional instruction.

The literature also illustrates an unsuccessful case study of instructional broadcasting in the service of higher education.

Although defunct since 1970, the University of the Air was an experiment using instructional television. It


47 Ibid.


began in 1967, sponsored by the State University of New York. By 1969 seven courses were telecast on eight educational stations in New York State.

In its final report, it was found that television by itself was not a panacea for education.

In summary, the primary lesson learned from considering the content packaging function of television was that television is only one of the many resources available for use in an instructional system and that proper consideration of its role can only take place when the complete instructional system is analyzed and understood. 50

Although correspondence materials and assignments were sent to the students, the dominant learning resource was television. Other resources were not readily available to the students.

Another reason for the closing of the university was lack of financial support. With a reduction in the State University's budget, the number of courses and participating campuses were reduced. 51

Since 1967 New York University has sponsored "Sunrise Semester." The 6:30 A.M. television lecture series has received four Emmy awards, and the programs are carried in


color over eighty-five stations of the Columbia Broadcasting System. The faculty and production staff for Sunrise Semester are supplied by New York University's Washington Square College of Arts and Science as a public service. In addition, "Sunrise courses are offered for credit by NYU and about forty colleges and universities, which set up their own administrative procedures, tuition schedules, and accreditation."\(^{52}\)

Recent applications of an instructional television network to higher education include the Oklahoma, Stanford, and TAGER projects.

The Televised Instructional System, established in Oklahoma by the Oklahoma Regents for Higher Education, began offering graduate courses to both business personnel and college students in 1971.

After studying alternatives for solving the problem of off-campus education, the State Regents determined that it could best be accomplished through the utilization of closed-circuit "talkback" televised instruction.\(^{53}\)

The Oklahoma system links four existing universities to eight industrial communities. Two-way feedback is built


into the system as each of the universities has a transmitting studio-classroom and receiving classrooms are equipped with television monitors and talkback equipment. The studio classroom is designed for both regular campus instruction and for remote locations via television. Participating business and industry provide the equipment for the remote classroom, and share with the State capital and maintenance costs. Course Coordinators from each participating company provide assistance for implementation of the telecasts.  

College courses, short courses, seminars, conferences, and special programs are to be offered by the Televised Instruction System. "Initially, the emphasis will be on graduate level courses from the fields of engineering, business, mathematics, and computer science." A Courier service provides for the exchange of homework, exams, references, and other written materials between and among the classrooms of the system on a daily basis. The enrollment fee for business and industry employees is $75 per credit hour.

The Stanford Instructional Television Network has a similar purpose, organizational design, and media technology. Since 1969 Stanford's School of Engineering has

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54 Oklahoma Higher Education, pp. 2-3.

55 Ibid., p. 4.
transmitted live telecasts to the Bay area over four ITFS channels from on-campus studio classrooms. Under this system, Stanford classrooms are connected with remote classrooms on the premises of forty organizations already participating in the part-time graduate engineering program. Although physically removed from the campus, the off-campus participants are bona fide Stanford matriculated students. Refresher courses are also available for graduate students under a non-registered option. Like the Oklahoma system, the Stanford studio-classrooms are equipped with two-way audio feedback. "Experience to date indicates a very positive reaction to teaching over the Network. Instructors new to the system quickly adapt to the television classroom situation." 56

The year 1972 marks the fifth year of successful interinstitutional cooperation among seven private and two public institutions in Texas by the TAGER project. The Association for Graduate Education and Research (TAGER) operates by a closed-circuit microwave television system known as the "Green Network." 57 Video and audio transmissions from originating classrooms are distributed by TAGER central


57 R. C. Peavey, The Association for Graduate Education and Research of North Texas (Dallas, n.d.), p. 3.
switching to remote classrooms. All classes are "live," and class participation is possible through a two-way audio system. The Green Network also permits TAGER institutions to cooperate via television in other academic pursuits: seminars, workshops, visiting lectures, and cooperative computer usage.58

Over 700 courses have been broadcast by the Green Network since 1965, involving a total enrollment of 15,700 students in the Northern Texas area. Graduate courses offered over the TAGER network were designed to "meet, primarily, recognized requirements in engineering, science, mathematics and business that would sustain the high technology industrial complex of the region."59 Although this emphasis reflects continuing regional needs, courses at the undergraduate level "have increasingly been added as TAGER institutions have realized the benefits that the television system can provide."60

Implications of a Review of the Literature

The experiences of many countries including the United States indicate there has been a vigorous exploration of the

58 Ibid., p. 5.


60 Ibid., p. 2.
ways in which the broadcasting media might contribute to existing educational systems. The Washington County grade school project and the TAGER and PACE programs illustrate that television has been applied to all levels of education. The research cited also shows that for most educational purposes the media are the most effective when they are supported by other learning resources. An example cited was the State of New York's University of the Air. More recently, an additional purpose of the broadcasting media has been to provide an educational experience for those who cannot attend full-time institutional courses in order to pass existing examinations. The Bavaria case study has been such an example.

Most of these international and American examples have utilized broadcasting in a combined operation to extend the teaching of an existing institution to a larger audience. Pertinent examples have been the Chicago TV College, S-U-N project of Nebraska, the Telekolleg Polish TV experiment, and the C.N.A.M. project in Paris, among several others.

The Open University in Britain, however, is a unique example of instructional broadcasting allied to higher education; it is a university in its own right with powers equivalent to those of any other British university. According to its Royal Charter, granted in 1969, "There shall be and is hereby constituted a University with the name and
style of the Open University."

**Organization of the Remainder of the Study**

The materials and methodology utilized in the study are explained in Chapter II. Before describing the Open University system, the investigator presents a discussion of the problems in British higher education which were catalytic to the development of the Open University. Chapter III also documents the initial participation of the BBC in the planning stages of the Open University and its involvement in adult education. A statement of the Open University's purpose, description of the student population, curriculum and degrees, and learning resources are given in Chapter IV. The organization and production activities of the BBC as an Open University learning resource, as well as its relation to the University's instructional system, are sketched in Chapter V. The results of the investigator's field research conducted at the Open University Headquarters and Alexandra Palace are in the succeeding chapter. Chapter VII draws conclusions from the research findings, suggests implications for the Open University as well as its broadcasting operation, and recommends topics for future investigation by educators, broadcasters, and Open University personnel.

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CHAPTER II
METHODOLOGY

The research procedures in this study combined an inves­tigation of primary source materials, pre-structured inter­views, questionnaires, and non-participant observation. The primary sources were in-house publications of the BBC staff allied to the Open University such as the News­letter, memos, the BBC's Listener magazine, The Times (London), British journals, and BBC and Open University official publications.

In order to assess the specific broadcasting operations of the Open University, the investigator developed criteria for evaluation. These criteria were considered to be prin­ciples to be followed in order to have a successful part­nership between open circuit broadcasting and higher educa­tion. Other criteria reflecting British educational broadcasting standards were not identified during the investigator's field research.¹

The process of generating and validating the pre-structured criteria was threefold. First, the investigator

¹ It was assumed that field research at the BBC and the Open University might have produced criteria which the British have established.
compiled a list of planning, production, utilization, and evaluation principles gleaned from a review of instructional broadcasting literature and from an interview with Richard B. Hull, Director of the Telecommunications Center, Bruce Mathews, ITV Supervisor, and Don Reiber, ITV producer, all of The Ohio State University. The list of suggested criteria was then examined by the investigator's Dissertation Committee comprised of Dr. Walter Emery, Dr. I. Keith Tyler, and Dr. John Belland, for additions and revisions. Thirdly, the revised criteria were incorporated into a questionnaire form, found in Appendix A.

The principles were then listed and so arranged as to lend themselves to rank order ratings. The resulting questionnaire was distributed to a panel of experts in education and educational broadcasting. With suggestions from Dissertation Committee members, the investigator selected the following as panel members:

(1) Richard B. Hull  
Telecommunications Director, The Ohio State University

(2) John Macy  
President, Corporation for Public Broadcasting (CPB)

(3) Frank Norwood  
Executive Secretary, Joint Council on Educational Telecommunications

(4) James F. MacAndrew  
Director of Broadcasting  
New York City Board of Education

(5) Al Hulsen  
Director of Radio Activities, CPB
The investigator spent five days in Washington, D.C. from December 12 to December 17, 1972, administering the questionnaires and gathering data with regard to the status of the Open University concept in the United States.

The number of questionnaires returned was 13, with the following panel substitutions:
(1) Mike Annison  
Special Assistant to the Deputy Commissioner  
United States Office of Education  
in place of Mr. Sidney Marland, Jr.,  

(2) Robert Bruce  
Director of Communications Planning  
Corporation for Public Broadcasting Service  
in place of Hartford Gunn,  

(3) Florence M. Monroe  
Assistant Administrator Director  
WNYE-TV Channel 25  
New York City  
in place of James MacAndrew.  

From the 13 received, 11 questionnaires had been fully completed and could be tabulated. The responses to each of the planning, production, utilization and evaluation criterion can be found in Tables 2, 3, 4, and 5, respectively. Each item was ranked according to the following scale:

4 = of great importance  
3 = of some importance  
2 = unimportant  
1 = not important  

Tables 6, 7, 8, and 9 rank the criteria according to their average rating scores in order to illustrate the panel's perception of the relative importance of each criterion. The placement order for each criterion is also given. The criteria generated by the panel members are included at the end of these tables.
### TABLE 2

PLANNING CRITERIA RANKED BY THE PANEL

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Judges</th>
<th>Sum</th>
<th>Average</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>4 4 4 4 3 4 4 3 3</td>
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<td>3 4 4 4 4 3 4 4 4</td>
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<td>3.9</td>
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<tr>
<td>5</td>
<td>3 4 4 4 4 4 4 4 4</td>
<td>43</td>
<td>3.9</td>
</tr>
<tr>
<td>6</td>
<td>3 4 4 4 4 4 4 4 4</td>
<td>43</td>
<td>3.9</td>
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<td>7</td>
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<td>37</td>
<td>3.4</td>
</tr>
<tr>
<td>8</td>
<td>4 3 4 3 3 4 4 4 3</td>
<td>38</td>
<td>3.5</td>
</tr>
<tr>
<td>9</td>
<td>3 3 4 4 4 4 4 4 4</td>
<td>42</td>
<td>3.9</td>
</tr>
</tbody>
</table>

1 = The Open University radio and television broadcasts should have a high budgetary priority within the Open University system.

2 = The broadcasts should be planned according to the specified behavioral objectives of each course.

3 = The broadcasts should be so designed as to integrate with other learning resources of the Open University.

4 = The recognized strengths and limitations of the broadcasting media as instructional tools should be considered in the development of the Open University broadcasts.

5 = Sufficient time should be incorporated into the planning activities.

6 = Course Team members of the Open University should be committed to the critical evaluation of how students learn.
TABLE 2 (continued)

7 = The planning of these broadcasts should be accomplished by cooperative activity of both the British Broadcasting Corporation and the Open University whereby both recognize the expertise of each.

8 = The final authority for production should rest with the British Broadcasting Corporation while decisions regarding academic content should be the ultimate responsibility of the Open University.

9 = The planning for these broadcasts should include procedures for production, utilization, and evaluation.
### TABLE 3

**PRODUCTION CRITERIA RANKED BY THE PANEL**

<table>
<thead>
<tr>
<th>Criterion&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Judges 1</th>
<th>Judges 2</th>
<th>Judges 3</th>
<th>Judges 4</th>
<th>Judges 5</th>
<th>Judges 6</th>
<th>Judges 7</th>
<th>Judges 8</th>
<th>Judges 9</th>
<th>Judges 10</th>
<th>Judges 11</th>
<th>Sum</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
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<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>33</td>
<td>3.2</td>
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<td>4</td>
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<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>40</td>
<td>3.7</td>
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<td>3</td>
<td>4</td>
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<td>4</td>
<td>4</td>
<td>4</td>
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<td>4</td>
<td>42</td>
<td>3.9</td>
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<td>40</td>
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<td>4</td>
<td>4</td>
<td>4</td>
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<td>3</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>38</td>
<td>3.5</td>
</tr>
</tbody>
</table>

<sup>a</sup>1 = There should exist a production standard to be applied to all broadcasts.

2 = The television teacher should be trained in the use of television as a teaching tool.

3 = The television teacher's role in the production process should be clearly defined.

4 = The full potential of the radio medium should be exploited for maximum instructional impact.

5 = The full potential of television should be exploited for maximum impact.

6 = A team effort of producer, television teacher, and technical crew should exist in the production process.

7 = The production activities should be conducted according to management principles.
### TABLE 4

**UTILIZATION CRITERIA RANKED BY THE PANEL**

<table>
<thead>
<tr>
<th>Criterion(^a)</th>
<th>Judges</th>
<th>Sum</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>4 3 4 4 4 4 4 4 4 4 4 4 4 4 4</td>
<td>43</td>
<td>3.9</td>
</tr>
<tr>
<td>2</td>
<td>3 4 3 4 4 4 4 4 4 4 3 4 4 4 4</td>
<td>40</td>
<td>3.7</td>
</tr>
<tr>
<td>3</td>
<td>3 4 4 4 4 4 4 4 4 4 4 4 4 4 4</td>
<td>43</td>
<td>3.9</td>
</tr>
</tbody>
</table>

\(^a\) In scheduling both the original and repeat broadcasts, a high priority should be given to the convenience and availability of the Open University students.

2 = Insofar as possible, the Study Centers should provide a full range of playback tapes and facilities for the Open University students.

3 = For each Open University course, the expected student learning activities should be well defined.
### TABLE 5
EVALUATION CRITERIA RANKED BY THE PANEL

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Judges</th>
<th>Sum</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4 4 3 4 4 4 4 4 4 4 4</td>
<td>43</td>
<td>3.9</td>
</tr>
<tr>
<td>2</td>
<td>4 3 4 4 4 4 3 4 4 4</td>
<td>43</td>
<td>3.9</td>
</tr>
<tr>
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<td>3 4 4 4 4 4 4 4 4 4</td>
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</tr>
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<td>4 4 4 4 4 4 4 3 3 4</td>
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<tr>
<td>6</td>
<td>3 4 4 4 4 4 2 4 3 3 4</td>
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<td>3.6</td>
</tr>
<tr>
<td>7</td>
<td>3 4 4 4 4 4 3 3 4 2 4</td>
<td>39</td>
<td>3.6</td>
</tr>
</tbody>
</table>

1 = Evaluation should continually occur through all the stages of planning, production, and utilization.

2 = Evaluation of the broadcasts should involve the Open University students.

3 = New production and content ideas should be pretested on a sample of the intended Open University student population before incorporation into a course series.

4 = The results of evaluation studies should be applied to future broadcasts.

5 = Evaluation should include the effectiveness of the television teacher.

6 = Evaluation should include the quality of the production evidenced in each radio and television broadcast.

7 = Evaluation should include an assessment of the broadcasting system as an efficient, available, and effective learning resource.
**TABLE 6**

<table>
<thead>
<tr>
<th>Average</th>
<th>Placement No.</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.9</td>
<td>2.5</td>
<td>The broadcasts should be so designed as to integrate with other learning resources of the Open University.</td>
</tr>
<tr>
<td>3.9</td>
<td>2.5</td>
<td>Sufficient time should be incorporated into the planning activities.</td>
</tr>
<tr>
<td>3.9</td>
<td>2.5</td>
<td>Course Team members of the Open University should be committed to the critical evaluation of how students learn.</td>
</tr>
<tr>
<td>3.9</td>
<td>2.5</td>
<td>The planning of the broadcasts should include procedures for production, utilization, and evaluation.</td>
</tr>
<tr>
<td>3.8</td>
<td>5.0</td>
<td>The recognized strengths and limitations of the broadcasting media as instructional tools should be considered in the development of the Open University broadcasts.</td>
</tr>
<tr>
<td>3.7</td>
<td>6.5</td>
<td>The Open University radio and television broadcasts should have a high budgetary priority within the Open University system.</td>
</tr>
<tr>
<td>3.7</td>
<td>6.5</td>
<td>The broadcasts should be planned according to the specified behavioral objectives of each course.</td>
</tr>
<tr>
<td>3.5</td>
<td>8.0</td>
<td>The final authority for production should rest with the British Broadcasting Corporation while decisions regarding academic content should be the ultimate responsibility of the Open University.</td>
</tr>
<tr>
<td>3.4</td>
<td>9.0</td>
<td>The planning of the broadcasts should be accomplished by cooperative activity of both the British Broadcasting Corporation and the Open University whereby both recognize the expertise of each.</td>
</tr>
<tr>
<td>Average Placement No.</td>
<td>Criteria</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>Other (added by Respondents)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- There should be a final arbitrator in planning disputes.
- Teacher training for television and radio must include use of the media.
- The broadcasts should be scheduled in relation to other educational programming for reference viewing and listening.
<table>
<thead>
<tr>
<th>Average</th>
<th>Placement No.</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>1.0</td>
<td>The optimum potential of television should be exploited for maximum impact.</td>
</tr>
<tr>
<td>3.9</td>
<td>2.0</td>
<td>The optimum potential of the radio medium should be exploited for maximum instructional impact.</td>
</tr>
<tr>
<td>3.7</td>
<td>3.5</td>
<td>The television teacher should be trained in the use of television as a teaching tool.</td>
</tr>
<tr>
<td>3.7</td>
<td>3.5</td>
<td>A team effort of producer, television teacher, and technical crew should exist in the production process.</td>
</tr>
<tr>
<td>3.6</td>
<td>5.0</td>
<td>The television teacher's role in the production process should be clearly defined.</td>
</tr>
<tr>
<td>3.5</td>
<td>6.0</td>
<td>The production activities should be conducted according to management principles.</td>
</tr>
<tr>
<td>3.2</td>
<td>7.0</td>
<td>There should exist a production standard to be applied to all broadcasts.</td>
</tr>
</tbody>
</table>

Other (added by Respondents)

The roles of the production team members must be clearly defined.

Training sessions of the television teacher and the producer should be held prior to production to insure an effective relationship.

Colorcasting in television presentations whenever possible.
TABLE 7 (continued)

<table>
<thead>
<tr>
<th>Placement No.</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other (continued)</td>
<td></td>
</tr>
<tr>
<td>Creativity should not be squelched due to management principles.</td>
<td></td>
</tr>
<tr>
<td>There should exist a working relationship of the full planning team in production.</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 8

UTILIZATION CRITERIA LISTED ACCORDING TO ORDER OF PRIORITY

<table>
<thead>
<tr>
<th>Average No.</th>
<th>Placement No.</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.9</td>
<td>1.5</td>
<td>In scheduling both the original and repeat broadcasts, a high priority should be given to the convenience and availability of the Open University students.</td>
</tr>
<tr>
<td>3.9</td>
<td>1.5</td>
<td>Students should be provided with learning objectives at the outset of instruction.</td>
</tr>
<tr>
<td>3.7</td>
<td>3.0</td>
<td>Insofar as possible, the study Centers should provide a full range of playback tapes and facilities for the Open University students.</td>
</tr>
</tbody>
</table>

Other (added by Respondents)

For each Open University course, the expected student learning activities should be well defined.

Students should have the opportunity to discuss with other students.

The students should be given suggested individual learning activities.

Printed materials and other feedback mechanisms should be available for the students.
<table>
<thead>
<tr>
<th>Place-ment No.</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.9 1.5</td>
<td>Evaluation should continually occur through all the stages of planning, production, and utilization.</td>
</tr>
<tr>
<td>3.9 1.5</td>
<td>Evaluation of the broadcasts should involve the Open University students.</td>
</tr>
<tr>
<td>3.8 3.0</td>
<td>The results of evaluation studies should be applied to future broadcasts.</td>
</tr>
<tr>
<td>3.7 4.5</td>
<td>New production and content ideas should be pretested on a sample of the intended Open University student population before incorporation into a course series.</td>
</tr>
<tr>
<td>3.7 4.5</td>
<td>Evaluation should include the effectiveness of the television teacher.</td>
</tr>
<tr>
<td>3.6 6.5</td>
<td>Evaluation should include the quality of the production evidenced in each radio and television broadcast.</td>
</tr>
<tr>
<td>3.6 6.5</td>
<td>Evaluation should include an assessment of the broadcasting system as an efficient, available, and effective learning resource.</td>
</tr>
</tbody>
</table>

Other (added by Respondents)

Evaluation of the broadcasts should focus on observable, pre-determined behavioral objectives.
An analysis of Tables 2 through 9 reveals that there is a high degree of agreement among the panel members. From the average criteria scores, it is also evident that all but 2 of the criteria are rated between worthy "of some importance" and "of great importance," with 10 criteria receiving a high 3.9 average score and only 2 criteria with an average rank of below 3.5. All the panel members ranked one criterion the same, 4.0. In contrast, the "not appropriate" rating was only applied twice. Such evidence seems to justify the application of these "ideal" standards to the broadcasting operation of the Open University.

The personnel interviewed, the facilities observed, and the procedures used in analyzing the data are now discussed.

With a grant received from The Ohio State University Development Fund Committee, the investigator spent approximately one month (March 27-April 25, 1972) in England. In order to understand and assess the broadcasting activities of the Open University, the following persons were interviewed:

**BBC Affiliates**

(1) One radio and one television producer from each of the four foundation course faculties and two producers from a second level course,

(2) The Educational Broadcasting Services Director,

(3) The Public Affairs Director,
(4) A representative of the Further Education Television Staff, and

(5) A representative of the Further Education Radio Staff.

Open University Affiliates

(1) One faculty television presenter from each of the four foundation courses,

(2) A representative of the Educational Technology faculty,

(3) A Course Team member from each of the four foundation courses who is not a (1) television presenter or (2) producer,

(4) A representative from the Public Information and Press departments,

(5) An administrator,

(6) Tutors and/or Counsellors located at Study Centers in the London-Westminster area, and

(7) Students attending the Study Centers throughout the London area on different nights of the week.

Others

(1) A representative from the Education Department of the Independent Television Authority,

(2) A representative of The Times (London) higher education division,

(3) A member of British Parliament, and

(4) Faculty members at the Universities of Leeds, London, and the National Extension College of Cambridge.

All interviews were tape-recorded. They were conducted at various locations, i.e., Alexandra Palace, Headquarters for Open University Productions; the main office of
The Times; House of Parliament; Independent Television Authority Thames Television office in London; Study Centers in the London area; Cambridge, Leeds, and the University of London. The Open University's campus at Milton Keynes was also visited.

The investigator pre-scheduled her observation and interview visits to the Study Centers according to several controlling factors. They were: (1) different weekday evenings, (2) different locations in London and the Westminster area, and (3) tutorial sessions for different courses. All students present at the Study Centers visited by the investigator were asked to complete a brief questionnaire form.

The pre-structured interview schedules for the sample population of BBC producers and personnel, Open University faculty and staff, Course Team members, television presenters, Study Center counsellors and tutors, and British educational broadcasters, educators, and journalists are found in Appendices B, C, D, E, F, G, H, and I. The student sample questionnaire form is found in Appendix J. All interview schedules and questionnaire forms were pre-tested for clarity, objectivity, and validity by nine graduate students of The Ohio State University.

The facilities observed were the Open University Productions center at Alexandra Palace, the Open University
Headquarters at Milton Keynes, and Study Centers in the London-Westminster area. The Study Center observation sheet is found in Appendix K. The libraries of the British Museum, City of London, and BBC, Broadcasting House, were also visited.

After gathering information in England concerning the Open University's tutorial sessions, the investigator devised the tutorial observation sheet found in Appendix L.

In addition to observations of Course Team sessions and video tapings of Open University television programs, the investigator monitored at least one radio and television program from each of the four foundation courses.

In order to describe and evaluate the four foundation course radio and television programs, as well as upper level course programs, the investigator applied two criteria: (1) the Awards rating sheet used by The Institute for Education by Radio and Television at Ohio State University and (2) the BBC guidelines for utilizing the media. They are found in Appendices M and N-1, N-2, and N-3, respectfully. Appendix O was the observation sheet for monitoring the "Open Forum" radio and television programs.

The data collected from interviews, observations, and primary source materials were tabulated according to the pre-determined criteria categories of planning, production,
utilization, and evaluation. Responses to both interview schedules and questionnaires were categorized and tabulated. Miss Sharon Zimmerman verified the categories and was the investigator's independent tabulator.

The results of these procedures are found in Chapter VI. In order to identify the role of broadcasting in the Open University, it is helpful to review the history of British higher education.
CHAPTER III
BRITISH HIGHER EDUCATION

The creation of an innovative, educational institution is inevitably a response to several demands and a recognition of numerous factors. For an understanding of the Open University operation within British society, the prominent factors resulting in the development of the Open University need to be identified. To comprehend the relationship between the BBC and the Open University, it is also necessary to examine Britain's educational broadcasting.

British higher education, which historically has been characterized by tradition rather than innovation, may well be on the threshold of a new era.1

The formation of the Open University is certainly an example of this "new era" as the tradition of Oxford and Cambridge no longer meets all British demands for higher education. As more and better education became available at lower levels, more people were prepared to attend institutions of higher learning.2


Following World War II, a number of changes occurred in British universities. Enrollment began increasing, academic salaries increased, and the government's role in education increased. Through government financing and grants, more students were able to remain in school longer. Traditionally, universities had been financed by private sources, and fees were paid by the students themselves.3

New universities were created to add to the existing "elitest" colleges, London University, and the red brick or regional universities. Universities such as the University of Sussex (1961) attained university status from the beginning. They also had the additional advantage of being able to experiment with new programs of academic study. Several Colleges of Advanced Technology were created to meet the rising demand for science and technology courses.4

The concept of "mass education" in Britain has only recently gained credibility.

For long regarded as a privilege of the few, the opportunity to engage in higher education is at last becoming widely accepted as a basic individual right.5

3 Ibid., pp. 230-45.
The permeation of mass education at the college level in Britain has been slow in comparison to United States higher education growth. Over 50 per cent of Americans at the age of 18 are enrolled in colleges. This figure reflects the availability of higher education in America, but it does not represent the percentage of those receiving the BA degree. Britain's record is far less impressive. Approximately 8 to 10 per cent at age 18 attend a college or university.

The problems of this "educational gap" in British society are well articulated by Dr. Walter Perry, the Vice-Chancellor of the Open University:

We provide higher education for a very much smaller proportion of our population than do the USA and many European countries; we are, and have even more been, neglecting our most valuable natural product, namely, brainpower. Trained brainpower must inevitably be the key to our future success; we dare not any longer have a substantial fraction of our brainpower untrained and untapped.

The principle external school examinations in Britain are labeled the General Certificate of Education (GCE).


They can be taken at the ordinary or "O" level, and advanced or "A" level. They are taken in schools at the age of about 16 and 18, respectively. The standards are set by seven different boards in Britain.

The Ordinary National Certificate (ONC) and Higher National Certificate (HNC) are part-time qualifications, mainly in technical subjects, offered by technical colleges.9

By the London University external degree program, anyone with the appropriate qualifications can obtain a degree by examination. Attendance at a conventional university is not required. London University examines students and awards degrees for those institutions without university status. By maintaining high academic standards in the examinations, the London University can regulate the overall university standards.10

Although the BBC has been active in school broadcasts since its early 1924 educational radio programs, before 1963 it was not utilized in the support of higher education.

But if in school broadcasting current developments mark only improvement and extension of the services pioneered in early days of the BBC, in higher education new ground is being broken

9 Hilary Perraton, Research Director, National Extension College, letter to the author (February 10, 1972).

10 Ibid.
and exciting advances made, if as yet (owing to financial stringency) on only a modest scale. Experience with ITV suggests that the higher the level of education, the higher the level of faculty resistance to such useful innovations as the technologists suggest and in fact make possible. Britain's ancient universities are notoriously conservative, and even the BBC has never dared to suggest that broadcasting had anything to offer them. But with the rapid postwar growth of the new "red brick" universities, a new progressive spirit is abroad which includes recognition of radio and television as useful means of updating and extending higher education, as well as coping with the tidal wave of students inundating college campuses.11

In 1960 the Pilkington committee was formed to examine British broadcasting. Under its chairman, Sir Harry Pilkington, the study analyzed the potential of educational broadcasting in higher education as well as other aspects of British television. Broadcasting and education were discussed as (1) school broadcasts for in-classroom use; (2) educational broadcasts for those no longer in school; (3) "educative," cultural programs; and (4) the educative effect of all television programming.12

One of the outcomes of the Pilkington study was a defined philosophy of educational broadcasting in Britain.11


The basic purpose of in-school broadcasting was stated as supplementing not replacing classroom instruction. As such, the role of the broadcaster was that of an agent of the teacher.  

The lack of educational broadcasts for college credit was a major criticism made in the report. The BBC and the Independent Television Authority (ITA) were cited as only making a very small contribution in higher education.  

Following this report, the Government made available to both the BBC and the ITA additional hours for presenting further adult education programs on television. "Programs even in the first series indicated the capacity of the medium to stimulate into educational activity many adults who had not been attracted by other provision."  

The most significant educational document surveying the potential of full-time higher education in this century as well as proposing solutions was the 1963 Robbins Report. The committee chaired by Lord Robbins presented statistical evidence for the government's commitment in higher education:

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13 Ibid., pp. 55-59.

14 Ibid., pp. 100-107.

The Robbins Committee estimated that in 1961 about 7 per cent of the age group met the minimum qualifications for university entrance.

After assessing the demographic factors related to enrollment and the cultural, social, and economic forces which may be expected to strengthen the demand for higher education, the Committee concluded that by 1980 the country "should be providing entry to full-time higher education for about 17 per cent of the age group."

The Committee estimated that in order to meet the demand of qualified students for higher education, the total number of places would have to be expanded from 216,000 in 1962-63 to 392,000 in 1973-74 and to 346,000 in 1980-81.16

To remedy the pressure of increased enrollment, the Report made several specific recommendations. They were: (1) many existing universities should be expanded to an enrollment of eight to ten thousand each; (2) the teacher training colleges should be affiliated with university schools of education and enlarged to accept about three times as many students as in 1962-63; (3) the ten colleges of advanced technology should be transformed into technological universities with student bodies of from 3,000 to 5,000; and (4) an additional 20,000 university places should be provided by giving university status to several of the current regional technical colleges and other colleges of art, commerce, and education.17


17Ibid., p. 56.
Although the Robbins Report did not receive unanimous approval from the Government and academic circles, it did define the nation's need for educated and specialized manpower, especially as the rate of technology increases. The Robbins Report has achieved special significance in British higher education for stating a rather revolutionary principle.

The basic assumption of the report is that courses of higher education should be available for all those who are qualified by ability and attainment to pursue them and who wish to do so. The government accepts this assumption and also the calculations on the number of places, both in higher education as a whole, and in institutions of university status, which flow from it.18

There is now concern for social justice in higher education. Thinking is diverted from the educated elite to equality in educational opportunity.

Television was cited in the Report as a new, appropriate method for higher education:

We think it likely that television, as a technique of educational communication, may be found to have considerable potential value as an ancillary both for part-time and correspondence study.19

This suggestion became a reality in the formation of the National Extension College (N.E.C.), which started in

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18 Ibid.

Cambridge in 1963. Initially termed the "Dawn University" it first provided only correspondence study.

The National Extension College is a unique institution. One of the prime aims of its founders, Dr. Michael Young and Mr. Brian Jackson, was to attract attention to the need for the provision of an education service for students who were not able to attend full-time or part-time courses and who would normally undertake most of their studies at home. However, once the doors were opened, students' letters and requests led to many other developments. Thus, it has branched out from providing traditional correspondence courses to the provision of an element of correspondence and tutorial guidance linked with radio and television broadcasts.20

Approximately 35,000 adult students have taken the seventeen courses so far offered by N.E.C. It has been stated with conviction:

... that three-way teaching (broadcasting, correspondence, and study centers) of home students can work. It is cheap and effective, especially if the three vital ingredients are combined instead of doled out separately.21

In January of 1970 the N.E.C. and the BBC collaborated to produce three courses in mathematics, literature, and history. These "Gateway" courses involved the integrated use of correspondence teaching and broadcasting in a way comparable to the proposed Open University teaching concept.


These courses, having as one of their aims the provision of preparatory material for the Open University, provide uniquely the opportunity to study in advance the progress of students who are likely to resemble Open University students.\textsuperscript{22}

Since the N.E.C. was a prototype for the forthcoming Open University, it is interesting to note some statistics regarding its students:

For a typical course, it has reached an audience which includes 40% who are manual or minor clerical workers; about some 7% who never got within a mile of the G.C.E. or similar exam, and up to 70% who left full-time education at 15 or younger.

From the composition of the first 200 students of the Gateway courses, 76% were in full-time education after the age of 16, and nearly one-fourth after the age of 20.\textsuperscript{23}

For the year 1969/70 a very high proportion of the National Extension College's students were following the BBC radio "A" level English course.\textsuperscript{24}

From an analysis of 6,965 questionnaire returns from students enrolled in the Gateway Series, the highest proportion of those "likely to enroll with the Open University" are teachers (34%).\textsuperscript{25}


\textsuperscript{23}Brian Jackson, "Open University in Danger of Attracting Wrong Students," The Times (London), November 25, 1969, p. 9.


The idea of the Open University was first publicly articulated by Labor Party leader Harold Wilson in a speech at Glasgow in 1963. Labeled as "The University of the Air," the new educational system would function by "combining TV, radio, and correspondence courses under the guidance and examination discipline of the best of our leaders in higher education. . . ."

A Government Planning Committee was established in 1965 to consider Mr. Wilson's innovative concept. Parliamentary leaders, professors, higher education personnel, and representatives of the educational television services made up the committee.

The results of their deliberations are found in a governmental white paper report which was presented to Parliament in 1966. The program would be mainly degree courses with some refresher courses. The curriculum would include subject areas of contemporary social, industrial, and commercial importance. Shorter courses in technological subjects would also be offered. The committee recommended the use of existing higher education facilities for


practical and laboratory work. The University's learning resources would include "a combination of television, radio, correspondence courses, and study and discussions at community viewing or study centers." As its name implies, the University of the Air was to utilize television as its main instructional method.

Its main contribution... being to bring lectures of distinction within easy reach of everyone, to build up the corporate feelings of a university, and to illuminate the crucial stages of a course. It will provide an added dimension, and give the University of the Air its unique impact and coverage.

Lady Jenny Lee, Labor Minister for the Arts, was the university's political sponsor. Through her tenacity, the proposal was examined by a Planning Committee for the new university in 1967.

Some members of her own Advisory Committee, and a considerable body of opinion outside would have preferred to see the emergence of a less ambitious undertaking, designed to meet student needs at an altogether lower level. Many senior

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29 Ibid., p. 6.

30 Ibid.

government officials were so sceptical that the project might well have been stifled if Miss Lee, with the support of the Prime Minister (Wilson), had not supplied the necessary and urgent political drive.

The general public, insofar as it had any inkling of what was planned, took its cue from an almost uniformly hostile press. The very phrase, "University of the Air," invited ill-informed comment, and the sneers of those who chose to believe that the public was being misled by fallacious promises of an easy road to learning. "Degrees While You Dust" ran one newspaper headline.\textsuperscript{32}

Despite opposition from the press and Conservative Party Officials, the Planning Committee under Lady Lee's chairmanship studied the problems inherent in the University of the Air concept. Several committee members, including Lady Lee, visited a number of correspondence and multi-media-instructed institutions throughout the world. One such example in the United States was Chicago's TV College.\textsuperscript{33}

The Report of the Planning Committee was published in 1969. The name was changed to the "Open University," and television no longer was to play a major instructional role. The "subsequent investigation no doubt led to a fuller realization of the severe limits placed on the use

\textsuperscript{32}John Scupham, "The Open University" (unpublished monograph for the International Broadcast Institute, n.d.).

\textsuperscript{33}James Zigerell, Dean of Chicago TV College, Interview.
of television for the broadcasting of university courses. . . ."34

On July 23, 1969 a university charter was formally presented to Lord Crowther, the first chancellor of the Open University, and to the Chairman of the University Council, Sir Peter Venables.

The first applications were received on January 3, 1970. The first television broadcast over BBC was at 11:30 A.M., January 3, 1971.35

Summary

The concept of the Open University and its application of educational broadcasting has been the result of several factors in British society. Perhaps the most noteworthy has been the increase in the number of university qualified students. Governmental investigations such as the Pilkington and Robbins Committees paved the way for action and innovative ideas in the British higher education system. The political thrust of the Labor Party was another influencing factor. Ultimately, one of the possible solutions to educational demands was the Open University.

The BBC has been an active participant in higher education from its early association with the N.E.C. in producing preparatory courses for the potential Open University students. Before analyzing the BBC's partnership with the Open University, it is necessary to examine the unique characteristics and objectives of the Open University itself. The role of the BBC can be then more accurately identified.
CHAPTER IV
THE OPEN UNIVERSITY

The characteristics of the Open University in British higher education need examination. The Open University's objectives, admission policy, organizational structure, operation, curriculum, student enrollment, course development, instructional system, and research and evaluation will be described. National and international reactions to the Open University as it has currently evolved will also be noted based upon press clippings and interview data collected in England, March-April, 1972. Lastly, the University's unique features are summarized.

Objectives

The Open University was established by a Royal Charter granted on April 23rd, 1969, as an autonomous university. Its objectives, as defined by the Charter, are:

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 standard
for its students and to promote the educational well-being of the community generally.¹

As stated in the Planning Committee's Report to the Secretary of State for Education and Science, the Open University was designed especially for older adult students, "able enough to enter higher education who were born too soon to reap the benefits of increasing educational opportunity."² From an analysis of the structure of British higher education, it is evident that there exists a tremendous backlog of adults who for personal or academic reasons have been denied access to university instruction. Hence, the Open University has been labeled "the university at home," and "the second chance university."

The social concern for filling the educational gap for the 21-year-old and over students in a practical and economical way was first initiated by Lady Jennie Lee, Chairman of the Planning Committee.³ This concept was reiterated by the Chancellor, Lord Crowther, in his July 23, 1969, Inaugural Address:

The first, and most urgent, task before us to cater for the many thousands of people,

²Great Britain, Secretary of State for Education and Science, Open University Planning Committee, Report, p. 2.
³Ernest Hunter, Director of Marketing, Interview, Milton Keynes, April 21, 1972.
fully capable of a higher education, who, for one reason or another, do not get it or do not get as much of it as they can turn to advantage, or as they discover, sometimes too late, that they need. Only in recent years have we come to realize how many such people there are, and how large are the gaps in educational provision through which they can fall. The existing system, for all its expansion, misses and leaves aside a great unused reservoir of human talent and potential. Men and women drop out through failures in the system, through disadvantages of their environment, through mistakes of their own judgment, through sheer bad luck. These are our primary material. To them we offer a further opportunity.4

According to the Planning Committee, the Open University is designed to fulfill two instructional purposes:

In summary, therefore, the objects of the Open University are to provide opportunities, at both undergraduate and postgraduate level, of higher education to all those who, for any reason have been or are being precluded from achieving their aims through an existing institution of higher education.5

Besides offering a "second chance" opportunity for a university education, the Open University is also intended to provide the opportunity to "improve academic and professional qualifications and to stimulate personal, intellectual growth."6

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5Great Britain, Secretary of State for Education and Sciences, Open University Planning Committee, Report, p. 5.

In order to serve these three intended categories of students, the Open University's main learning resources are received in the home. Its adult, full-time student population is over 21 and therefore already employed. There are no classrooms or residence halls.

Two safeguards were built into the Open University Charter to insure that its B.A. degree is equivalent in standard to other first degrees. They were:

First, the creation of the Academic Advisory Committee, and second, the need for the appointment of external examiners to control the award of all individual credits.\(^7\)

Although the Open University B.A. degree is comparable to other British B.A. degrees, the Open University itself is currently existing for a different type of student body. By 1974, however, the University will admit 500 eighteen-year-olds as a pilot project with the Department of Education and Science. As of March, 1972, the only two areas not yet finalized are tuition and the proportion of unqualified students participating in the pilot scheme.\(^8\)

This plan, although still in the developmental stage, already has provoked a major political controversy. The

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\(^8\)Paul Medlicott, "OU Agrees to Take 500 Teenagers," The Times Higher Education Supplement, March 24, 1972, p. 1.
Conservative Party Minister of Education, Mrs. Thatcher, advocated the economic advantage. "It is a well-known fact that the student per capita cost at the Open University is substantially less than a traditional university." Since the Open University is subsidized by the Government, the Conservative Party in power is thought to be keenly interested in reducing government aid to the Open University.10

Those opposing the plan claim the Open University should be allowed to remain a "second chance" university providing degrees for adults.

It is naive to imagine that an institution planned for adults, whose motivation was high and who had considerable experience in work can teach the average school leaver without fundamental changes in its philosophy. On what basis are 18-year-old students for the Open University to be chosen? Logically it is the brightest students who are most able to benefit from the kind of education provided by the Open University without the formal structures of an academic community: yet in practice it will be the weakest students who end up reading its degrees.11

Reaction among those members of the Open University administrative and academic staff that were interviewed

9Ibid.


was unanimously opposed to the 18-year-old addition.
A typical comment was expressed by a member of the Insti-
tute for Educational Technology: "More Open University
students means cheaper education, not better higher educa-
tion."  

The future competition with existing universities is
implied by a member of Parliament: "The Open University
is intended to be a catching up opportunity, not an alter-
native to study at a technic or university."  

Whether for political or educational reasons, the
Open University has agreed officially to the plan, but
"only on condition that it is properly monitored and that
the necessary extra funds are made available."  

The University is "open" in essentially three ways:
first, in a social sense because courses are available to
Englishmen in any part of the United Kingdom without
having to move from home or job for the purpose of study
(except for a one week mandatory summer school session for
each foundation course);  

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12 Mrs. Naomi MacIntosh, Senior Lecturer, Institute
of Educational Technology, Interview, Milton Keynes,
April 21, 1972.


14 Medlicott, "Open University Agreed to take 500

15 The Open University Prospectus 1971, p. 37.
sense because admission does not depend upon any formal academic requirements; and thirdly, in a public sense as the radio and television broadcasts are on open circuit distribution.

Admission Criteria

Applications for entry are considered upon the basis of these non-traditional criteria:

a) Are you sufficiently prepared to benefit from and succeed in your proposed studies at degree level?

b) Is there a particular need for improved educational standards in your occupational group?

c) Is the course you wish to follow one in which we can provide adequate tutorial help?

In addition to these questions, the University accepts applicants on the basis of first come, first served.

Students are not eligible if they are under twenty-one and live outside the United Kingdom. Full-time adult students of other educational institutions may register at

16 Ibid., p. 51.

17 "The Open University," Speech by Dr. Walter Perry, Vice Chancellor, to the Royal Television Society's 20th Fleming Memorial Lecture, 1969.


the Open University only if they obtain permission of their institution.\textsuperscript{20}

Organizational Structure

Its Royal Charter has established the Open University as an independent, autonomous institution. There are two statutory organizations having executive power, the Senate and Council. The powers of each are loosely delineated by the Charter. The rationale for this nondefinitive structure is "to allow a large measure of flexibility within which an effective administrative pattern can emerge."\textsuperscript{21}

The administration and management of the Open University is the responsibility of the Council while academic matters are the Senate's concern.\textsuperscript{22} The Council members are nominated by the Privy Council, the BBC, and the Royal Society together with internal members appointed by the Senate. Two sectors of higher education are represented. These are the "university sector," through members nominated by the Committee of the Vice Chancellors and Principals, and the "public sector," through members nominated

\textsuperscript{20}Open University Prospectus 1971, p. 22.

\textsuperscript{21}International Compendium of Multi-Media Systems, p. 114.

\textsuperscript{22}The Charter of the Open University, p. 3.
by the various representatives of the local education authorities. Eight places on the council will be filled by co-option, "which will allow flexibility in ensuring that persons of special experience will serve as the Council from time to time." The composition of the Senate provides for representatives of both the full-time academic staff and the part-time tutorial and counseling staff and the educational technologists.

Chart I on page 74 illustrates the Open University's flexible organizational structure. The chart also depicts the organizational relationship of the BBC to the Open University.

Officers of the Open University are Chancellor (Lord Crowther), Pro-Chancellor (Sir Peter Venables), Treasurer, Vice-Chancellor (Dr. Walter Perry), and Secretary (Mr. Anastasios Christodoulou).

On the administrative and services level, the Vice-Chancellor's office includes an Advisor on Audio-Visual Aids, the Information Services

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23 The Open University of the United Kingdom and Its Instructional System, n.d., p. 5.


25 Open University Prospectus 1971, p. 84.

26 Mr. Ted Jones, Administrative Assistant, Interview, Milton Keynes, April 21, 1972.
Chart 1: Organizational Structure of the Open University

Source: The Open University and Its Instructional System, p. 5.
Division, a Project Control Officer and the Publishing Division. The Secretary's Office includes an academic Administration Division, a Council and External Affairs Division, a Data Processing Division, a Finance Division, and a Division of Media Production and Media Development.27

To facilitate Open University administration, the United Kingdom is divided into twelve regions, each with a Regional Director.28 Each Regional Assembly elects a representative to the General Assembly. Membership in the General Assembly is from both the staff and students, and it exercises its elective powers to the Council and Senate through Regional Assemblies.29

Staff

The academic departments are classified by six discipline areas: Arts, Educational Studies, Mathematics, Science, Social Sciences, and Technology. Each faculty is chaired by a Dean.

Appointments to the academic staff were drawn from existing British colleges and universities and "were of a quality that matched that of any other university that

28 David Grugon, Assistant Director of Studies, Interview, Milton Keynes, April 20, 1972.

began to make the rest of that world take the new institution seriously.\textsuperscript{30}

Although not provided for in the Planning Committee Report, an Institute of Educational Technology was created. It is responsible for the development of course materials as well as research and evaluation for all the faculties.\textsuperscript{31} The Institute establishes the necessary educational technology expertise to the Open University's instructional system.

The Director of Studies supervises part-time tutors and counsellors for each Open University course and manages the summer school session and Study Centers. The responsibilities of the tutors and counsellors will be discussed under "Instructional System." The other full-time staff are the Staff Tutors who supervise the tutor staff for each course and the twelve senior counsellors who supervise the Counsellors of each region. The Staff Tutors are also officially part of the Open University faculty. Table 10 provides a quantitative breakdown on the number of full-time staff including the BBC personnel. The part-

\textsuperscript{30} Report of the Vice-Chancellor: The Early Developments of the Open University, p. 117.

\textsuperscript{31} David Hawkridge, Director of the Institute of Educational Technology, Interview, Milton Keynes, April 21, 1972.
### TABLE 10

**FULL-TIME STAFF EMPLOYED ON OPEN UNIVERSITY WORK**

**July 1971**

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>University Headquarters</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic</td>
<td>149</td>
<td></td>
</tr>
<tr>
<td>Administrative</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td>Technical</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Auxiliary</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Secretarial and Clerical</td>
<td>284</td>
<td></td>
</tr>
<tr>
<td>Research Assistants</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>687</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Regional Staff</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All Staff</td>
<td>202</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>BBC (full-time O.U. only)</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>Administrative</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Supporting (including Engineering)</td>
<td>165</td>
<td></td>
</tr>
<tr>
<td>Secretarial and Clerical</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>310</td>
</tr>
</tbody>
</table>

**Grand Total** 1,199

---

*a* John Robinson, BBC Chief Assistant to the Open University, Interview, London, April 24, 1972.
time tutors and counsellors in the 250 Study Centers total
around 3,000 in addition to the 1,199 full-time staff.

**Operation: Facilities and Costs**

The Open University administrative and faculty head­
quarters are located on a seventy-acre site in the newly
created city of Milton Keynes. It is here that corre­
ponderence materials and kits are mailed to the students.

The Study Centers are located in 250 geographical
areas throughout the twelve regions. These centers are
usually classrooms in existing polytechnic, red brick, and
traditional universities.  

The radio and television programs are produced in a
small area of Alexandra Palace which is rented by the BBC.
This is the same location from which the BBC first "on the
air" television broadcast was produced in 1936.  

The financing of the University includes initial and
recurrent expenditures and costs required by its students.
The capital cost of establishing the University and its
buildings has been estimated at £10 million through 1972.  

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32 David Grugon, Interview.

33 Frank Gilman, Director of BBC Educational Broad­

34 W. Martin, *The Open University of the United King­
dom*, p. 18.
The University's overhead or recurrent expenditures include payments to the BBC for broadcasting services and the cost of maintaining the Milton Keynes headquarters, Regional and Study Centers, and staff salaries. The BBC's annual budget, which is approximately £1.5 million, includes the cost of production and transmission equipment, which is acquired by the BBC on behalf of the University.

Other recurrent expenditures are the provision of library facilities at Milton Keynes, the operation of one week summer school sessions, and the costs of printing, packing, and mailing the correspondence materials.

The student undergraduate fees are as follows:

- Provision registration fee £ 10
- Tuition fee for each foundation course £ 10
- Summer school fee of one week for each foundation course (covering board) £ 25
- Tuition fee for each undergraduate course at the second, third, or fourth level £ 20
- Tuition fee for a half-course at the second, third, or fourth level £ 10

---


"The course fee is a composite one covering registration, tuition, counselling, student services, examinations, and graduation."\textsuperscript{39} The entering student faces a minimum total cost of £ 140 for a B.A. degree, or £ 180 for B.A. with honors. Fees for higher degrees range from £ 170 for the B. Phil. through an additional £ 150 for the M. Phil. to £ 220 for the Ph.D. degree.\textsuperscript{40}

The Open University has several sources of income apart from student fees, which are insufficient to keep the university functioning. Under the Department of Education and Science, government funds are provided as a "grant-in-aid."\textsuperscript{41} A third source of income is derived from the sale of copyright video tapes, correspondence texts, and correspondence kits such as the mini-microscope.\textsuperscript{42} The outlet for Open University materials has been educational institutions. According to a March issue of \textit{Open House}, an internal Open University publication,

Since marketing began last summer the bulk of all sales has been through the college.

\textsuperscript{39}Ibid., p. 84.

\textsuperscript{40}Open University Prospectus 1971, p. 75.

\textsuperscript{41}The International Compendium of Multi-Media Systems, p. 132.

\textsuperscript{42}Ernest Hunter, Interview.
and larger bookshops for other universities, polytechnics, and colleges of further education.43

The Open University requires a comparatively low yearly budget and student fees are very inexpensive in relation to conventional British universities. The economic aspects of the Open University is but one reason for its great appeal.

Curriculum

There are six faculties, the arts, educational studies, mathematics, science, social science, and technology. It began in January, 1971, with four foundation courses (first-year level) from the arts, mathematics, science, and social science.44 A fifth foundation course in technology has been added in 1972.45 There is no such foundation course in the educational studies faculty since "it is intended to develop courses for the inservice training and further education of teachers."46 These foundation courses are intended to serve several objectives:


44 The Open University Prospectus 1971, p. 28.

45 Ibid., p. 43.

46 The Open University of the United Kingdom and Its Instructional System, p. 2.
Students at O.U. are not expected to offer the usual academic qualifications for university admission. They represent a wide diversity in age, background, and level of sophistication in the subject they are studying. The foundation courses are meant to provide a broad introduction to a field and to give all students a grasp of essentials, although not all students are expected to go on to second- or third-level courses in the subjects.\textsuperscript{47}

All faculties have second, third, and fourth level courses. Each self-contained course is subdivided into units. Usually there is one course unit per week for each of the 36 weeks from January 1 to October (November and December are examination and registration periods).\textsuperscript{48}

Students may choose to study any one or two of the foundation courses, but they are normally not allowed to study more than two courses in the same year.\textsuperscript{49} A significant number of students who registered for two courses preferred to drop one. "Thirty per cent of students who started studying two courses had dropped to one course by May 7th, 1971.\textsuperscript{50} A description of the 1971 Open University


\textsuperscript{48}The Open University Prospectus 1971, p. 37.

\textsuperscript{49}The Open University of the United Kingdom and Its Instructional System, p. 10.

\textsuperscript{50}Naomi E. McIntosh, "Research for a New Institution -- The Open University" (paper given to the annual General Meeting of the Society for Research into Higher Education December 16, 1971), p. 13.
degree structure is presented in the chart on page 84. Courses at the third and fourth level had not yet been developed.

In addition to the undergraduate and graduate curriculum, post experiences courses are being planned for presentation in 1973 or 1974. Three of these courses are half-credit courses

- in computing for managers and business executives,
- in industrial relations for both employers and employees,
- and in the reading process and the development of competence in teaching reading skills designed for school teachers.  

A uniqueness about the university in its curriculum is there are few restrictions on course selection:

- Maximum flexibility and an interdisciplinary approach thus characterize the Open University courses.

- The OU requirements for a degree are deliberately designed to deter narrow specialization and to encourage multi-disciplinary study.

The Open University's interdisciplinary approach is patterned after the newly formulated curriculae at Keele University.  

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51 Report of the Vice-Chancellor: The Early Development of the Open University, p. 76.

52 The Open University Prospectus 1971, p. 17.

53 Walsh, "The Open University: Breakthrough for Britain?" p. 676.

54 Hilary Perraton, Research Director for the National Extension College, Interview, Cambridge, April 18, 1972.
Chart 2: Degree Structure at The Open University 1971

<table>
<thead>
<tr>
<th>Foundation Courses</th>
<th>Level II</th>
<th>Level III</th>
<th>Level IV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Arts</strong></td>
<td>Humanities</td>
<td>Renaissance and Reformation</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Age of Revolution</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Twentieth Century</td>
<td>-</td>
</tr>
<tr>
<td><strong>Educational Studies</strong></td>
<td>-</td>
<td>Learning and Development</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Administration and Management</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social Relationships</td>
<td>-</td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td>Mathematics</td>
<td>Mathematics II</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer Science and Statistics</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mathematical methods</td>
<td>-</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td>Science</td>
<td>Geology</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physics</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Geophysics</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physics-Chemistry</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Geology</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Biochemistry</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Biology</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chemistry</td>
<td>-</td>
</tr>
<tr>
<td><strong>Social Sciences</strong></td>
<td>Understanding Society</td>
<td>People and Organizations</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Urban Development</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contemporary Britain</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Economic Theory and Policy</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Psychology - principles and methods</td>
<td>-</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>Technology</td>
<td>Materials Science</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Engineering mechanics</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Electronics design and communications</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: The Open University Instructional System of the United Kingdom, p. 5.
University departs from the strong precedent of specialization. For example, an Oxford undergraduate student's education focuses upon a single subject area.

The completion of each course earns the student one full credit. This year half-year credit second-level courses were added to the curriculum, lasting eighteen weeks. Half-credit courses are also planned for third- and fourth levels. "With a greater variety from which to choose, the student has greater flexibility in course selection."55

The credit course structure appears to reflect the continuing education design of the Open University. Credits can be accumulated over an indefinite period of time as the part-time adult students may find other demands make it necessary for him to discontinue, at intervals, his Open University education. Yet he can re-enter at anytime. In addition:

Credits can be accumulated in units as small as one at a time. The part-time learner who has to balance the demands of home, work, and avocation may have only a little time for study. The concurrent following of a large full-time situation, but it appears inappropriate in a part-time context.56

55 Peter Holiday, Assistant Secretary for Academic Planning, Interview, Milton Keynes, April 20, 1972.

Besides the advantage of flexibility, the credit system permits Open University students to be exempted from sections of a course because of earlier work completed in other institutions.57

Three out of four registered students have gained credits in Open University courses in 1971. The results of their examination were highly favorable:

The university's students ended their first academic year with examinations on November 1 and 2 when 15,823 students sat a total of 17,664 foundation course examinations in arts, mathematics, science, and social sciences with a total of 1,841 students taking two foundation course examinations. A total of 92.5 per cent of those students who sat the examinations were successful in gaining either a credit or credit with distinction.58

Table 11 illustrates the percentage of students registered per faculty and the corresponding percentage of those receiving credits. The highest number of credits awarded were to art students while the lowest number were received by mathematics students.

**Degree Requirements**

The Open University awards a Bachelor of Arts to the student who completes six courses and obtains six credits


TABLE 11

CREDITS RECEIVED 1971 STUDENTS

<table>
<thead>
<tr>
<th>(1) Course</th>
<th>(2) Courses Registered May 71</th>
<th>(3) Course examination taken with % of students registered</th>
<th>(4) Credits with distinction and % of course examinees</th>
<th>(5) Credits excluding distinctions and % of course examinees</th>
<th>(6) Total credits and % of course examinees</th>
<th>(7) % of students courses registered May 71 awarded credit or credit with distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>6,112</td>
<td>5,352 (87.6)</td>
<td>175 (3.3)</td>
<td>5,057 (94.5)</td>
<td>5,232 (97.8)</td>
<td>85.6</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>6,001</td>
<td>5,036 (83.9)</td>
<td>217 (4.3)</td>
<td>4,611 (91.6)</td>
<td>4,828 (95.9)</td>
<td>80.5</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4,639</td>
<td>3,423 (73.8)</td>
<td>390 (11.4)</td>
<td>2,389 (69.8)</td>
<td>2,779 (81.2)</td>
<td>59.9</td>
</tr>
<tr>
<td>Science</td>
<td>4,963</td>
<td>3,855 (77.7)</td>
<td>154 (4.0)</td>
<td>3,353 (87.0)</td>
<td>3,507 (91.0)</td>
<td>70.7</td>
</tr>
<tr>
<td>Total *</td>
<td>21,715</td>
<td>17,666 (81.4)</td>
<td>936 (5.3)</td>
<td>15,410 (87.2)</td>
<td>16,346 (92.5)</td>
<td>75.3</td>
</tr>
</tbody>
</table>

* Because some students took two courses these totals apply to courses sat and examined and should not be confused with overall Student totals.

in two foundation courses and four upper-level courses (second, third, or fourth). For the B.A. with honors degree, eight credits are required, two foundation courses, two at the third or fourth level, and four others from the second to the fourth level.\footnote{59 The Open University Prospectus 1971, p. 39.}

During 1972-73, higher degree programs are to be added such as the B. Phil., M. Phil., and Ph.D. The number of credits required for the Master of Philosophy is three regular credits and three research credits. For a Doctorate, three regular credits are required in addition to six research credits.\footnote{60 Ibid., p. 31.}

It is expected that the Open University student will spend 10 to 20 hours per week on each course. Completion of a B.A. without honors is expected to take on the average of six years.\footnote{61 The Open University in the United Kingdom and Its Instructional System, p. 15.}

**Enrollment**

The University received 42,821 applications in the period of initial enrollment from January 15 to August 4, 1970. After subtracting those who subsequently changed their minds and withdrew applications, the net figure in
January, 1971, from which 25,000 enrolled was 40,817. Since many applied for two courses, the total course application figure was 62,147.62

Final selection of the first 25,000 enrollees was designed to achieve a fair distribution between geographical regions, occupational categories, and the four foundation courses in relation to the overall profile of applications. The data on which applications were received was another consideration.63

Table 12 shows the progression of Open University applications in 1971 and 1972.

As of March, 1972, there have been a total of 17,000 applications received for 1973 admission.64 The final number of 1973 registered applications will be known by January, 1973.

Table 13 on page 91 shows the analysis of 1971 applicants by occupation. The highest percentage are teachers. "This category of students has the highest economic motive to complete a B.A. degree since their salaries directly

62Ibid., p. 22.


TABLE 12

OPEN UNIVERSITY APPLICANTS

<table>
<thead>
<tr>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Study in 1971</td>
</tr>
<tr>
<td>Total of applicants</td>
</tr>
<tr>
<td>Number provisionally registered</td>
</tr>
<tr>
<td>after selection (January 1971)</td>
</tr>
<tr>
<td>Number finally registered on payment</td>
</tr>
<tr>
<td>of first-year fees (May 1971)</td>
</tr>
<tr>
<td>For Study in 1972</td>
</tr>
<tr>
<td>Total of applicants</td>
</tr>
<tr>
<td>Number provisionally registered</td>
</tr>
<tr>
<td>after selection (January 1972)</td>
</tr>
<tr>
<td>Add number of students applying</td>
</tr>
<tr>
<td>to continue from 71 (both successful and</td>
</tr>
<tr>
<td>unsuccessful in first year)</td>
</tr>
<tr>
<td>Possible total of students in 1972</td>
</tr>
</tbody>
</table>


correlate with their education."65 No doubt also that the Open University concept was more thoroughly diffused to teachers than to any other segment of British society. Examples have been the active promotion efforts of the

### TABLE 13

**OCCUPATIONAL ANALYSIS OF 1971 APPLICANTS**

(Numbers given refer to non-graduates, those in brackets refer to graduates)

<table>
<thead>
<tr>
<th>Occupational Group</th>
<th>Number</th>
<th>Percentage of total</th>
<th>Outcomes set after scrutiny of applicants</th>
<th>Percentage allocated places</th>
<th>Quota percentages as absolute numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Housewives</td>
<td>3,738</td>
<td>8.9 (0.3)</td>
<td>10.0% (0.15)</td>
<td>9.6 (0.2)</td>
<td>2,500 (25)</td>
</tr>
<tr>
<td>2. Armed Forces</td>
<td>959</td>
<td>1.7</td>
<td>2.0% (0.15)</td>
<td>2.0</td>
<td>500 (26)</td>
</tr>
<tr>
<td>3. Administrators and Managers</td>
<td>2,830</td>
<td>6.6 (0.3)</td>
<td>4.5% (0.15)</td>
<td>5.4 (0.2)</td>
<td>1,125 (25)</td>
</tr>
<tr>
<td>4. Teachers</td>
<td>14,642</td>
<td>33.6 (2.3)</td>
<td>30.0% (1.0%)</td>
<td>33.0 (1.3)</td>
<td>7,500 (250)</td>
</tr>
<tr>
<td>5. Professions and the Arts</td>
<td>4,869</td>
<td>11.3 (0.6)</td>
<td>8.5% (0.15)</td>
<td>9.7 (0.3)</td>
<td>2,125 (25)</td>
</tr>
<tr>
<td>6. Qualified Scientists and Engineers</td>
<td>3,275</td>
<td>7.3 (0.7)</td>
<td>8.0% (0.15)</td>
<td>9.0 (0.3)</td>
<td>2,000 (25)</td>
</tr>
<tr>
<td>7. Draughtsmen, Laboratory Assistants and Technicians</td>
<td>3,037</td>
<td>7.4 (0.1)</td>
<td>9.0% (0.15)</td>
<td>9.1 (0.1)</td>
<td>2,250 (25)</td>
</tr>
<tr>
<td>8. Electrical, electronic, metal and machines and allied trades</td>
<td>730</td>
<td>1.8</td>
<td>3.0% (0.0%)</td>
<td>2.3</td>
<td>730 (0)</td>
</tr>
<tr>
<td>9. Other manufacturing, farming, mining, construction, transport and communications</td>
<td>1,171</td>
<td>2.8</td>
<td>5.0% (0.15)</td>
<td>3.1</td>
<td>1,250 (25)</td>
</tr>
<tr>
<td>10. Clerical and office staff</td>
<td>3,324</td>
<td>8.1 (0.1)</td>
<td>10.0% (0.15)</td>
<td>8.0 (0.1)</td>
<td>2,500 (25)</td>
</tr>
<tr>
<td>11. Shopkeepers, sales, services and sport, recreation workers, Fire Brigade and Police</td>
<td>1,409</td>
<td>3.4</td>
<td>4.25 (0.15)</td>
<td>3.7</td>
<td>1,125 (25)</td>
</tr>
<tr>
<td>12. Not working (other than housewives) retired, independent means</td>
<td>1,040</td>
<td>2.4 (0.1)</td>
<td>3.0% (0.15)</td>
<td>2.4 (0.1)</td>
<td>730 (25)</td>
</tr>
<tr>
<td>13. In institutions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- The Open University and Its Instructional System, p. 11.
National Union of Teachers, articles in secondary school magazines such as the widely circulated The Teacher, and reports of the Open University's progress in The Times Education Supplement. There is a professional initiative for teachers as a large number of them do not have their B.A. "Of 380,000 teachers, 200,000 don't have their degrees due to fewer opportunities in England to take credit for a degree."

Table 14 compares the occupations of 1971 applicants to 1972. The percentage of teachers has dropped slightly (5.3%) from 1971 to 1972.

From the total number of 1973 applications received, the occupations of housewives and technicians are among those with a larger share of the total 1973 occupational profile.

Another important trend for future enrollment is that "older students continued at a slightly higher rate than the younger ones." In light of the pilot project to admit 500 eighteen-year-olds, this trend may be highly significant to the character of the Open University admissions policy.

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66 Evans, Interview.
67 "More Housewives, Fewer Teachers Apply for 1973 Course," p. 1
<table>
<thead>
<tr>
<th>Category</th>
<th>1972</th>
<th>1971</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Housewives</td>
<td>13.0%</td>
<td>11.0%</td>
</tr>
<tr>
<td>2. Armed Forces</td>
<td>1.7</td>
<td>1.5</td>
</tr>
<tr>
<td>3. Administrators and Managers</td>
<td>4.0</td>
<td>4.9</td>
</tr>
<tr>
<td>4. Teachers</td>
<td>33.6</td>
<td>38.9</td>
</tr>
<tr>
<td>5. Professions and the Arts</td>
<td>12.1</td>
<td>12.8</td>
</tr>
<tr>
<td>6. Scientists and Engineers</td>
<td>3.4</td>
<td>3.7</td>
</tr>
<tr>
<td>7. Technicians</td>
<td>10.5</td>
<td>8.6</td>
</tr>
<tr>
<td>8. Electrical and Allied Trades</td>
<td>2.6</td>
<td>1.8</td>
</tr>
<tr>
<td>9. Farming, Mining and Other Manufacturing Industries</td>
<td>1.6</td>
<td>1.7</td>
</tr>
<tr>
<td>10. Communications</td>
<td>1.5</td>
<td>0.9</td>
</tr>
<tr>
<td>11. Clerical and Office</td>
<td>8.8</td>
<td>8.1</td>
</tr>
<tr>
<td>12. Shopkeepers and Sales</td>
<td>4.2</td>
<td>3.6</td>
</tr>
<tr>
<td>13. Retired</td>
<td>2.9</td>
<td>2.4</td>
</tr>
<tr>
<td>14. Institutions</td>
<td>0.2</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Course Development

Each Open University course is developed by a course team composed of academicians from the course disciplines, BBC producers (usually one for radio and one for television), at least one member of the educational technology staff, and part-time professional consultants. The team has a Chairman directing the ten to twenty-course team members. The responsibility for each entire, self-contained course from its design to production rests with the Course Team members.

To help ensure good continuity, the team then breaks up into small working groups of two-three members—one member having primary responsibility for producing certain materials, and the other(s) having mainly a watching and advisory brief. The working groups overlap so that each course team member has the dual task of (a) personally producing certain parts of the course, and (b) monitoring related parts of the course which his colleagues are producing.

Full Course Team meetings also have the responsibility for assessing unit progress within a course and for revising course structure depending upon student feedback.

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69 David Stringer, Lecturer in Linguistics, Interview, Milton Keynes, April 22, 1972.

printing and broadcasting deadlines, and time constraints. 71

Recognizing that the Open University students are being taught at a distance, the course materials must be exceptionally clear and self-sufficient. The Course Team is the core of the university's teaching system, hence it must collectively provide a comprehensive teaching package.

After course objectives, planning of the structure and format, and writing of content have been completed and agreed upon, the print materials are "piloted" on a group of potential Open University students. With the aid of the Team's educational technologist, these results are reported to the Course Team members. Revisions are then made by the unit authors where appropriate. 72

The next step after developmental testing is the production of radio and television programs. An analysis of the integration of the broadcasts and the Course Team structure will be given in the next chapter. Lastly, all course materials are edited, printed, and distributed to the students by mail.

71 Ibid.

72 Richard Hooper, Senior BBC Producer for Open University Productions in the Educational Studies Faculty, Interview, London, April 24, 1972.
From an observation of one Course Team session and from a review of Open University literature, the investigator differentiated the Course Team concept from traditional academic teaching. In a conventional university, the student does not have the benefit of several subject experts. He learns from his teacher's expertise and resources. With the Course Team structure, several teachers are mutually interacting by suggesting, criticizing, and questioning. There is a broadly based, collective expertise input to the course materials. Yet administratively it may be difficult to reach consensus and meet course deadlines unless each Course Team member compromises.73

**Instructional System**

The method of instruction for the Open University student is unique. Six different kinds of learning resources are characteristic of its instructional system.

No other institution of higher education in the world has such a system. It is also the most advanced and sophisticated multi-media instructional system being used to teach large numbers of students at a distance.74

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73 Observation of an Educational Studies Course Team Session for a Third Level Course, E 352, Milton Keynes, April 21, 1972.

Chart 3 on page 98 illustrates the variety of learning resources and their relation to the total system. The student is the focal point of the model as each learning resource reacts upon him in his own environment. The multi-learning components in turn are designed to integrate with one another.

A comprehensive feedback network aided by a computer provides information on students' academic progress. Because of this computerized feedback system, assessment can be quickly and repeatedly performed. Considering the overall nature of the student body of the "second choice" university, it is crucial that the student and the University keep up to date on his progress or lack of it. "Continuous assessment is important in the Open University context because it offers a method of identifying quickly the need for remedial action."\(^\text{75}\)

Each learning resource has its own function. The most important learning resource is the correspondence packages containing basic course materials for about one month's work.\(^\text{76}\) Included in the correspondence materials are unit expositions, pictorial illustrations and photos where appropriate, self-assessment exercises, unit tests or


\(^{76}\)Hawkridge, A Summary of the Instructional System Used by the Open University, p. 1.
Chart 3: Student Learning Activity at the Open University

Source: The Open University of the United Kingdom and Its Instructional System, p. 8.
assignments, supplementary readings, and broadcast notes. Some assignments are computer marked while others are sent to appropriate class tutors for comments and assessment.77

All correspondence packages containing these materials are mailed. During Britain's postal strike in 1971, there was an unavoidable breakdown in the instructional system.

A second learning resource is radio and television broadcasts produced by the BBC. Each unit of a course is usually accompanied by a 25-minute radio and television program. The philosophic rationale for broadcasting as an Open University learning resource and its descriptive characteristics within the instructional system will be discussed in the next chapter. An analysis of the role of broadcasting based upon the investigator's research and validated criteria will be presented in Chapter VI.

The tutor represents a third learning resource. He grades the essay assignments and suggests further study.78

Originally, there were two tutors: a correspondence tutor graded students' written work and a class-tutor,


78 Hawkridge, A Summary of the Instructional System Used by the Open University, p. 2.
responsible for face-to-face tuition at Study Centers.\textsuperscript{79}

In 1971, however, only one tutor per course per Study Center region was retained. "It was felt that the student ought to be able to personally meet a tutor worker instead of having a tutor middleman."\textsuperscript{80}

Another new tutor activity begun in 1972 was monthly tutorials at Study Centers lasting about one hour. From observations of ten tutorial sessions in the London area in April 1972, it seemed that they accomplished three purposes depending upon the tutor: One, recent essay questions were reviewed and discussed; two, the tutor lectured on the important or difficult concepts of a complete unit as he perceived them; and three, the tutor played the role of an additional primary resource motivating students to explore other aspects to the unit's subject. Approximately ten to twenty-five students were present at the ten monthly tutorial sessions attended by the investigator. According to another source:

\textit{As for the tutorial system, statistics show that on an average about 50 per cent of any students attended a local study center in}

\textsuperscript{79}The Open University in the United Kingdom and Its Instructional System, p. 72.

\textsuperscript{80}Mrs. Jill Foot, Tutor and Counsellor for the Arts, Interview, London (April 20, 1972).
any given week, although attendance tended to drop as the year progressed. 81

The third learning resource available to students is a counselling service. There is one counselor per approximately 30-35 students. He advises the students on administrative and general learning problems, primarily, although he also plays a pastoral role in encouraging good study habits and motivating the discouraged. Counsellors are part-time personnel and are selected on the basis of their academic achievements. There is a counsellor for each course. Usually, applicants are placed according to their expertise for a particular course. On occasion, counsellors for one course may also serve as tutors for the same course but attached to different students. 82

Tutors and counsellors meet students at the fourth learning resource, the Study Center. The usual hours are 6:30 to 9 P.M., Monday-Friday. Geographically located in 250 communities throughout the United Kingdom, these Centers are also convenient for students meeting with other students. "For the student wishing interaction and academic stimulation from his fellow peers, the Study Centres serve the purpose." 83

81 Smith, "Britain's Open University," p. 49.
82 Mrs. Jill Foot, Interview.
83 David Grugon, Interview.
Chart 4 on page 103 graphs the proportion of students attending Study Centers in any one week in 1971. As might be expected, the Centers were most frequently attended by math students. From the twelve Study Centers visited by the investigator during April 3-18, 1972, the largest attendance was 25, the smallest was 5.

The Centers visited in the London-Westminster area had similar facilities. According to the investigator's check sheet for facilities at the Centers (Appendix K), the media equipment consisted of a radio and television set. Several Centers have a 16 mil. film cartridge machine for video-tape playback and computer terminals for math students. Other observations are reported below:

Description of Physical Layout of Study Center.--A classroom(s) within a secondary school, adult education, or university.

Opening Hour and Closing.--6:30 P.M. until 9 P.M., Monday through Friday.

Number of Personnel at Each Center.--One counsellor for each faculty assigned to a Center location; one tutor for each course. Typically, two courses were assigned for a particular night: Arts and Educational Studies every Thursday night at Walgreen Study Center, for example.

Accessibility to Students.--According to counsellors and tutors interviewed, each Center is supposed to cover a radius of ten miles.
Chart 4: The Proportion of Students Attending Study Centers in Any One Week - 1971

Source: Naomi E. MacIntosh, "Research for a New Institution - The Open University," p. 18.
Cost of Study Center Operation.—There is usually no charge for using classrooms in existing institutions, and if television and radio sets are already in the classroom, there is no initial cost for facilities.

Maintenance.—No cost.

Percentage of Total Open University Budget.—Approximate yearly fee for part-time counsellors is about £1,500 and for part-time tutors about £3,000, a total of roughly 10 per cent of the Open University’s total budget.

Number of Students at Centers.—Depending upon the location, night, and tutorial session in process, the investigator observed the average attendance to be between 10 and 25 students at each Center.

Activity of Students Present.—Viewing broadcasts, counselling sessions, meeting other students, tutorial sessions.

Bulletin Board Displays.—None observed.

Distinguishing Features of Center.—Conventional classrooms with desks, blackboards, and television/radio sets.

The utilization of the Open University programs at the Study Centers is discussed in Chapter V.

A one-week, mandatory summer session for each of the foundation courses is the fifth learning resource. The summer sessions are held in existing higher education institutions and are purposely scheduled in the summer when classroom space is available and when most of the Open
University students usually take vacations or can easily obtain time off. Summer school offers the student several advantages:

In these schools he not only received additional face-to-face assistance but also engages in activities important for university level courses and impossible to arrange in the Study Centres. Laboratory work features prominently in the science summer schools, for example.84

The experience of the first year's summer school sessions was overwhelmingly favorable. Typical comments from BBC producers and Open University staff and faculty members interviewed were: "A very exhilarating experience"; "It was such a joy to meet our students"; and "their enthusiasm and eagerness to learn was rather refreshing."

An American professor who was invited to be an art tutor last year commented:

We tutors were ready for anything. What we got were eager and energetic secretaries, business executives, salesmen, housewives, farmers, retired military personnel, mailmen, factory workers, and teachers--so excited about an authentic university professor that they sometimes all tried to speak at once. Such sustained enthusiasm was nothing less than astonishing; thanking a tutor after class almost became a ritual, there were so many expressions of appreciation.85

84 Hawkridge, A Summary of the Instructional System, p. 2.

In place of one week summer sessions, the second to fourth level courses require two week-end sessions at specified Study Centers. It is felt that beyond the first year, there is no need for an intensified one-week session. Current thinking for the second to fourth-level student may be modified, however, as the university progresses.86

Research and Evaluation

The Institute of Educational Technology at the University is responsible for course research and evaluation. The results of the Institute's studies are distributed to Course Team members, administration, and staff involved in future planning. "The aim must be to establish a self-improving system."87

Table 15, page 107, lists these on-going and planned research projects by the Institute. A brief description of the nature of each of the research projects is also given. Those projects related to broadcasting are discussed in Chapter V.

The Institute of Educational Technology offers to the Open University evaluative data with which to assess its teaching effectiveness. With the aid of the Data

86 Grugon, Interview.
### TABLE 15
RESEARCH PROJECTS AT THE OPEN UNIVERSITY

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On-Going Research</strong></td>
<td></td>
</tr>
<tr>
<td>1. &quot;Some Social and Educational Consequences of Independent Study through the Open University&quot;</td>
<td>An initial questionnaire to all students will look in detail into patterns of study and problem areas for those who drop out early.</td>
</tr>
<tr>
<td>2. &quot;Students Preparing for the Open University&quot;</td>
<td>A study of the social and educational background, motivation, and anticipated study difficulties of preparatory course students.</td>
</tr>
<tr>
<td>4. &quot;Conceptual Models&quot;</td>
<td>An inquiry into how knowledge is structured and taught.</td>
</tr>
<tr>
<td>5. &quot;Developmental Testing&quot;</td>
<td>An inquiry into the effectiveness of trying out teaching material before full-scale teaching.</td>
</tr>
<tr>
<td><strong>Planned Research</strong></td>
<td></td>
</tr>
<tr>
<td>1. &quot;Media Research&quot;</td>
<td>There will be an on-going project inquiring into the most effective use of TV and radio for Open University teaching.</td>
</tr>
</tbody>
</table>
TABLE 15 (continued)

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. &quot;New Methods of Testing&quot;</td>
<td>A search for new methods of test and examination design</td>
</tr>
<tr>
<td>3. &quot;A Study of Different Methods of Course Design and Production&quot;</td>
<td>An attempt to isolate human and organizational factors facilitating or hindering the efficient production of Open University courses.</td>
</tr>
</tbody>
</table>

*Research Projects into Adult Education and Learning at the Open University, Institute of Educational Technology, n.d.*

Processing Division and an ICL 1902A computer (tape-disc storage and document reader), accurate figures can be obtained for enrollment analysis, student achievement and failure, effectiveness of the multi-combination of learning resources, and assessment of each of the instructional materials. Such informative data may also reveal characteristics of the adult learner which could be applicable to numerous adult extension programs, continuing education, and any other institution of higher learning catering specifically to those over 21.
Reactions to the Open University

Although it is too premature to generalize on the success of the Open University, some initial skepticism has been alleviated. 88 During its first year of operation, the publication Daily Telegraph, the largest circulated "highbrow" newspaper, criticized the unorthodox instructional system as being too liberal and easy. 89 Other publications which are more working-class oriented like The Guardian were pessimistic about the Open University attracting the "wrong" students such as teachers. Much negative speculation also concerned the value of the Open University degree in relation to existing British university degrees. 90

As more applicants are received, there is some indication that those of the working classes are beginning to take advantage of the Open University. 91 A philosophical reason for the absence of this segment of British society may reflect their non-educational tastes and environment

88 "Ridicule and Hostility to the Open University Has Been Removed," The Times Higher Education Supplement, March 3, 1972, p. 3.

89 Brian MacArthur, the editor of The Times Higher Education Supplement, Interview, London, April 24, 1972.

90 Paul E. Metlicott, The Times (London) correspondent, Interview, April 13, 1972.

91 Refer to Tables 13 and 14, pages 91 and 93.
One may need prior exposure to a university experience before recognizing its cultural, intellectual, or monetary value.

From the small sampling of faculty members interviewed from the Universities of Leeds and London, and the National Extension College, it was found that the curriculum and teaching methods have the respect of several fellow colleagues. Newspaper articles entitled, "OU's Determined Respectability" and the publication of the Open University's faculty achievements have helped to confirm academic acceptance.

There has been a tremendous international interest in the Open University. According to John Lodge, Press Officer, "There are about fifty visiting foreign dignitaries a week." An examination of the Overseas Press Cuttings in the autumn of 1972 suggests that Japan, West Germany, the Scandinavian countries, and the United States have very favorably regarded the Open University concept. French, Italian and Soviet articles were the briefest and least enthusiastic.


94 John Lodge, Interview, Milton Keynes, April 21, 1972.
A Pilot project involving the Open University's Science foundation course has begun in Benin, Nigeria. In September of 1972, four American universities will try out the Math, Science, and Humanities foundation courses as a test of the application of Open University materials (not the system). The institutions are Rutgers, Universities of Maryland and Huston, and San Diego State.

Summary

The various interpretations of the Open University's success in British society are significant once one has understood the objectives, admissions policy, organizational structure, operations, curriculum and degrees, enrollment, course development, learning resources, and research of the Open University.

From a discussion of these characteristics, it is apparent that there are several innovative and pioneering aspects of the Open University. Unlike traditional British higher education, the Open University's purpose is to provide a university degree for those without formal, university requirements. Although acclimated to conventional teaching in secondary schools, its student


96 Ernest Hunter, Interview.
population is exposed to new methods of learning such as radio and television in addition to the written word. The specific nature of the students demands emphasis upon independent "at home" study. Self-instruction has the advantage of flexibility in study habits, but it also demands keen motivation when interest diminishes and course content becomes more complex. Since it is expected that each unit of course work requires at least ten hours' concentration, most of the Open University students must appreciatively desire a university education. The following is an estimation of this ten-hour breakdown:

. . . six hours of self-instruction, a half-hour of TV, a half-hour of radio, a half-hour of self-assessment tests, about a half-hour for "subjective" assignments to be graded later by tutors, about an hour of "objective" assignments to be graded later by computer, and in science about an hour for home experiments.  

The typical red brick or Oxford student would not have the benefits of these multi-learning experiences or the flexibility of a curriculum based upon an interdisciplinary approach. Traditional departmental structures have been replaced by general faculties at the Open University.

Without the cost of meals and board usually associated with campus residence halls and classroom facilities, the tuition at the Open University is inexpensive. Britain

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98Smith, "Britain's Open University," p. 50.
has developed a teaching system that is "potentially applicable to any country and is capable of producing a graduate at about 20 per cent the cost of a conventional university education."99

Unlike the City TV College of Chicago, for example, the Open University is an independent autonomous institution utilizing television and radio in combination with other resources. By its careful selection of faculty, including counsellors and tutors, the University recognizes that academic credibility and respectability are important to its stature and the economic viability of its degrees.

The Open University system has the potential for outstanding instruction. Its Course Team structure encourages mutual exchange among intellects, the broadcasting expertise of the BBC, and the constructive criticisms of the Institute of Educational Technology staff. Since its correspondence materials are easily accessible in bookstores for a nominal fee (the cost of an average text is $2.80), and since its broadcasts are available to anyone with television and VHF radio sets, the Open University is not operating in a vacuum. It is an open system within the British society; as such, national feedback and student opinion can filter into the system for its own self-improvement.

99Ibid., p. 48.
Both domestic and international reactions to the Open University have been described. Those of the working class are beginning to take advantage of the Open University which has reduced the criticism that the University is attracting the "wrong" kind of students who are already somewhat educated. Acceptance of the Open University by British faculty members also appears probable according to various newspaper reports and the opinions of some faculty members interviewed.

The Open University Science course materials are currently being used in Nigeria. American interest in the adoption of Open University materials is evident by the forthcoming pilot program at four universities.

Having described the features of the Open University itself, it is now appropriate to define the function of the University's broadcasting component.
CHAPTER V
THE NATURE OF BROADCASTING WITHIN
THE OPEN UNIVERSITY SYSTEM

In order to interpret accurately the Open University's broadcasting model and its relevance as a learning resource, it was important to review the significant features of the Open University itself. The investigator then concentrated on the descriptive purpose of the study: "What is the nature of broadcasting within the Open University?"

The data were derived from the research questions presented in the methodology chapter. These descriptive questions were organized in this chapter according to the processes of planning, production, utilization, and evaluation. The future of broadcasting at the Open University, which was a research question generated by the investigator's field study, was also examined. Prestructured interviews and questionnaires, non-participant observations, and other primary source materials gathered in England provided the qualitative data for analyzing each research question. Planning characteristics of the Open University broadcasting model are described first.
Planning

What Is the Strategy of Broadcast Utilization Within the Open University's Approach to Learning?

Considering the Open University's unique approach to learning as home oriented, self-paced, integrated, and multi-media based, what is the purpose of the broadcasting media in this system? From research in England and an extensive review of BBC Open University publications, there appeared no stated philosophy or theoretical structure for broadcast decisions.

Open University radio and television allocations are decided by the Broadcasting Allocation Committee, a "very powerful and political committee." Membership is composed of representatives of Open University, BBC, and of government personnel. This Committee is highly significant to broadcasting output as it determines the number and length of programs for each faculty.

Some staff members and producers of the BBC organization allied to the Open University were of the opinion that broadcast decisions are weighted according to pragmatics within the system--budget constraints, political pressure, publication deadlines, and BBC available air times. What-

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1A. W. Bates, Lecturer in Media Research Methods, Institute of Educational Technology, Interview, Milton Keynes, April 21, 1972.

2Peter Holiday, Interview.
ever the rationale for broadcast allocation decisions, the investigator observed that criteria for utilizing one medium versus another and the identification of course objectives difficult to achieve without the availability of the broadcasting media had not yet been developed. It was also observed that each faculty utilized broadcasting differently. The variance of utilization is discussed later in this chapter.

One undisputable characteristic of the Allocation Committee affecting broadcast utilization is that their decisions are permanently binding upon the individual faculties. Once a set number of radio and television broadcasts have been allocated, the faculty involved and the BBC are committed to that fixed amount. The broadcast revision policy is restrictive because of cost and time constraints. That policy is:

The planning and budgeting of the Open University ensure that about one in ten individual programmes can be re-made each year, and whole courses can be remade every four years.3

In the first year of the Open University's existence (1971), the BBC's contribution was one radio and one television program series per each of the four foundation courses. The agreement also called for one television and

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radio repeat per week for 36 weeks in each course. The repeat program is to be scheduled at a different time of day within a reasonable time of the original broadcast. After three years, the number of weekly broadcasts is not to exceed thirty hours in each medium.

The 1972 schedule for Open University broadcasts suggests the influence of pragmatic considerations. The most influential factor in scheduling original and repeat transmissions is the scarcity of broadcast time. BBC broadcast hours are restrictive. Currently there is scheduled on BBC TV 2 about 18 hours per week of Open University programming and on BBC Radio VHF 4, about 23 hours per week.

If each of this year's second level courses (about 12) had been given the same broadcast allocation as the 1971 foundation courses, there would be little available broadcast times for third- and fourth-level courses. Consequently, the Allocation Committee attempted to alleviate the scarcity of available transmission times by restricting Humanities, Social Sciences, and Educational Studies courses to a maximum of one television program for every

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4Report of the Planning Committee to the Secretary of State for Education and Science, p. 23.

5The BBC and the Open University: Some Questions Answered, p. 11.
two units within each course. Courses in the Sciences, Technology, and Math have been restricted to a maximum of one radio program every two units. These broadcast restrictions appear necessary especially in light of the 60-70 undergraduate courses that will be eventually offered. While still in the early stages of operation, the Course Teams have not yet identified those course objectives best accomplished by the broadcasting media. There is evidence, however, which may suggest that the current broadcast allocation restriction has caused the members of some Course Teams to re-examine the function of broadcasting in their faculties. For example, "Content is being more carefully selected for radio and television presentations." Another faculty member stated: "We have got to become more discriminating in which learning resource should be deliberately manipulated for which course objective." 

Although there appeared no evidence of a well-defined strategy for broadcast utilization in each faculty, some overall generalizations about the nature of the broadcast-

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7 Peter Holiday, Interview.
8 Bill Prescott, Faculty member of the Institute of Educational Technology and Course Team member for the Educational Studies Faculty, Interview, Milton Keynes, April 21, 1972.
9 Dr. Graham Reed, Senior Lecturer in Mathematics, Interview, Milton Keynes, April 21, 1972.
ing contribution can be made. For example, a BBC publication has described the general character of its Open University productions. These rather orthodox uses of radio and television can be summarized as direct teaching, demonstration and visual exposition, group identification, enrichment, student announcements, motivator and pacer of study.\textsuperscript{10}

In another Open University source the general philosophy for the use of television in the science faculties and for the application of radio were described. In the sciences, television is to be used for:

1. items requiring demonstration of visual movement,
2. laboratory experience, and
3. remote situations which the student can experience vicariously.\textsuperscript{11}

Depending upon the nature of the course, radio was described as a medium for:

1. remedial role at short notice,
2. music in the Humanities courses,
3. plays and dramatizations, and
4. readings from literature.\textsuperscript{12}

\textsuperscript{10}The BBC and the Open University: Some Questions Answered, p. 11.

\textsuperscript{11}The Open University and Its Instructional System, p. 7.

\textsuperscript{12}Ibid.
The investigator applied these general strategies for broadcast utilization (see Appendices M-l, M-2, and M-3) to the thirty radio and television programs she monitored from Tuesday, April 4, to Friday, April 14, 1972. The other critique form (Appendix N) proved to be an unworkable evaluative tool. It was extremely difficult to isolate and assess Content Factors separately from Production Factors. With most media instruction linked in some way to correspondence materials, the investigator could not rate the categories of Significance nor the Authoritativeness of the Content. It was also impossible to judge the Relation of Content and Production to Intended Audience without experiencing the correspondence and tutorial sessions. The problem of broadcast evaluation becomes apparent.

From the investigator's limited observations of the radio and television broadcasts, there was no uniform application of the uses for the media. Rather, strategy appeared to depend upon the nature of the individual faculties. In the Science courses, for instance, utilization seemed to be more related to the correspondence texts than the Arts programs, which appeared to be instruction enrichment and understandable to the non-Open University audience. Television was perceived as essential to the Science course by the Course Team as in the science correspondence texts students were advised not to take the course unless they had access to television and radio. Math
programs seemed consistently utilized as supplementary to the correspondence materials and as a motivator and regulator for the student's continued study. Another characteristic of the Math television programs monitored was an emphasis upon intricate graphs and animation.

Although it was operationally impractical for the investigator to "enroll" in all six faculties for one month and thereby be responsible for at least 10 hours a week instruction for each course discipline, her brief exposure to the broadcasts resulted in quite a liberal education. From "Renaissance and Reformation" (radio), "Decision-Making in Britain," (radio) to "National Income and Economic Policy" (television), and "The Fundamental Theorem of Calculus" (television), the programs were generally well researched and highly informative.

A unique use of television appeared to be the Educational Studies radio and television programs. Second level courses (there is no foundation course in this faculty) such as "The Curriculum: Context, Design, and Development" were ingenious in revealing primary source materials, case studies, and real life experiences instead of the orthodox formats of the "talking face," "slides with narrator," or "panel discussion." The Educational Studies television programs appeared less cognitively and more affectively oriented. According to the previously described BBC strategy for utilization (Appendices M-1, M-2, and M-3), the
investigator observed the philosophy for broadcast utilization by the Educational Studies faculty was for stimulating appreciation, emotional involvement, and arousing attitudinal responses as they related to the course objectives. Students, on the other hand, rated these programs "more interesting" but "less useful" than other faculty programs.\textsuperscript{13}

The "Open Forum" university radio and television broadcasts are designed to provide "news item reports on students, faculty, staff, developments within the Open University and for general discussion and feedback."\textsuperscript{14} The Open Forum programs are taped at the Alexandra Palace studio one week prior to transmission. Strategy for utilization is similar to a magazine service whereby problems, reactions, and announcements are disseminated to a large number of persons. The "Open Forum" programs were not designed in the original broadcasting plan. Rather, their existence developed as the BBC and the Open University realized both the need for student feedback and the need to promote university proceedings. Broadcasting appeared a more expedient and flexible delivery system for this form of communication than the telephone or mail. Students could contribute to

\textsuperscript{13} Naomi E. MacIntosh, Interview.

\textsuperscript{14} Roger Tucker, BBC producer for the Open Forum television program, Interview, London, April 19, 1972.
the programs by writing their comments and criticisms to the Open Forum producers. This year, the Open Forum concept has taken on an additional non-broadcasting role. The producers have become "ombudsmen" since the Open Forum service is a "clearinghouse" for all kinds of student concerns. The producers refer Open Forum letters to the appropriate Open University personnel.

The Open Forums give the student a "voice" as well as help establish the identity of the Open University itself. Programs to date have broadcast the first Open University General Assembly, discussed administrative policies, interviewed tutors and counsellors at various Study Centers, introduced new courses, and reflected typical student problems. 15

What Is the Organization and Function of the BBC Staff Allied to the Open University?

As the broadcast production and transmission agency, the BBC fulfills an important service for the Open University. In analyzing the University's broadcasting system, it therefore becomes appropriate to describe certain features of this British broadcasting organization as they relate to the Open University. In addition to its other educational and entertainment programming, the BBC has adapted its

15 Data collected from Appendix L Interview Schedule with producer Roger Tucker.
organizational structure, selection of producers, and its facilities so as to accommodate the Open University programs.

The presence of the BBC in the Open University higher education experience is a logical extension of one of the BBC's services. The BBC's keen involvement in adult and further education programming has been described. According to its charter, the three purposes of the BBC are "to inform, educate, and entertain." As outlined in Chapter III, prior to the Pilkington Report and the National Extension College "Gateway Series," the BBC had not been associated with university-prescribed broadcasts. Recognizing that the Open University was a government inspired plan for higher education, and considering the BBC's tradition of "educational" and "educative" programming, it is not surprising that the Open University allied with the BBC for its broadcasting instruction. The Independent Television Authority could not have been considered since it is not a production agency. The commercial organization schedules and promotes programs which are produced by regional companies like Thames Television.16

The agreement between the BBC and the Open University has been defined as a "partnership." In the Appendix of

the Planning Committee's Report, the exact nature of the partnership is fully explained:

The radio and television programmes required by the University and provided by the BBC, are to be planned on the basis of an educational partnership between University and BBC staff. In practice, this partnership will extend over the whole range from the conception of the course to the final production of the programmes. The success of this partnership rests on the recognition by both parties that, while effective education is the overriding objective, and the ultimate responsibility of the University under its charter, each has a specific professional role to play. 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 interrelationship 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 the fullest use of the experience of the broadcasting staff.

Within this area, such matters as the choice of principal academic contributors to programmes and the interconnection of subject instruction and broadcasting method will be of first importance to both partners. While the BBC recognizes the right of the Open University finally to determine any such points that may be at issue, the University agrees that full participation of BBC staff in all discussions pertaining to these matters is a necessary condition of working effectively together. The key relationship between contributors and production staff jointly engaged in producing material and programmes for broadcasting will thus be secured.17

This "partnership" on a theoretical basis is designed to insure representation of BBC and Open University staff on

17 Report of the Planning Committee to the Secretary of State for Education and Science, Appendix I.
their respective committees. For example, the BBC is represented on the University Council and Senate (see Chart 1, page 74), and the University is represented on the BBC's Further Education Advisory Council. But the most significant evidence of the mutual cooperation between the BBC and the Open University was observed in a Course Team session. Here there was frequent dialogue among the BBC producers, academic staff, educational technologists, and course consultants. It has been reported that from Course Team meetings it is difficult to identify the producer from the academic. The investigator's observations confirmed this exchange of role definitions.

The BBC producer in the Open University context is not restricted to that of a "technician." His production expertise and higher education experiences are designed to strengthen the quality of his contributions.

The producers of Open University Productions are Course Team members and make academic contributions. The BBC Senior producers present have had previous experience in the BBC's Further Education Departments while the Junior producers or production assistants participating have been

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18 The BBC and the Open University: Some Questions Answered, p. 8.

19 Observation of a Course Team Meeting, Education 352, Milton Keynes, April 21, 1972.
selected by the BBC on the basis of their own academic background and subject matter specialty.\textsuperscript{20}

The training of these novice producers is discussed under \textit{production} in this chapter. The Course Team itself has the collective function of (1) designing the course, (2) choosing the objectives, and (3) the selection and utilization of the broadcasting media in addition to the correspondence text.\textsuperscript{21}

Until this year, the Open University programs were produced within the BBC's Further Education Department. The organizational structure now has been changed so that Open University Productions is a separate department within the BBC. Chart 5 on page 129 indicates the relationship between the new department and other BBC educational departments.

A reason for the change was that the number of BBC staff allied to the Open University had been increasing as more courses were added. A separate department could also be bi-media: With one producer for both radio and television there would be better integration of media, as

\textsuperscript{20} Donald Holms, Senior BBC Radio Producer, Educational Studies Faculty, Interview, London, April 15, 1972.

\textsuperscript{21} Gwen Prichard, BBC radio producer for Educational Studies Faculty, Interview, London, April 9, 1972.
Chart 5: **Organizational Structure for BBC Educational Broadcasting and Approximate Dates of Formation**

- **Controller of BBC Educational Broadcasting**
- **Open University Productions** (established 1972)
- **Further Education TV** (established 1962)
- **Further Education Radio** (established 1958)
- **Schools TV** (established 1956)
- **Schools Radio** (established 1922)
well as more efficiency of staff.\textsuperscript{22} New production appointments are now bi-media.

Each faculty has its own production department within the Open University Production's structure. The form of organization of each production department varies with each faculty. For example, in the Arts all the producers work on all the Arts courses.\textsuperscript{23} In the Educational Studies faculty, each producer works on a specified course. Regardless of the management policy in operation, each producer is responsible for contributing to the Course Team sessions to form the ultimate production of the course's broadcasting components.\textsuperscript{24} There is, however, a Senior BBC Radio and Television Producer associated with each faculty. He is a member of all his faculty's Course Teams and responsible for all production decisions. There are two editors employed by the Open University Productions for the six faculties.\textsuperscript{25}

\textbf{How Are These Broadcasts Financed and Programmed?}

The broadcasting component of the Open University is not financed from the revenue of BBC license taxes but from

\textsuperscript{22}Richard Hooper, Interview.

\textsuperscript{23}\textit{Ibid.}

\textsuperscript{24}Donald Holms, Interview.

\textsuperscript{25}Peter Montagon, Interview.
the Open University's income. Student tuition fees and substantial government subsidies from the Department of Education and Science comprise this income. The amount of grant-in-aid from the British government from 1971 to 1973 has been estimated:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>£ 5,494,00</td>
</tr>
<tr>
<td>1972</td>
<td>£ 6,663,00</td>
</tr>
<tr>
<td>1973</td>
<td>£ 7,269,00</td>
</tr>
</tbody>
</table>

Chart 6, on page 132, summarizes the 1969-73 Open University budget, including BBC total recurrent costs. From the chart it is evident that the broadcasting radio and television programs are a significant investment of money. It has been estimated that 22.2 per cent of the total planned expenditure for 1973 has been allocated for broadcast finance. Another source stated that "the proportion of the budget allocated to broadcasting is almost as great as that spent by the University on providing correspondence and face-to-face tuition and counselling to over 35,000 students this year."

In addition, the amount of time invested both in BBC transmission scheduling and in academic involvement is

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26 A. W. Bates, Interview.


28 A. W. Bates, Interview.
**Chart 6: Summary of Open University Budget, 1969-73.**

**A. Capital Expenditure**

1969-73

Approx. £4.5 million over the period (including approx. £1 million BBC capital costs)

**B. Recurrent Expenditure**

<table>
<thead>
<tr>
<th>Year</th>
<th>Basic Recurrent Expenditure (including salaries, essential operating costs, and BBC costs not shown separately)</th>
<th>BBC/GU Total Recurrent</th>
<th>Direct Student Costs (variable according to number of students)</th>
<th>Less - Fees from Students</th>
<th>Total Recurrent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>£2.1 million</td>
<td>1.5</td>
<td>2.7</td>
<td>0.8</td>
<td>£6.6 million gross</td>
</tr>
<tr>
<td>1971</td>
<td>£2.4 million</td>
<td>1.5</td>
<td>2.7</td>
<td>0.8</td>
<td>£5.8 million net</td>
</tr>
<tr>
<td>1973</td>
<td>£2.9 million</td>
<td>2.0</td>
<td>4.1</td>
<td>1.8</td>
<td>£8.2 million gross</td>
</tr>
</tbody>
</table>

**Source:** Prepared by Chief Assistant (Open University) BBC in consultation with Information Services, Open University, June 30, 1971.
demanding. The BBC in partnership with the University will produce about 360 radio programs and about 300 television programs next year. Since each radio and television program is repeated, that means that Open University broadcasts "will take up almost as much transmission time as the total of BBC Schools and Further Education broadcasting."29 Academic involvement in broadcast activities is also time-consuming. One faculty presenter commented, "I spend about five hours preparation for each one minute of my television presentation."30

Since broadcasting is an expensive commodity of both time and money, it is appropriate to ask, "How much of the students' total study week is devoted to watching and listening to the Open University programs?" The University assumes the student will spend about ten hours per week per course; listening to the radio and television programs constitute about one hour of this total.31

The broadcasts are scheduled on BBC 2 TV and UHF Radio 4 every day of the week. Usual weekday times are approximately 5:30 P.M. to 7:30 P.M. Monday through Friday. For

29 John Cain, Director of Further Education Television, BBC, Interview, London, April 7, 1972.

30 Dr. Graham Reed, Interview.

31 Richmond Postage, Speech to the NAEB Convention.
television, the weekend times are 9:05 A.M. to 12:35 P.M.
saturday and Sunday (repeat broadcasts) and for radio,
10:30 A.M. to 3:40 P.M. Saturday and Sunday. One television Open Forum broadcast is programmed the first
Saturday morning of each month (repeated that Sunday A.M.),
while the radio Open Forums are broadcast twice a month
and are usually not repeated. An Open University broadcast
schedule for Saturday, April 8, 1972, is found in Table 16,
page 135.

The schedule of Open University programming is not
highly publicized by the BBC. The BBC's Radio Times pub-
lication does not promote the programs themselves as "to do
so would prevent space for other BBC programming and space
is costly." It was also noted that the media sections of
daily British papers do not specify which program is
scheduled when. The Open University student does, however,
have detailed "Broadcast Notes" in his course supplementary
booklets.

Another important aspect of developing the Open
University broadcasts is the selection of appropriate
content and presentational techniques. Before describing
the criteria for content and production, it is informative
to consider the producer's perception of integrating media
and instruction.

32 John Robinson, Interview.
TABLE 16
OPEN UNIVERSITY BROADCAST SCHEDULE
Saturday, April 8, 1972

**BBC 2 Television**

<table>
<thead>
<tr>
<th>Time</th>
<th>Program</th>
<th>Course/Course Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.05 am</td>
<td>Electromagnetics and Electronics</td>
<td>(course TS282)</td>
</tr>
<tr>
<td></td>
<td>Signposting the Course (Revision)</td>
<td>(programme 6)</td>
</tr>
<tr>
<td>9.35 am</td>
<td>School and Society</td>
<td>(course E282)</td>
</tr>
<tr>
<td></td>
<td>School Careers</td>
<td>(programme 4)</td>
</tr>
<tr>
<td>10.35 am**</td>
<td>Mechanics and Applied Calculus</td>
<td>(course MST282)</td>
</tr>
<tr>
<td></td>
<td>Rigid Bodies</td>
<td>(programme 6)</td>
</tr>
<tr>
<td>11.05 am**</td>
<td>Renaissance and Reformation</td>
<td>(course A201)</td>
</tr>
<tr>
<td></td>
<td>Renaissance Spectacle</td>
<td>(programme 6)</td>
</tr>
<tr>
<td>11.35 am</td>
<td>Geology</td>
<td>(course S23-)</td>
</tr>
<tr>
<td></td>
<td>Field Relations</td>
<td>(programme 6)</td>
</tr>
<tr>
<td>12.05 pm</td>
<td>Comparative Physiology</td>
<td>(course S22-)</td>
</tr>
<tr>
<td></td>
<td>Respiratory Mechanisms</td>
<td>(programme 6)</td>
</tr>
<tr>
<td>12.35 pm</td>
<td>Structure, Bonding and the</td>
<td>(course S25-)</td>
</tr>
<tr>
<td></td>
<td>Periodic Law</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oxidation States and the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Typical Metals</td>
<td></td>
</tr>
</tbody>
</table>

**BBC Radio 4 - VHF only**

<table>
<thead>
<tr>
<th>Time</th>
<th>Program</th>
<th>Course/Course Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.30 am**</td>
<td>Mathematics foundation course</td>
<td>(course M100)</td>
</tr>
<tr>
<td></td>
<td>Differentiation (1)</td>
<td>(programme 12)</td>
</tr>
<tr>
<td>10.55 am**</td>
<td>Comparative Physiology</td>
<td>(course S22-)</td>
</tr>
<tr>
<td></td>
<td>Why Sex?</td>
<td>(programme 2)</td>
</tr>
<tr>
<td>11.35 am**</td>
<td>Mechanics and Applied Calculus</td>
<td>(course MST282)</td>
</tr>
<tr>
<td></td>
<td>Mechanics Tutorial</td>
<td>(programme 2)</td>
</tr>
<tr>
<td>11.35 am**</td>
<td>Humanities foundation course</td>
<td>(course A100)</td>
</tr>
<tr>
<td></td>
<td>Melody, Harmony and Rhythm</td>
<td>(programme 13)</td>
</tr>
<tr>
<td>2.00 pm**</td>
<td>Renaissance and Reformation</td>
<td>(course A201)</td>
</tr>
<tr>
<td></td>
<td>The Subject in Renaissance Art</td>
<td>(programme 11)</td>
</tr>
</tbody>
</table>
TABLE 16 (continued)

BBC Radio 4 - VHF only

<table>
<thead>
<tr>
<th>Time</th>
<th>Program Title</th>
<th>Course/Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.40 pm**</td>
<td>The Age of Revolutions British Agriculture in the EEC</td>
<td>(course D203)</td>
</tr>
<tr>
<td>3.00 pm</td>
<td>OPEN FORUM: a magazine programme for students and staff</td>
<td>(programme 11)</td>
</tr>
<tr>
<td>3.20 pm**</td>
<td>New Trends in Geography Industrial Linkage</td>
<td>(course D281)</td>
</tr>
<tr>
<td>3.40 pm</td>
<td>The Sociological Perspective Social Competence and the Labelling Process</td>
<td>(course D283)</td>
</tr>
</tbody>
</table>

**Indicates repeat broadcast

What Do the BBC Producers Identify as the Instructional Strengths and Weaknesses of the Broadcast Media?

That radio and television can be employed in the process of higher learning has clearly been demonstrated from the Schramm research summaries to studies of Chicago's TV College. An important ingredient contributing to the effectiveness of any instructional message is the medium by which it is transmitted. There are those of the McLuhan camp who assert "the medium is the message."

Certainly one's philosophy of the broadcasting media will greatly influence the quality of his transmitted programs. Recognizing the relationship between theory and practical application, the investigator was interested in determining the theoretical framework for producer's decisions. Using the Interview Schedule found in Appendix
B, she interviewed the following Open University Productions personnel. Each faculty is purposefully represented but the individuals were randomly selected.

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paul Kafno</td>
<td>Bi-Media Production Assistant</td>
<td>Arts</td>
</tr>
<tr>
<td>John Wittclife</td>
<td>Bi-Media Senior Producer</td>
<td>Social Science</td>
</tr>
<tr>
<td>Frances Sealy</td>
<td>Bi-Media Production Assistant</td>
<td>Social Science</td>
</tr>
<tr>
<td>Ed Milner</td>
<td>Bi-Media Production Assistant</td>
<td>Educational</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Studies</td>
</tr>
<tr>
<td>Donald Holmes</td>
<td>Senior Radio Producer</td>
<td>Educational</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Studies</td>
</tr>
<tr>
<td>Mrs. Helen Rapp</td>
<td>Senior Radio Producer</td>
<td>Arts</td>
</tr>
<tr>
<td>Gwen Prichard</td>
<td>Bi-Media Production Assistant</td>
<td>Educational</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Studies</td>
</tr>
<tr>
<td>Vivianne King</td>
<td>Bi-Media Production Assistant</td>
<td>Math</td>
</tr>
<tr>
<td>Nat Taylor</td>
<td>Senior TV Producer</td>
<td>Science</td>
</tr>
<tr>
<td>Ed Goldwin</td>
<td>Senior TV Producer</td>
<td>Technology</td>
</tr>
</tbody>
</table>

The investigator asked these producers their perceptions of broadcasting as an educational tool. Responses from the investigator's pre-structured interviews in England were recorded and assigned to pre-determined categories. An independent source also coded the responses to estimate the reliability of the categorization. Those responses mentioned which were not associated with the pre-determined
categories are listed under the heading "Other." The re-
search questions and responses were:

Question asked, "What are the unique characteristics of
radio which are disadvantageous to education?"

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency of Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of visualization</td>
<td>8</td>
</tr>
<tr>
<td>Pacing of content</td>
<td>4</td>
</tr>
<tr>
<td>Lack of immediate feedback</td>
<td>3</td>
</tr>
<tr>
<td>Other: Radio is a medium of an older audience</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Question asked, "What are the unique characteristics of
radio which are advantageous to education?"

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency of Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increases imagination</td>
<td>6</td>
</tr>
<tr>
<td>Immediacy</td>
<td>4</td>
</tr>
<tr>
<td>Realism</td>
<td>1</td>
</tr>
<tr>
<td>Demands concentration</td>
<td>1</td>
</tr>
<tr>
<td>Inexpensive</td>
<td>1</td>
</tr>
<tr>
<td>Adaptable to sound effects</td>
<td>1</td>
</tr>
<tr>
<td>Other: Relaxed, conversational medium</td>
<td>1</td>
</tr>
<tr>
<td>Edit and reproduce quickly</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Question asked, "What are the unique characteristics of
television which are disadvantageous to education?"

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency of Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacing of content</td>
<td>7</td>
</tr>
<tr>
<td>Lack of immediate feedback</td>
<td>6</td>
</tr>
<tr>
<td>Low definition for detail</td>
<td>3</td>
</tr>
<tr>
<td>Other: Tendency to oversimplify problem</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>
Question asked, "What are the unique characteristics of television which are advantageous to education?"

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency of Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stimulation</td>
<td>10</td>
</tr>
<tr>
<td>Demonstration purposes</td>
<td>9</td>
</tr>
<tr>
<td>Vicarious experience</td>
<td>8</td>
</tr>
<tr>
<td>Realism</td>
<td>4</td>
</tr>
<tr>
<td>Primary Source</td>
<td>4</td>
</tr>
<tr>
<td>Regulator of Study</td>
<td>3</td>
</tr>
<tr>
<td>Movement visualized</td>
<td>2</td>
</tr>
<tr>
<td>Other: Symbolic concepts explained</td>
<td>2</td>
</tr>
<tr>
<td>Group Identity</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43</strong></td>
</tr>
</tbody>
</table>

The primary advantages of television in education according to the Open University producers interviewed were stimulation or motivation, demonstration, and an agent for vicarious experiences. Regarding the advantages of radio, five of the ten producers identified radio's strength as increasing the imagination. In considering the disadvantages of both media, the lack of immediate feedback and pacing of content were mentioned.

The investigator's pre-conceived category system generally proved a valid indicator of the producer's responses. All of the pre-determined 18 categories were mentioned at least once with the addition of 6 categories generated by the producers themselves.

The investigator also felt it was important to identify areas of production difficulties connected with the Open University broadcasts. No category system was pre-structured...
here. The pre-determined questions asked to these producers and their responses were:

**Question asked, "What has been the greatest difficulty you have experienced in producing an Open University program?"**

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency of Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defining course objectives</td>
<td>8</td>
</tr>
<tr>
<td>Time constraints</td>
<td>6</td>
</tr>
<tr>
<td>Lack of understanding the media by academics</td>
<td>4</td>
</tr>
<tr>
<td>Establishing &quot;partnership&quot; relationships with academicCourse Team members</td>
<td>3</td>
</tr>
<tr>
<td>Characteristics of Open University students not yet defined</td>
<td>2</td>
</tr>
<tr>
<td>Inability to anticipate conceptual difficulties for students</td>
<td>2</td>
</tr>
<tr>
<td>Lack of academic cooperation in production planning</td>
<td>2</td>
</tr>
<tr>
<td>No method of feedback</td>
<td>1</td>
</tr>
<tr>
<td>Newnesses of the Open University media design</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>29</td>
</tr>
</tbody>
</table>

These experiences suggest the nature and variety of production difficulties encountered at the Open University Productions Headquarters. Operational problems of the Course Teams and the lack of time were frequently noted. There was no mention made by those interviewed of needing additional funds or media equipment.

The previous data collected from the research questions pertaining to the strengths and weaknesses of the broadcast media in general, as well as those production problems germane to the Open University programs, have been discussed. The philosophies of the Open University producers interviewed indicate that quantitatively there are
more advantages to utilizing both media in education than there are disadvantages. Several producers also felt that their production problems were related to academic considerations and establishing a working relationship with other academic Course Team members.

What Criteria for Content and Presentation of the Broadcasts Have Been Determined by the BBC Producers Allied to the Open University?

The radio, television, and bi-media producers were asked, "What criteria do you set for the Open University broadcasts that you produce?" The investigator deliberately coded the responses according to the same, pre-conceived categories established in identifying the strengths of the broadcasting media in education. It was felt that such a methodology would produce a consistent pattern of responses between media theory and actual criteria for application. Hence, those categories receiving "no response" were included in the results.

Question asked, "What criteria do you set for the Open University broadcasts that you produce?"
The investigator's hypothesis predicting a similar response from both questions of theory and application proved incorrect. It appears that each producer interviewed applied his own individual criteria to his production efforts. These criteria were not uniform or standardized among these ten Open University producers. Practical concerns of broadcasting, Course Team agreement, and the correspondence materials appear to influence the producers' selection of content and production as much as their theoretical perceptions of the educational strengths of the media.

What Is the Specific Relationship between the Correspondence Materials and the Broadcasts to the Learning Process?

Initial Open University and BBC publications have
stressed the "integration" of its broadcasting media and other learning resources. In theory there should be a direct relationship between the printed correspondence materials (readings, glossaries, assignments) and the broadcasting material (programs and "Broadcast Notes"). In practice, however, the investigator observed that this integration varied among the various faculties.

Course Teams of the individual faculties appear to define the relationship between the correspondence to the broadcast. For example, most Math programs which have been produced were directly related to the corresponding text material. In fact, when the investigator monitored the Math radio and television programs, she felt intellectually handicapped without having the appropriate written material. The presenter's suggestion to "refer to the text, page 2" was meaningless to her. The Math text appeared the primary source with further illustrative and remedial instruction purposes assigned to the broadcasts. As one math producer commented, "We feel that broadcasting should be utilized for clarifying difficult formulas." Broadcasting may be particularly suited for this Math teaching objective. It would appear that the

33 See, for example, The Open University in the United Kingdom and Its Instructional System, pp. 1-5.

34 Vivinne King, BBC Junior Producer in the Math Faculty, Interview, London, April 11, 1972.
language of Math would be easily adaptable for the visual image of television. The most consistent production characteristic of those Math television broadcasts monitored was reliance upon static visuals—graphs and charts. Occasionally, computer animation and models were used to illustrate a process, relationship, or movement.

At a Math Conference held at Alexandra Palace for Open University math producers, faculty, students, and other interested persons, the investigator noted instructional problems derived from the integration of the text and the broadcast. If the student had not yet read that week's course correspondence, he did not understand the connecting broadcast program.

Aside from the self-pacing difficulty, another concern expressed at the Conference was the domination of the text over the media. A question raised was, "Why should the chronological pattern and content of the text dictate the design of the broadcasts?" A number of math producers present expressed regret that the broadcasts must have a contrived structure because of their current reliance upon the text.

On the other hand, it was noted by several participants that if the design of the broadcast programs were completely free from the text and other subsequent broadcasts, there would be a problem of relevance. It was highly recommended at the Conference that the student must be able to compre-
hend how the television and radio broadcasts fit into the instructional strategy of the Open University courses. Without assigning overall course objectives to the programs, the students may fail to understand the relationship or significance of the programs. It was felt by some participants that a new media structure must be integrated with existing Open University learning resources.\(^{35}\)

The Science faculty has currently a very significant integration between the media and print sources:

The integration of the science materials with the television programmes is extremely close. In a typical programme, students are being asked to turn to a particular page in the course unit, and then to enter in their course materials instrument readings and answers of various kinds. The course materials, in other words, deliberately have gaps to be filled in from the telecasts.\(^{36}\)

As proof of this deliberate, interdependency strategy of media and print, Science students are advised not to take the course unless they have access to a television and radio set.\(^{37}\) The Science broadcast programs monitored by the investigator are further evidence. The presenter(s) repeatedly referred to previously discussed print material, 

\(^{35}\)Observation of the Open University Math Conference, Alexandra Palace, April 18, 1972.


\(^{37}\)Bill Prescott, Interview.
forthcoming print topics, and the explicit function of the program in relation to the text.

The Arts faculty, in contrast, appeared to use an enrichment approach in designing its broadcasts. The correspondence material is clearly the primary source with broadcasting as a supplementary resource. As previously mentioned, any "eavesdropper" audience can learn from the broadcast--without the aid of previous broadcasts or text explanation.

This year several Economic television foundation course programs have a "Postscript." This "afterthought" lasts about ten minutes and is programmed in addition to the regular radio or television broadcast which has been purposely shortened to allow for the "Postscript" insertion. The purposes of the "Postscript" are:

1. To further clarify a difficult concept in the text, or
2. To clarify a difficult concept in the previous broadcast. 38

The content of the "Postscripts" are usually derived from first-year student feedback informally collected at various Study Centers and summer school sessions. The "Postscripts" have the additional advantage of being produced two or three days in advance of the regular

38 John Robinson, Interview.
broadcast, or in the case of television, one week in advance. Radio is usually associated with being technically capable of responding quickly to feedback; yet, the "Postscript" example illustrates that television can also have this advantage.

When the ten Open University producers were asked their perception of broadcasting in relation to the other Open University learning resources such as the correspondence packages (Interview Schedule, Appendix B), there was a variety of responses. Enrichment, basic instruction, no correlation, and as an introduction or conclusion to a course unit were the categories described. Their responses were evenly distributed among these categories.

**Production**

What Training Was Needed for the Faculty Presentors to the Broadcast Media?

In most cases the faculty presenter or television/radio lecturer is automatically determined. If he wrote the correspondence unit, then usually he is the broadcast presenter. If several Course Team members co-authored the print source, they may all share in the presenter's role or those most interested in the media volunteer. There is no audition sponsored by the BBC nor are there written
principles for the selection of presentors within the faculties.\(^3^9\)

Periodically, the BBC does sponsor workshops for members of the Course Team. Generated by BBC Course Team members, or by faculty requests, the Workshops are intended to serve a variety of purposes:

1. Orient academic staff to media characteristics;
2. Training of new BBC junior producers (production assistants) and bi-media staff; and
3. Experiment with various media effects such as split-screen, wipe-out, animation, etc.\(^4^0\)

These workshops do not appear to be conducted with any regularity by the faculties despite the continued addition of new Open University faculty as Course Team members for second, third and fourth level courses.

In order to describe the perceptions of television faculty presentors of utilizing broadcasting as an instructional tool, the investigator designed the questionnaire form found in Appendix E. The investigator randomly selected one faculty member from each of the four foundation courses who was reported to have participated in at least one Open University television program. Those interviewed and their faculties were:

\(^{3^9}\)Richard Hooper, Interview.

\(^{4^0}\)Ibid.
<table>
<thead>
<tr>
<th>Name</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Graham Reed</td>
<td>Math</td>
</tr>
<tr>
<td>Dr. David Johnson</td>
<td>Science (Chemistry)</td>
</tr>
<tr>
<td>Mr. Jeff Ebge</td>
<td>Social Sciences (Geology)</td>
</tr>
<tr>
<td>Dean William Furguson</td>
<td>Arts (History)</td>
</tr>
</tbody>
</table>

Only one respondent, Dean Furguson, had prior television experience as a guest lecturer. Each respondent was asked to complete the questionnaire form, and their verbal responses were recorded.

The question, "What constitutes effective television teaching?" has been very controversial in the field of educational broadcasting. There are proponents who claim actors instead of professors are more effective communicators of content. Others regard television as only a delivery system; any good classroom teacher is automatically effective on television. Instructional technologists articulate the importance of designing the objectives and the message in relation to the learning system, such as the broadcasting media.

In light of these differing points of view, the investigator was curious to determine the opinion of some Open University faculty presentors. The respondents listed above were asked to "rank in order the qualities you consider most important for teaching on television." The categories were determined by the investigator upon reviewing the literature of instructional television and
television teaching. \(^42\) Table 17 presents the quantitative results of these respondents to the pre-structured categories presented to them. The ranking system was:

1 equals most important; 2 equals next important; and so on.

**TABLE 17**

**CRITERIA FOR TELEVISION TEACHING\(^a\)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Rank of Each Respondent</th>
<th>Total Rank</th>
<th>Average Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicative attitude</td>
<td>1 1 1 3</td>
<td>5</td>
<td>1.25</td>
</tr>
<tr>
<td>Familiarity with media forms</td>
<td>9 3 2 2</td>
<td>16</td>
<td>4.00</td>
</tr>
<tr>
<td>Prior teaching experience in the same subject</td>
<td>3 1 10 5</td>
<td>19</td>
<td>4.75</td>
</tr>
<tr>
<td>Desire to motivate students</td>
<td>4 2 8 7</td>
<td>21</td>
<td>5.25</td>
</tr>
<tr>
<td>Enthusiasm for teaching</td>
<td>6 7 3 6</td>
<td>22</td>
<td>5.5</td>
</tr>
<tr>
<td>Expertise in subject matter</td>
<td>7 8 7 1</td>
<td>23</td>
<td>5.75</td>
</tr>
<tr>
<td>Keen interest in using television</td>
<td>5 5 5 8</td>
<td>23</td>
<td>5.75</td>
</tr>
<tr>
<td>Good diction and grammar</td>
<td>2 9 4 9</td>
<td>24</td>
<td>6.00</td>
</tr>
<tr>
<td>Prior experience in using TV in the classroom</td>
<td>8 6 9 4</td>
<td>27</td>
<td>6.75</td>
</tr>
<tr>
<td>Acting ability</td>
<td>11 4 6 10</td>
<td>31</td>
<td>7.75</td>
</tr>
<tr>
<td>A diversified teaching background of many related subjects</td>
<td>10 10 11 12</td>
<td>43</td>
<td>10.75</td>
</tr>
<tr>
<td>Popularity with fellow faculty members</td>
<td>13 11 14 11</td>
<td>46</td>
<td>11.5</td>
</tr>
<tr>
<td>Frequency of scholarly publications</td>
<td>14 14 13 14</td>
<td>65</td>
<td>16.25</td>
</tr>
<tr>
<td>Other</td>
<td>0 0 0 0</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

\(^a\)One respondent gave a "1" rating twice.

\(^42\) The sources used are listed in the Bibliography.
From these responses, the qualities of "communicative attitude" and "familiarity with media forms" were considered very important. The qualities of "popularity with students," "a diversified teaching background of many related subjects," "popularity with fellow faculty members," and "frequency of scholarly publications" were among those rated least important. "Expertise in subject matter" was given about the same priority as "desire to motivate students" but rated slightly more important than the presentational skills of diction and acting. When the presentors were asked to explain the importance of the category, "prior teaching experience in the same subject matter," all replied "in order for the presentor to anticipate student difficulty in comprehension."

In addition to the presentors identical perceptions of why prior teaching could be an advantage for television instruction, the low overall, total ranking of 19 indicates it is considered important. It is reasonable to assume the faculty presentors are aware of the medium's lack of immediate feedback.

From the question, "To what degree do you feel good classroom teachers make good television teachers," the presentors were asked to select the categories of always,

---

41 Interview notes for faculty presentors Johnson, Reed, Ferguson, and Edge, April 20-21, 1972.
somewhat, and never. The somewhat category was the response of all four.

The presentors were also asked, "Please circle the area(s) that you have modified for television instruction: pacing of instruction, content material, and organization of content." Each expressed a different opinion. One felt that "pacing of instruction" was demanded to keep students interested and understanding the content. Another felt that it was impossible to single out one area since he found the entire process of constructing a television program was radically different from his other teaching experiences. A third circles all the areas as he believed pacing was important because of the scarcity of broadcast time, content had to be modified for visual representation, and organization of content should reflect the dramatic form the medium can add to the content's structure. The fourth presentor circled two excluding "content material."

From the responses to "Please describe how you would define effective television instruction," there was no consensus among the presentors. Their varied responses were:

1. It should be inspirational as well as have a visual impact.

2. The content is crystal clear and follows a simple, logical organizational pattern so
that there are no questions.

3. A process in the program should become so meaningful that the student has the desire and interest to duplicate or apply it.

4. The visual and audio effect enhance the comprehension and appreciation for the subject matter.

It is impossible to generalize about conventional versus televised teaching from this small survey. Yet it should be noted that these faculty members apparently have made some very specific judgments from the nature of their own experiences with the Open University television programs.

What Is the Instructional Purpose of the Open University Faculty Presentations?

There appears to be no standard description of the faculty presenter's role. It seems to vary in terms of the broadcasting media used in a course. "In the first year of production, the talking face format was generally used in most of the television foundation courses." The investigator pursued this subject with several Open University producers. One producer justified the "talking face" formula by stating, "The first year Open University students needed the university identification of a

---

43A. W. Bates, Interview.
Professor 'lecturing' to him."\(^44\) Another producer explained that lack of time made creative exploitation of radio, and especially television, impossible. Gratification of the faculty's egos on national open circuit broadcasting with the glamor of the BBC was also suggested. Another explanation offered was by an Open University administrative staff member. He felt, "what else could our faculty be expected to do but teach in the same conventional style and manner of a university professor as they had been doing before the Open University began."\(^45\) Since the faculty recruitment policy of the university was patterned exactly after existing British higher learning institutions, professors were not selected on the basis of their familiarity or competence in broadcasting.

In the Arts radio and television second year programs monitored, there was usually no presenter. Instead, the presentational mode was dramatization, film footage of famous art and sculpture, or an interview with an artist or critic who may or may not be an Open University Art faculty member. The reliance upon outside sources was observed to be a general characteristic of several programs beside Art.

\(^{44}\) Donald Holms, Interview.

\(^{45}\) Peter Holiday, Interview.
The Educational Studies monitored (starting at the second level) were narrated by several different presentors. Usually the presentor interpreted and expounded upon the visual or aural information. This faculty appeared to use the case study approach to teaching whereby in-depth documentaries and life situations were presented for analysis.

In Math and the Sciences, the presentor played a more direct, active part in the broadcasts. The presentational format consisted of two or three presentors creating a beginning ("Here's what we're going to do," middle (Let's do it"), and end ("Here's what we did") organizational pattern. Sometimes it was observed that the models, charts, graphs, maps, and other informative visuals appeared to dominate the instruction, with the presentor playing a somewhat passive role.

The continued use of the presentor as a direct primary teaching resource appears doubtful to some Open University producers. "As the academics and BBC become more experienced and as the Course Teams mature in their application of media technology, the broadcasts will become more sophisticated and the productions more complex."46 The desirability of the "talking face" as the only presentor of information was questioned by not only several producers interviewed but also faculty members

46Richard Hooper, Interview.
themselves. As a faculty member commented, "We may be able to stimulate the student more by providing him with appropriate vicarious experiences through the media and let the counsellor and tutor provide the human, personal inspiration." 47

Utilization

How Is Broadcasting Utilized at the Study Centers?

One of the purposes of the Study Centers is for viewing and listening to the Open University broadcasts, either the original transmission or repeat. BBC 2 TV is available to about 92 per cent of the population while BBC VHF Radio 4 is accessible to 88 per cent. 48

During her one month visit to England, the investigator went to twelve Study Centers located in the London-Westminster area. The facilities for broadcast monitoring at these Centers were described in Chapter IV. The Centers visited were found to be replicas of any conventional classroom with desks and blackboards.

The investigator was particularly interested in observing how the Open University programs were utilized at the Centers during a tutorial session. These sessions, a monthly, face-to-face encounter with a course tutor, are

47 David Johnson, Lecturer in Geology, Interview, Milton Keynes, April 21, 1972.

48 Duncan Thomas, BBC Senior Engineer, Interview, London, April 7, 1972.
a new addition to the Open University instructional system.

The investigator requested to visit a different Study Center location the evening of a tutorial session for each of the four faculties. It was felt that such a purposeful sampling procedure would tend to include a diverse sample of Open University students and tutors, who were associated with different subjects. The tutorial sessions observed were:

<table>
<thead>
<tr>
<th>Tutorial Session for Course No.</th>
<th>Course Title</th>
<th>No. of Sessions Observed at Different Study Center Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed 281</td>
<td>&quot;The School, Curriculum, and Society - (2nd level Educational Studies)</td>
<td>3</td>
</tr>
<tr>
<td>A100</td>
<td>&quot;Humanities - (foundation course in Art)</td>
<td>2</td>
</tr>
<tr>
<td>M201</td>
<td>&quot;Math&quot; - (2nd level)</td>
<td>1</td>
</tr>
<tr>
<td>S100</td>
<td>&quot;Science&quot; - (foundation course)</td>
<td>2</td>
</tr>
<tr>
<td>D282</td>
<td>&quot;National Income and Economic Policy&quot; - (2nd level course in Economics)</td>
<td>2</td>
</tr>
</tbody>
</table>

The investigator designed Appendix L in England to (1) record the relationship between the broadcasts and the tutorial sessions; (2) record the reactions of the students and tutors "before," "during," and "after the broadcasts, and (3) note any consistent utilization of the broadcasts at the tutorials observed. The investigator felt that such qualitative data might further indicate the function of broadcasting as an Open University learning
resource and identify its role in relation to other resources such as the tutorials.

Using Appendix L as a guideline and check sheet for recording observations, the investigator found there was little integration of the broadcasts and the following tutorial activity. Each method of instruction appeared to be a separate entity in the tutorials visited. The only exception was observed in the two Science tutorials. Here the tutors asked if there were any post broadcast questions resulting from the Science television programs. None of the other course tutors appeared to connect the broadcast material to the student's learning experiences. In five of the ten tutorials observed, the television set was not turned on. It is possible that several reasons may have contributed to this lack of viewing. The tutor may have felt the television program was not meaningful for (1) his planned review lecture; (2) clarifying assessment questions; or (3) highlighting of the important concepts found in the next text unit. A related television program might not have been scheduled. Another reason could have been that the tutor preferred to chat informally with those students present until starting a more formal presentation. It was observed that students began randomly arriving from 6:30 P.M. until 7 P.M.

Reactions of the 92 students "before," "during," and "after" the broadcasts at the Centers visited were varied.
Very few students showed visible evidence of "preparing" for the programs such as taking out note paper or referring to the "Broadcast Notes" in the correspondence text. It is very possible that the programs were a repeat for some of the students. "During" the programs some students appeared to concentrate (especially in the Science and Math programs), others were distracted by fellow students or the tutor, or arrived late, or glanced at the set while doing other activities. "After" the broadcasts, the tutor was given immediate attention. No aspect of the previous program was discussed except in one Science tutorial where a student wished a point clarified which was part of the Science program.

Tutor reactions to the broadcasts fell into three categories. Three of the ten tutors observed left the room periodically during the broadcast, five did not turn the set on, and two watched the program.

An important variable in broadcast viewing at the Centers during a tutorial or counselling session is scheduling. Sometimes a course tutorial or counselling session does not coincide with the broadcast transmission schedule for that course. According to the Assistant Director of Study Centers, there is no consistent pattern as the assignments of tutorials and counselling sessions are decided upon by the Senior Counsellor for the par-
ticular study center region.\textsuperscript{49}

The investigator was also interested in noting the frequency with which the students use the centers for viewing and listening to Open University programs. At the Study Centers of the ten tutorial sessions observed and two other locations, a questionnaire form was distributed among the student present (Appendix G). The investigator asked the students to complete the form before leaving the Center. From approximately 100 students the investigator received 66 forms.

One of the questions was, "How often do you use the Study Center for (1) broadcast playback, and (2) group discussion of the broadcast material?" Replies from the 66 students were coded according to six pre-conceived categories: never, twice a week, weekly, twice a month, once a month, and occasionally. The results were:

<table>
<thead>
<tr>
<th>Student Use for Viewing at Study Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>----------------------------</td>
</tr>
<tr>
<td>Once a week</td>
</tr>
<tr>
<td>Monthly</td>
</tr>
<tr>
<td>Never</td>
</tr>
<tr>
<td>Occasionally</td>
</tr>
<tr>
<td>Twice a month</td>
</tr>
<tr>
<td>Twice a week</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>
Student Use for Group Discussion of Broadcast Material at Study Centers

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency of Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a week</td>
<td>20</td>
</tr>
<tr>
<td>Occasionally</td>
<td>16</td>
</tr>
<tr>
<td>Monthly</td>
<td>16</td>
</tr>
<tr>
<td>Never</td>
<td>14</td>
</tr>
<tr>
<td>Twice a month</td>
<td>0</td>
</tr>
<tr>
<td>Twice a week</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>66</strong></td>
</tr>
</tbody>
</table>

If these students at the Centers visited are characteristic of the total Open University population, then it is possible to make certain generalizations about student use of radio and television sets at regional Centers:

1. Most students have access to a radio and television set at home, and

2. Most students watch and listen to the broadcasts in their own home rather than at the Study Centers.

The characteristics of some students and tutors toward viewing and listening to Open University programs at the Study Centers have been noted. Utilization of the broadcasts at the Center locations appears a fruitful area for in-depth research by the Open University. Data of several students reactions to the quality of the programs and other evaluative research questions are discussed next.
Evaluation

How Does the Use of Radio and Television Contribute to the Learning Process of the Open University Student?

Recognizing that the application of broadcasting to the Open University instructional system varies in terms of the individual faculties and Course Team's decisions and that students learn in various ways, the investigator attempted to analyze the instructional significance of the programs by determining (1) the frequency of student viewing and listening, and (2) the evaluative reactions of students to the broadcasts. Broadcast utilization at some Study Centers has been described.

Chart 7 on page 163 is a graph of the amount of radio listening for the four foundation courses in ten weeks (March-April, 1971). Chart 8, on page 164, similarly plots television viewing for the same courses over the same period. When these figures were registered, the University had been in operation since January, 1971.

Radio listening for this period is consistently high in the Humanities. "This may be a reflection of the fact that slightly more Arts students do not have access to BBC TV 2 and are, therefore, more concerned to use the medium that is available to them." Science instruction, 49

49 Naomi E. MacIntosh, Interview.
Chart 7: Radio Listening Levels - Units 9-18

Chart 8: Television Viewing Levels - Units 9-18

where television and radio are considered compulsory by
the faculty, has consistently the highest viewing figures.
"More students watch the Science programs twice than they
do for any other faculty."\(^{50}\)

The investigator tends to agree with some Open Univer-
sity producers and members of the Institute of Educational
Technology staff in thinking that assessment influences
viewing and listening. Presently, only the second level
Educational Studies courses have briefly introduced broad-
cast assessment into their correspondence material. "The
broadcasting media can't be perpetuated in the Open Univer-
sity system unless they are assessed. Otherwise, they lack
value as an additional form of learning."\(^{51}\)

The entire question of media assessment raises several
fundamental questions about the purpose of the Open Univer-
sity and its "integration" of learning resources. If the
broadcasting contribution is assessed, an Open University
student may not be able to remain home-based since BBC TV 2
and BBC Radio VHF 4 are not available everywhere in the
United Kingdom. The concept of "independent study" is
negated when the Study Center ceases to be an optional
alternative for the student.

\(^{50}\) Ibid.

\(^{51}\) A. W. Bates, Interview.
Assessment of the broadcasts also means greater integration with the correspondence text, regardless of the faculty or broadcast medium involved. The role of radio and television in relation to the other learning resources and course objectives would have to be defined in clear-cut, absolute terms. Hence, the advantages and disadvantages of establishing a broadcast assessment policy should be carefully considered in light of the University's total philosophy.

How Is the Effectiveness of the Broadcasts Measured and by What Criteria?

To determine the degree of effectiveness of the Open University radio and television programs is a very difficult task. With a massive at-home-based student population, evaluation of any kind is a low, tedious process. It is also invalid to draw sweeping generalizations on the data available since the University only began in 1971.

Some general evaluative data about the programs has been collected by the University's Institute of Educational Technology. A Report Form of each course unit is mailed weekly to a sample of one in three Open University students. Questions pertaining specifically to the programs ask the student to identify (1) the time and location of viewing and listening; (2) the usefulness of the programs; and (3) the degree of interest in the programs. The results of these Report Forms were not made available to the investi-
She was informed that they were being analyzed and not yet distributed to the appropriate Open University personnel.

The faculty of Humanities also has a method of broadcast evaluation for its courses. Under the sponsorship of Professor Michael Drake, a short questionnaire is sent weekly to a sample of first-year students enrolled in the "understanding Society" course. These radio and television rating forms ask the student to describe:

1. The number of times he watched or listened to a broadcast and why, or
2. Why he missed the programs,
3. The amount of information, pacing, interest, and usefulness of the program,
4. Areas for improvement,
5. If the text was read prior to the broadcast, and
6. If the "Broadcast Notes" were read prior to the broadcast.

The investigator was unable to obtain information about the nature of the responses to such questions. These attempts at describing and evaluating the Open University radio and television broadcasts appear to be factual and attitudinal and relate to individual programs.

Although the Open University was designed as a self-supporting, computerized feedback system, the process of
evaluation is not easily accomplished. There is a problem of quantity and multi-sources of information that can be generated. Broadcast evaluation raises several other interrelated questions:

1. How should the evaluation of broadcasting differ from that of the other learning resources?

2. How should the overall broadcast contribution for a course be evaluated?

3. How should individual radio and television programs be evaluated?

4. What course objectives are appropriate for broadcasting in relation to the other learning components?

5. When should evaluation occur?

The design of a quick, accurate, relevant, and constructive feedback process for data concerning these and other evaluative topics is extremely difficult and complex. Such assessment also calls for precision and validity of measurements, which have not been developed.

What Are Students' Reactions to the Open University Programs?

Reactions to the radio and television programs were solicited from Open University students at the twelve Study Centers visited. Sixty-six students responded to the investigator's pre-structured questionnaire form
The purpose of the questionnaire was to identify student comments about the broadcasts in general. The investigator was interested in qualitative data regarding student attitudes about the television programs, frequency of viewing and listening, the overall quality of teaching evident in the programs, and general criticisms of the programs.

The questions and responses were:

1. "How often do you watch the Open University television broadcasts?"

   Weekly  50
   Twice Monthly  11
   Semi-weekly  5

2. "How often do you listen to the radio broadcasts?"

   Weekly  40  Monthly  3
   Occasionally  20  Semi-weekly  3

3. "What do you like best about the television broadcasts?"

   Visualization  32  Identify with
   Convenience  20  Lecturer  3
   Inspires study  11

4. "What do you like least about the television broadcasts?"

   Impersonal  20  Inconvenient scheduling of programs 8
   No feedback  10  Distracting  7
5. "Do you feel that the radio and television broadcasts are similar?"

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>30</td>
<td>Perhaps</td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

6. Please explain, if answered "yes."

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Same lecturer</td>
<td>8</td>
</tr>
<tr>
<td>Same application of content</td>
<td>4</td>
</tr>
<tr>
<td>Some content but different application</td>
<td>5</td>
</tr>
</tbody>
</table>

7. "Would you like more, less, same amount of television programs?"

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>More</td>
<td>34</td>
</tr>
<tr>
<td>Less</td>
<td>2</td>
</tr>
<tr>
<td>Same</td>
<td>10</td>
</tr>
</tbody>
</table>

8. "Would you like more, less, same amount of radio programs?"

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less</td>
<td>39</td>
</tr>
<tr>
<td>More</td>
<td>7</td>
</tr>
<tr>
<td>Same</td>
<td>20</td>
</tr>
</tbody>
</table>

9. "Which form of learning do you like the best?" Please circle one: Correspondence, Counsellor, Broadcasts, Tutor

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Correspondence</td>
<td>23</td>
</tr>
<tr>
<td>Broadcasts</td>
<td>13</td>
</tr>
<tr>
<td>Counsellor</td>
<td>18</td>
</tr>
<tr>
<td>Other: Combination of several sources</td>
<td>3</td>
</tr>
</tbody>
</table>

10. "How would you rate the quality of teaching by the Open University television presenter(s)?" Circle: Excellent, Good, Fair, Poor

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>25</td>
</tr>
<tr>
<td>Fair</td>
<td>5</td>
</tr>
<tr>
<td>Good</td>
<td>22</td>
</tr>
<tr>
<td>Poor</td>
<td>3</td>
</tr>
<tr>
<td>Other: No comment as no comparison</td>
<td>10</td>
</tr>
</tbody>
</table>
11. "How would you rate the quality of teaching by the Open University radio presentor(s)?" Circle: Excellent, Good, Fair, Poor

<table>
<thead>
<tr>
<th>Quality</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>18</td>
</tr>
<tr>
<td>Good</td>
<td>30</td>
</tr>
<tr>
<td>Fair</td>
<td>10</td>
</tr>
<tr>
<td>Poor</td>
<td>8</td>
</tr>
<tr>
<td>Other: Never listen</td>
<td>7</td>
</tr>
</tbody>
</table>

12. "What are your negative criticism(s) about the radio and television programs?" Please describe.

- Broadcast schedule inconvenient: 25
- Too short: 4
- Too long: 4
- Unrelated to the course: 3
- Unrelated to the text: 11
- Not enough repeats: 3
- Not enough visuals: 9
- Not interesting: 1
- Too complicated: 5
- Nat enough visuals: 5

The qualitative data on some student comments about the Open University radio and television programs in general have suggested several interesting points. These particular students appear to watch the television programs with the approximate frequency that they listen to the radio programs yet they would prefer to have more television and less radio. The correspondence form of learning was liked the best with the other resources--counselling, tutoring, and broadcasting--liked about equally as well. The quality of radio and television teaching was frequently rated "excellent" and "good," although more students proportionately selected the "poor" and "fair" categories for radio. Most of the students gave visualization as their favorite aspect of television. In contrast, the impersonal nature of the medium was liked least. Regarding the negative
criticism(s) of both media, the category most frequently described was the inconvenience of the broadcasting schedule.

From the evidence presented, it is reasonable to assume that the radio and television programs favorably contribute to learning of Open University students. It appears too premature to identify "a level of significance."

After describing the investigator's findings about students' reactions to the Open University programs, it is appropriate to examine the research in media sponsored by the University.

What Research Is Being Conducted by the BBC and/or the Open University Concerning Their Utilization of Instructional Broadcasting? What Are the Implications for Higher Education of Such Research?

The Open University Productions of the BBC relies upon the University's Institute of Educational Technology for its broadcasting research. "We feel the IET has the funds, staff, and machinery for quantitative research, and we do not." 52

Research in broadcasting is mainly the responsibility of A. W. Bates of the IET. Specifically, he has been assigned to "research into the most effective ways of using various media for teaching in the Open University situation." 53 His proposed topics of research are concen-

52 Mrs. Helen Rapp, Senior Producer for the Arts Faculty, Interview, London, April 13, 1972.

trated into four key developmental areas. They are:

1. The development of an automatic feedback system which would monitor the cognitive and affective impact of television and radio;

2. The development of more flexible methods of production to allow for greater creativity and less time;

3. The development of experimental courses which would create new purposes and objectives in using the media; and

4. The development of a method of course analysis based upon a theoretical framework for the application of certain media to certain course objectives.\textsuperscript{54}

In addition to course preparation and production, he and the IET staff are concerned with broadcast evaluation. Currently there is a broadcast utilization study in process to assess the amount of video tape and cassette playback at the Study Centers.\textsuperscript{55}

The data collected from these and other broadcasting studies should have significant application to educational broadcasters and academicians interested in applying the media to their teaching situation. The identification of broadcasting effects upon the learner, as well as the conditions for maximum contribution in the learning environment will be especially valued. The results of broadcasting in the Open University context with its national coverage by the BBC and the large number of radio and television

\textsuperscript{54}Ibid., p. 2.

\textsuperscript{55}David G. Hawkridge, Interview.
programs for college credit can affect our perceptions of the design, production, utilization, and assessment necessary for the effective partnership of broadcasting and higher education.

The planning, production, utilization, and evaluation media activities unique to the Open University operation have been discussed. The investigator's research in England generated another broadcasting question, which is now examined.

What Is the Future of Broadcasting Within the Open University?

In an effort to predict the future of Open University broadcasting, the investigator was curious to determine why broadcasting was originally chosen as a learning resource. The question becomes historically significant upon considering the drastic difference between Harold Wilson's "University of the Air" concept and the Planning Committee's "Open University," employing television in addition to several other learning resources.

The following question was asked of a total of 35 persons: ten Open University Productions producers, four Course Team members, four Open University staff members, two BBC Further Education personnel, one member of Parliament, three British professors, ten tutors, and one London journalist. Their responses reveal several differing philosophies about broadcasting in general:
Question asked, "Why do you think that radio and television are included within the Open University instructional system?"

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;It's a very cheap method of delivery once you have over 300 students.&quot;</td>
<td>7</td>
</tr>
<tr>
<td>&quot;The Open University was conceived for the mass audience and broadcasting reaches the mass audience.&quot;</td>
<td>5</td>
</tr>
<tr>
<td>&quot;Since the Open University was designed for the 'second chance,' there has to be some way to keep him motivated. Television can be a good stimulant and keeps the student at a desirable pace so he doesn't fall behind in his studies.&quot;</td>
<td>5</td>
</tr>
<tr>
<td>&quot;The Open University is purposely &quot;public&quot; so using the &quot;public broadcasting waves is natural.&quot;</td>
<td>4</td>
</tr>
<tr>
<td>&quot;I suppose it was the recognition by someone that we learn by both aural and visual stimuli.&quot;</td>
<td>3</td>
</tr>
<tr>
<td>&quot;How else was the home-based student to receive instruction?&quot;</td>
<td>3</td>
</tr>
<tr>
<td>&quot;With so many unique features of open door admission, etc., the application of broadcasting added one more aspect of notoriety to the new University.&quot;</td>
<td>3</td>
</tr>
<tr>
<td>&quot;Broadcasting was chosen for its anonymous value. The intended Open University students would not be embarrassed to enroll if they knew no one would laugh at their lack of knowledge.&quot;</td>
<td>2</td>
</tr>
<tr>
<td>&quot;One way for a university to establish its credibility is to deliberately allow its curriculum to be widely exposed throughout all educational channels like professional organizations. Broadcasting is really a &quot;shop window&quot; for the Open University as it gives the University exposure to the non-student as well as the enrolled student. In a sense, the eavesdropping audience is crucial.</td>
<td></td>
</tr>
</tbody>
</table>
Response

Response to the success of the entire venture. If he can be motivated to register, then the Open University can sustain critical objections."

"There has been a tradition of cultural, educative programming in Britain via the media. The BBC has had its history of radio dramas and TV literary serials, which have fulfilled its charter obligation to inform. The media here have always been considered educational in some way so there was ample proof that one can learn from radio and television."

"The Labor Party has long believed in education as a means of self-betterment. Public libraries and Educational Divisions of Workers Unions are examples of the keen interest in education. Wilson capitalized on Labor's desire for self-improvement through education and thought television and radio were already available and well-liked by the mass. In other words, he probably believed they were already conditioned to the media."

The reasons cited for the inclusion of broadcasting in the Open University instructional system have been diverse. Political, economic, and social motives were suggested in addition to the inherent characteristics of the radio and television media themselves. From these responses, it appears that broadcasting in the Open University situation may fulfill other functions beside delivering information to a large number of geographically isolated students at specified times.
Several factors make it difficult to determine the future of broadcasting at the Open University. The investigator has noted both the hazards of premature generalizations since the University is completing its second year, and the diversity of opinion concerning the rationale for including broadcasting as one of the learning sources.

Another influential factor affecting the future of Open University radio and television programs is the BBC. In 1975, the BBC's partnership with the Open University expires, and its production facilities at Alexandra Palace must be vacated. The BBC Royal Charter expires in 1976 (the license for the Independent Television Authority also expires in 1976).

Will the BBC continue as the production-transmission service agency to the Open University as per its 1968 agreement? An important factor affecting their future partnership is Britain's "Fourth Network." As one BBC source suggested, the fate of this non-allocated television network will determine to a large degree the BBC's involvement in the Open University.56 When the telecommunications spectrum was allocated in 1936, four channels having nationwide coverage in England were established because

56Peter Montagon, Interview.
four proved a feasible mathematical number. Today, the allocation of this fourth national television network has been the subject of considerable debate. The question, "Should England have a 'fourth network'?" has several pros and cons. The commercial, ITA network claims it is only fair that they have a second television channel to compete with BBC 1 and BBC 2. Despite a very persistent lobbying effort, the ITA has not been awarded the "fourth network." Those against licensing the "fourth network" to either the BBC or ITA question the need for this channel. In an informative Listener article, Philip Whitehead, former BBC producer who is now a member of Parliament, asserted: "There was not a need for the available channel when it was originally allocated and there still isn't a need for it. Neither the ITA nor the BBC would know what to do with it."

The decision to allocate the "fourth network" to the BBC, ITA, educational institution(s), or other non-commercial organizations rests with the Technical Sub Committee composed of BBC, ITA, technicians, and interested

57 Duncan Thomas, Senior BBC Engineer, Interview, London, April 13, 1972.

58 Charles Warren, Interview.

British citizens. If this Committee recommends to the Minister of Post and Telecommunications, Sir John Eden, that the fourth channel be specifically allocated to educational institutions, then the BBC may no longer provide transmission time, production assistance, and other educational expertise to the Open University.  

It is reasonable to expect that in the next few years the British government will form a commission and hold a series of hearings culminating in a White Paper Report on the "Allocation of the Fourth Network." Certainly the historical action of the British government from the Beveridge Committee to the Pilkington Committee establishes precedent for future broadcasting investigation. The actual allocation of the available channel may follow the example of the FFC hearings in the United States by setting aside this frequency for education.

The role played by the print medium and face-to-face tuition will also affect the future direction of the broadcasting activities at the Open University. In addition, expansion of the "integration" strategy among the various learning resources may influence the instructional impact of the broadcast media.

An alternative delivery system from the broadcast

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60 John Cain, Interview.
media would be video and audio cassettes. According to several BBC personnel, cassettes and even cable television are too expensive at this time in England to have any real impact upon broadcasting. Besides cost, there is an additional problem to cassette utilization in the Open University context. According to a member of the Institute of Educational Technology staff,

The cassettes would have to be packaged small enough to be sent through the post quickly and cheaply. If they are located at the Study Centers, then the independent learning philosophy is defeated as students will be forced to go outside their homes for Open University instruction.61

The future of the BBC and hence broadcasting within the Open University is unclear. All one can do at this time is to identify those factors affecting their future partnership.

**Summary**

The descriptive nature of the broadcast activities of the Open University has been presented. Research data collected in England were organized by the processes of planning, production, utilization, and evaluation.

The data revealed that the University's Broadcasting Allocation Committee is responsible for planning the total amount of programs for each faculty. The respective

61A. W. Bates, Interview.
faculties and the Open University Productions, a new department within the Educational Broadcasting Division of the BBC, are committed to the number of programs allocated. A revision policy has pre-determined the amount of remake programs. With the increasing number of courses planned at the third and fourth level, BBC available transmission times are limited. In addition to programming an original and repeat broadcast for each course offered, the BBC schedules "Open Forum" radio and television programs. The Allocation Committee in 1972 has attempted to alleviate the scheduling difficulty by restricting the amount of broadcasting available to each faculty.

The cost of the Open University Productions budget is approximately 1.5 million pounds, a significant sum in proportion to other Open University expenses. In 1973, the broadcasting expenditure is estimated to be 2 million.

The Course Teams associated with each of the six faculties determine the role of broadcasting for their course and its relation to the correspondence materials. Course Team members are Senior and Junior Open University producers who have had academic experience, faculty, educational technologists, and part-time consultants. The relationship between the producers and the academicians in the Course Team structure has been defined as a partnership whereby both recognize the expertise of each. Some Course Teams have designed a television/radio
presentor(s) into their programs while other Course Teams have chosen different modes of presentation.

The investigator interviewed ten producers and four faculty television presentors who were associated with the four foundation courses. Their responses suggested, for example, that the meaning of effective television teaching has several definitions and that other considerations are important in production besides media characteristics.

Using the BBC's description of its general strategy of Open University broadcast utilization, the investigator observed that the function of broadcasting varied among the faculties, as well as its integration with the correspondence materials. The Science programs were found to be designed as essential, not supplementary, to the overall course instruction as were the Art, Math, Humanities, and Educational Studies programs. Problems of integrating the broadcasting, print, and tutorial learning resources were noted by the investigator's observation of an Open University Math Conference and ten tutorial sessions at Study Centers in the London area.

The University's Institute of Educational Technology is primarily responsible for research in broadcasting. Its forthcoming studies of broadcast utilization at the Study Centers, identification of media effects, and the application of certain media to certain course objectives could be
highly informative to the area of educational broadcasting in higher education.

The investigator conducted an informal sampling of student reactions to the Open University programs. Their responses suggested, among other aspects, that the television programs were especially liked and more of them were desired. Another research effort examined the frequency with which some students used the regional Study Centers for broadcast monitoring and discussion of the programs. "Monthly," and "once a week" were the most repeated responses given for viewing and listening at the Centers.

In looking toward the future of broadcasting at the Open University, various rationales for the role of broadcasting as a learning resource in the Open University were examined. The importance of Britain's "fourth network" and other factors were described in relation to the future partnership of the BBC and the Open University.

Chapter VII evaluates the planning, production, utilization, and evaluation activities of broadcasting at the Open University.
Having identified the significant features of the Open University's broadcasting operations, the investigator next analyzed its effectiveness. Two sources of assessment were employed: (1) evaluative statements from sources outside the Open University context and (2) application of the criteria previously validated by a panel of experts in education and educational broadcasting.

In order to gain an additional perspective on the effectiveness of the broadcasts apart from the opinions of Open University producers, students, staff, and faculty members, the investigator interviewed persons representing other sources. The investigator felt it would be informative to identify reactions to the broadcasts from diversified sources apart from the Open University. Those interviewed for this purpose and their respective backgrounds were:

<table>
<thead>
<tr>
<th>Name</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Cain</td>
<td>Director, BBC Further Education Television</td>
</tr>
<tr>
<td>Michael Stevens</td>
<td>Director, BBC Further Education Radio</td>
</tr>
<tr>
<td>John Coney</td>
<td>Lecturer in Math, University of Leeds</td>
</tr>
</tbody>
</table>
These eight individuals were asked a series of evaluative questions about the Open University programs. The questions and the variety and frequency of their responses were:

Question asked, "How often do you watch/listen to the Open University programs?"

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;If I happen to tune in a program I like, I usually will check for the next scheduled program and watch it.&quot;</td>
<td>1</td>
</tr>
<tr>
<td>&quot;Haphazardly--about once a week.&quot;</td>
<td>1</td>
</tr>
<tr>
<td>&quot;Usually I rely upon my wife to alert me to a good course series.&quot;</td>
<td>1</td>
</tr>
<tr>
<td>&quot;On occasion--once a month.&quot;</td>
<td>1</td>
</tr>
<tr>
<td>&quot;I confess only rarely as I haven't the time.&quot;</td>
<td>1</td>
</tr>
<tr>
<td>&quot;Right now I wouldn't miss the Art series as it's terribly interesting.&quot;</td>
<td>1</td>
</tr>
<tr>
<td>&quot;The scheduled times in the evening and on the weekends are horrid and just too inconvenient for me to view regularly.&quot;</td>
<td>1</td>
</tr>
</tbody>
</table>
Response Frequency

"I can't pick up the radio programs on my VHF set, but I can get the TV reception and will usually watch whenever I'm bored with competing BBC or ITA programming." 1

Total 8

Question asked, "How would you evaluate the Open University television broadcasts?"

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;It's too early to make any absolute evaluations.&quot;</td>
<td>5</td>
</tr>
<tr>
<td>&quot;I would rather not as they evaluate their own output.&quot;</td>
<td>2</td>
</tr>
<tr>
<td>&quot;Generally inconsistent in effectiveness.&quot;</td>
<td>1</td>
</tr>
</tbody>
</table>

Total 8

Question asked, "How do you feel that the broadcasting media are being utilized by the Open University?"

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Not too well yet as broadcasting doesn't seem to have found its place within their teaching system.&quot;</td>
<td>2</td>
</tr>
<tr>
<td>&quot;Rather experimentally as the venture is still very new.&quot;</td>
<td>2</td>
</tr>
<tr>
<td>&quot;There is too much of a talking face format.&quot;</td>
<td>1</td>
</tr>
<tr>
<td>&quot;Creative production is lacking.&quot;</td>
<td>1</td>
</tr>
<tr>
<td>&quot;Quite well I think as the programs are generally extremely informative.&quot;</td>
<td>1</td>
</tr>
<tr>
<td>No answer</td>
<td>1</td>
</tr>
</tbody>
</table>

Total 8
It is reasonable to assume that each respondent’s professional background, familiarity with the Open University, frequency of viewing and listening to the broadcasts, and other predisposed attitudes probably influenced his assessment of the programs. Although it is impossible, therefore, to accurately determine the rationale for their respective judgments, the data were interesting. None of the respondents were affiliated with the Open University, but they all appeared to be informed about it. The majority recognized the danger of evaluating the programs prematurely yet they identified specific areas for improvement—more creative production, presenter training, and program scheduling and length. None appeared to watch or view the programs with any regularity.

These responses could represent a small sampling of the Open University eavesdropping audience. Concerning information on the non-Open University viewer or listener, an Open University staff member stated, "We know practically nothing about the 'shop window' viewer except that he is part of a total audience of roughly 10 to 35,000 viewers, depending upon the program and transmission time." Other sources estimated the size of this audience to be from 50 to 75,000.

1 Bill Prescott, Interview.
It is possible for the Open University to have 'open' instruction since it utilizes the open circuit broadcasting channels of BBC 2 and BBC VHF 4. From the estimates presented on the approximate size of the eavesdropping audience, apparently the British public has taken somewhat of an interest in listening or viewing the Open University radio and television programs. Their favorable reactions to the broadcasting instruction might be an important factor to the future operation of the University. "We hope some of the general audience viewers will eventually become Open University students."² Besides helping to augment the Open University's enrollment, their favorable responses might also enhance its credibility. It is possible that faculty members of other British universities and prospective employers of Open University graduates comprise a portion of the "shop window" audience.

Recognizing the infancy of the Open University and its broadcasting operation, the investigator believed that a systematic attempt at evaluating the broadcast planning, production, utilization, and evaluation activities at present would yield fruitful results. First, the evaluation process would involve the development of meaningful criteria by which to appraise a broadcast system allied to an institution of higher education. Second, the criteria

²Peter Holiday, Interview.
developed and ranked could be applied to the broadcast activities of the Open University in order to identify its specific strengths and weaknesses.

Then comes the process of applying the criteria to the broadcast operation. The criteria have been organized into the categories of planning, production, utilization, and evaluation. Each principle is discussed in the order of its importance as ranked by the panel members. Tables 7, 8, 9, and 10 in Chapter II have previously listed the rank order importance given to each criterion. Table 18, page 190, lists these and the additional criteria suggested by the panel members. The criteria are stated according to their order of priority.

Since a description of the characteristics of the broadcasting operation has been given in Chapter V, the investigator has not duplicated previous discussion. Rather, the broadcasting operation of the Open University is appraised according to the educational broadcasting criteria which the investigator generated and validated. The basis for the investigator's evaluations were interview data, questionnaires, and first-hand observations derived from a one-month field study in England. The standards for the evaluations and their definition in this study are given on page 194.
TABLE 18
EDUCATIONAL BROADCASTING CRITERIA APPLIED TO THE OPEN UNIVERSITY

<table>
<thead>
<tr>
<th>Placement Order</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planning</strong></td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>The broadcasts should be so designed as to integrate with the other learning resources of the Open University.</td>
</tr>
<tr>
<td>2.5</td>
<td>Sufficient time should be incorporated into the planning activities.</td>
</tr>
<tr>
<td>2.5</td>
<td>Course Team members should be committed to the critical evaluation of how students learn.</td>
</tr>
<tr>
<td>2.5</td>
<td>The planning for the broadcasts should include procedures for production, utilization, and evaluation.</td>
</tr>
<tr>
<td>5.0</td>
<td>The recognized strengths and limitations of the broadcasting media as instructional tools should be considered in the development of the Open University broadcasts.</td>
</tr>
<tr>
<td>6.5</td>
<td>The broadcasts should have a high budgetary priority within the Open University system.</td>
</tr>
<tr>
<td>6.5</td>
<td>The broadcasts should be planned according to the specified behavioral objectives of each course.</td>
</tr>
<tr>
<td>8.0</td>
<td>The final authority for production should rest with the British Broadcasting Corporation while decisions regarding academic content should be the ultimate responsibility of the Open University.</td>
</tr>
<tr>
<td>9.0</td>
<td>The planning of the broadcasts should be accomplished by the cooperative activity of both the British Broadcasting Corporation and the Open University whereby both recognize the expertise of each.</td>
</tr>
</tbody>
</table>
TABLE 18 (continued)

<table>
<thead>
<tr>
<th>Placement Order</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.0</td>
<td>There should be a final arbitrator in planning disputes.</td>
</tr>
<tr>
<td>Other:</td>
<td>Teacher training for television and radio must include the use of broadcasting media.</td>
</tr>
<tr>
<td></td>
<td>The broadcasts should be scheduled in relation to other informative, educational programming for reference listening and viewing.</td>
</tr>
</tbody>
</table>

Production

| 1.0              | The optimum potential of television should be exploited for maximum impact. |
| 2.0              | The optimum potential of the radio medium should be exploited for maximum instructional impact. |
| 3.5              | The television teacher should be trained in the use of television as a teaching tool. |
| 3.5              | A team effort of producer, television teacher, and technical crew should exist in the production process. |
| 5.0              | The television teacher's role in the production process should be clearly defined. |
| 6.0              | The production activities should be conducted according to management principles. |
| 7.0              | There should exist a production standard to be applied to all broadcasts. |
| 8.0              | The roles of production team members must be clearly defined. |
| Other:           | Training sessions of the television teacher and producer should be held prior to production to insure an effective relationship. |
COLORCASTING IN TELEVISION PRESENTATIONS

CREATIVITY SHOULD NOT BE SQUELCHED DUE TO MANAGEMENT PRINCIPLES.

THERE SHOULD EXIST A WORKING RELATIONSHIP OF THE FULL PLANNING TEAM IN PRODUCTION.

### Production (continued)

<table>
<thead>
<tr>
<th>Placement Order</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>In scheduling both the original and repeat broadcasts, a high priority should be given to the convenience and availability of the Open University students.</td>
</tr>
<tr>
<td>1.5</td>
<td>Students should be provided with learning objectives at the outset of instruction.</td>
</tr>
<tr>
<td>3.0</td>
<td>Insofar as possible, the Study Centers should provide a full range of playback tapes and facilities for the students.</td>
</tr>
<tr>
<td>Other:</td>
<td>For each Open University course, the expected student learning activities should be well defined. Students should have the opportunity to discuss with other students. The students should be given suggested individual learning activities. Printed materials and other feedback mechanisms should be available for the student.</td>
</tr>
</tbody>
</table>

### Utilization

<table>
<thead>
<tr>
<th>Placement Order</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>In scheduling both the original and repeat broadcasts, a high priority should be given to the convenience and availability of the Open University students.</td>
</tr>
<tr>
<td>1.5</td>
<td>Students should be provided with learning objectives at the outset of instruction.</td>
</tr>
<tr>
<td>3.0</td>
<td>Insofar as possible, the Study Centers should provide a full range of playback tapes and facilities for the students.</td>
</tr>
<tr>
<td>Other:</td>
<td>For each Open University course, the expected student learning activities should be well defined. Students should have the opportunity to discuss with other students. The students should be given suggested individual learning activities. Printed materials and other feedback mechanisms should be available for the student.</td>
</tr>
</tbody>
</table>
**TABLE 18 (continued)**

<table>
<thead>
<tr>
<th>Placement Order</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Evaluation</strong></td>
<td><strong>1.5</strong></td>
</tr>
<tr>
<td></td>
<td>Evaluation should continually occur through all the stages of planning, production, and utilization.</td>
</tr>
<tr>
<td><strong>1.5</strong></td>
<td>Evaluation of the broadcasts should involve the Open University students.</td>
</tr>
<tr>
<td><strong>3.0</strong></td>
<td>The results of the evaluation studies should be applied to future broadcasts.</td>
</tr>
<tr>
<td><strong>4.5</strong></td>
<td>New production and content ideas should be pre-tested on a sample of the intended Open University student population before incorporation into a course series.</td>
</tr>
<tr>
<td><strong>4.5</strong></td>
<td>Evaluation should include the effectiveness of the television teacher.</td>
</tr>
<tr>
<td><strong>6.5</strong></td>
<td>Evaluation should include the quality of the production evidenced in each radio and television program.</td>
</tr>
<tr>
<td><strong>6.5</strong></td>
<td>Evaluation should include an assessment of the broadcasting system as an efficient, available, and effective learning resource.</td>
</tr>
<tr>
<td><strong>Other:</strong></td>
<td>Evaluation of the broadcasts should focus on observable, pre-determined behavioral objectives.</td>
</tr>
<tr>
<td>Evaluative Term</td>
<td>Meaning Assigned</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>&quot;Very Satisfactory&quot;</td>
<td>The Open University has made a successful application of this criterion.</td>
</tr>
<tr>
<td>&quot;Satisfactory&quot;</td>
<td>The Open University has applied this criterion with moderate success.</td>
</tr>
<tr>
<td>&quot;Unsatisfactory&quot;</td>
<td>The Open University has failed in its application of this criterion.</td>
</tr>
<tr>
<td>&quot;Undetermined by the Research Efforts&quot;</td>
<td>(1) This criterion is present but the research findings were qualitatively or quantitatively insignificant to warrant any evaluative conclusions; or (2) data could not be collected by the research study to determine the application of this criterion.</td>
</tr>
<tr>
<td>&quot;Inappropriate&quot;</td>
<td>The Open University broadcasting operation should not be assessed according to this criterion. The purpose, design, and implementation of the model in its Open University setting are inappropriate to this criterion.</td>
</tr>
</tbody>
</table>

The investigator was unable to identify any other criteria already generated by either the BBC or the Open University. As one Open University producer stated, "We have been too pressured to produce, so we haven't had the luxury of defining what it is we ought to do."³

Evaluation of the planning, production, utilization, and evaluation activities is now presented.

³ Gwen Prichard, Interview.
### TABLE 19
APPLICATION OF PLANNING CRITERIA

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Evaluation of OU Broadcasting Activities</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The broadcasts should be so designed as to integrate with other learning resources.</td>
<td>Two evaluations are appropriate: (1) very satisfactory for some broadcasts, and (2) unsatisfactory for other.</td>
<td>1. The data indicates that in the faculties of Math and Science the broadcasts and the correspondence are highly integrated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. The other faculties and some tutorial sessions are inconsistent in their integration.</td>
</tr>
<tr>
<td>2. Sufficient time should be incorporated into the planning activities.</td>
<td>Satisfactory</td>
<td>The Course Team has six months to prepare and produce a course.</td>
</tr>
<tr>
<td>3. Course Team members of the Open University should be committed to the critical evaluation of how students learn.</td>
<td>Very satisfactory</td>
<td>The Course Team sessions generally reflect that the academic, producers, and educational technology staff members have keen interest in student learning.</td>
</tr>
<tr>
<td>Criteria</td>
<td>Evaluation of OU Broadcasting Activities</td>
<td>Evidence</td>
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</tr>
<tr>
<td>4. The planning for these broadcasts should include procedures for production, utilization and evaluation.</td>
<td>Three evaluations are appropriate: (1) production = satisfactory; (2) utilization = unsatisfactory; (3) evaluation = unsatisfactory.</td>
<td>1. Consistency of production planning varies according to the individual Course Teams.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Suggested broadcasts utilization guides are prepared for students but not for counsellors or tutors.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Marginal efforts at in-depth broadcast evaluation have been made by the Course Teams.</td>
</tr>
<tr>
<td>5. The recognized strengths and limitations of the broadcasting media as instructional tools should be considered in the development of the Open University broadcasts.</td>
<td>Satisfactory</td>
<td>The Open University Production producers interviewed and the faculty presentors are aware of the unique characteristics of the media. Applying media exploitation theory rests with the planning decisions of the Course Team &quot;working groups.&quot;</td>
</tr>
<tr>
<td>Criteria</td>
<td>Evaluation of OU Broadcasting Activities</td>
<td>Evidence</td>
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</tr>
<tr>
<td>6. The Open University radio and television broadcasts should have a high budgetary priority within the Open University system.</td>
<td>Very satisfactory</td>
<td>The cost of the broadcasts is proportionally higher than for other learning resources.</td>
</tr>
<tr>
<td>7. The broadcasts should be planned according to the specified behavioral objectives of each course.</td>
<td>Satisfactory</td>
<td>The consistency of this application varies from faculty to faculty. Other factors operate in broadcast planning such as the allocation of the Broadcast Committee, Course Teams' concept of media exploitation, and time constraints.</td>
</tr>
<tr>
<td>8. The final authority for production should rest with the BBC while decisions regarding academic content should be the ultimate responsibility of the Open University</td>
<td>Very satisfactory</td>
<td>Although this criterion appears to contradict the mutual cooperation ideology of the Course Teams, it usually was reported to exist in the final production analysis.</td>
</tr>
<tr>
<td>Criteria</td>
<td>Evaluation of OU Broadcasting Activities</td>
<td>Evidence</td>
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</tr>
<tr>
<td>9. The planning of these broadcasts should be accomplished by cooperative activity of both the BBC and the Open University whereby both recognize the expertise of each.</td>
<td>Very satisfactory</td>
<td>The structure and responsibilities of the Course Team are such that a cooperative working relationship between the BBC Open University staff and academics is particularly feasible in theory and practice.</td>
</tr>
<tr>
<td>10. There should be a final arbitrator in planning disputes.</td>
<td>Very satisfactory</td>
<td>The faculty dean is the final arbitrator in the Course Team sessions. Usually, however, decisions are reached by majority vote or consensus of the Course Teams.</td>
</tr>
<tr>
<td>11. Teacher training for TV and radio must include use of the media.</td>
<td>Two evaluations are appropriate: (1) satisfactory for faculty and (2) unsatisfactory for tutors and counsellors.</td>
<td>1. BBC workshops are offered at irregular intervals for familiarizing faculty with the media.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. No training is presently given to tutors and counsellors for student broadcast utilization at the Study Centers.</td>
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<tr>
<td>12. The broadcasts should be scheduled in relation to other educational programming for reference viewing and listening.</td>
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</table>

<table>
<thead>
<tr>
<th>Evaluation of OU Broadcasting Activities</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsatisfactory</td>
<td>Scheduling of Open University broadcasts is made independent of BBC TV 2 and Radio 4 UHF related &quot;educational&quot; or &quot;educational&quot; programming.</td>
</tr>
<tr>
<td>Criteria</td>
<td>Evaluation of OU Broadcasting Activities</td>
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<tr>
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</tr>
<tr>
<td>1. The optimum potential of television should be exploited for maximum impact.</td>
<td>There are two evaluations: satisfactory and unsatisfactory.</td>
</tr>
<tr>
<td>2. The optimum potential of the radio medium should be exploited for maximum instructional impact.</td>
<td>There are two evaluations: satisfactory and unsatisfactory.</td>
</tr>
<tr>
<td>3. The television teacher should be trained in the use of television as a teaching tool.</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>4. A team effort of producer, television teacher and technical crew should exist in the production process.</td>
<td>Very satisfactory</td>
</tr>
<tr>
<td>Criteria</td>
<td>Evaluation of OU Broadcasting Activities</td>
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<tr>
<td>-------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>5. The television teacher's role in the production process should be clearly defined.</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>6. The production activities should be conducted according to management principles.</td>
<td>Very satisfactory</td>
</tr>
<tr>
<td>7. There should exist a production standard to be applied to all broadcasts.</td>
<td>Very satisfactory</td>
</tr>
<tr>
<td>8. The roles of production team members must be clearly defined.</td>
<td>Very satisfactory</td>
</tr>
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<td>Criteria</td>
<td>Evaluation of OU Broadcasting Activities</td>
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</tr>
<tr>
<td>9. Training sessions of TV teachers and producer should be held prior to production to insure an effective relationship.</td>
<td>Inappropriate</td>
</tr>
<tr>
<td>10. Colorcasting in TV presentations whenever possible.</td>
<td>Inappropriate</td>
</tr>
<tr>
<td>Criteria</td>
<td>Evaluation of OU Broadcasting Activities</td>
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<tr>
<td>------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>11. Creativity should not be squelched due to management principles.</td>
<td>Impossible to determine by the research efforts.</td>
</tr>
<tr>
<td>12. There should exist a working relationship of the full planning team in production.</td>
<td>Satisfactory</td>
</tr>
</tbody>
</table>
### TABLE 21

**APPLICATION OF UTILIZATION CRITERIA**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Evaluation of OU Broadcasting Activities</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In scheduling both the research efforts.</td>
<td>Undetermined</td>
<td>Data were not available to determine if consideration is given to the &quot;availability and convenience&quot; of the Open University students.</td>
</tr>
<tr>
<td>2. Students should be provided with learning objectives at the outset of instruction.</td>
<td>Very satisfactory</td>
<td>The &quot;Broadcast Notes&quot; and the correspondence materials define the purposes of each course unit.</td>
</tr>
<tr>
<td>3. Insofar as possible, the Study Centers should provide a full range of playback tapes and facilities for the Open University students.</td>
<td>Unsatisfactory</td>
<td>The typical Study Center is only equipped with a television or radio set. About 10 centers have a computer terminal for math students. In those Centers where there is no TV, a 16 mil. film cartridge is used. There are no tape libraries at the Centers.</td>
</tr>
<tr>
<td>Criteria</td>
<td>Evaluation of OU Broadcasting Activities</td>
<td>Evidence</td>
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<tr>
<td>4. For each Open University course, the expected student learning activities should be well defined.</td>
<td>Satisfactory</td>
<td>With the self-contained characteristic of the correspondence materials, the learning activities are well specified. But (depending upon the faculty) the broadcasting contribution to the overall course is often unclear.</td>
</tr>
<tr>
<td>5. Students should have the opportunity to discuss with other students.</td>
<td>Very satisfactory</td>
<td>The 250 regional Study Centers in the United Kingdom are in operation for this purpose.</td>
</tr>
<tr>
<td>6. The students should be given suggested individual learning activities.</td>
<td>There are two evaluations: (1) unsatisfactory for the broadcasts and (2) very satisfactory for correspondence texts.</td>
<td>1. The &quot;Broadcast Notes&quot; and the broadcasts are not sources which suggest other learning activities beyond themselves.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. The correspondence text usually suggests several supplementary readings and/or experiments, and other projects.</td>
</tr>
<tr>
<td>Criteria</td>
<td>Evaluation of OU Broadcasting Activities</td>
<td>Evidence</td>
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</tr>
<tr>
<td>7. Printed materials and other feedback mechanisms should be available for the student.</td>
<td>Very satisfactory</td>
<td>1. Open Forum Radio and Television broadcasts are especially designed to solicit students' opinions and questions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. The Open University mails to the student the correspondence materials needed for each course unit. Supplementary related readings can be purchased at specified bookstores.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. All computer and tutor marked assignments are returned to the students approximately two weeks after completion.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Students elect representatives to the Open University General Assembly.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Counsellors at the Study Centers serve as the most immediate, direct feedback source to the student.</td>
</tr>
<tr>
<td>Criteria</td>
<td>Evaluation of OU Broadcasting Activities</td>
<td>Evidence</td>
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</tr>
<tr>
<td>6.</td>
<td>The students can telephone a specified Open University member for information and assistance.</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 22
APPLICATION OF EVALUATION CRITERIA

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Evaluation of OU Broadcasting Activities</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Evaluation of the broadcasts should continually occur through all the stages of planning, production, and utilization.</td>
<td>Satisfactory</td>
<td>Critical assessment of ideas and materials by the Course Team members provides an informal system for evaluating the planning and production stages. All broadcasts must have the approval of their respective Course Teams.</td>
</tr>
<tr>
<td>2. Evaluation of the broadcasts should involve the Open University students.</td>
<td>Satisfactory</td>
<td>The unit Report Forms and Pilot testing of correspondence materials directly involves the Open University student and intended applicants.</td>
</tr>
<tr>
<td>3. The results of evaluation should be applied to future broadcasts.</td>
<td>Unsatisfactory</td>
<td>The results of informal evaluative opinions and report forms have been generally considered too inconsistent and premature to affect future broadcast planning to date.</td>
</tr>
<tr>
<td>Criteria</td>
<td>Evaluation of OU Broadcasting Activities</td>
<td>Evidence</td>
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</tr>
<tr>
<td>4. New production and content ideas should be pretested on a sample of the intended Open University student population before incorporation into a course series.</td>
<td>Satisfactory</td>
<td>New course programs are usually pretested on a sample of students but there is controversy about the significance of the pretest results depending upon the faculty involved.</td>
</tr>
<tr>
<td>5. Evaluation should include the effectiveness of the television teacher.</td>
<td>Unsatisfactory</td>
<td>Evaluation to date has not assessed the television teacher. Some programs, especially in Art, do not have a faculty presenter, however.</td>
</tr>
<tr>
<td>6. Evaluation should include the quality of the production evidenced in each radio and television broadcast.</td>
<td>Unsatisfactory</td>
<td>Evaluation to date has not assessed production factors.</td>
</tr>
<tr>
<td>7. Evaluation should include an assessment of the broadcasting system as an efficient, available, and effective learning resource.</td>
<td>Unsatisfactory</td>
<td>The Educational Studies faculty is presently experimenting with broadcast assessment. Yet, evaluation to date has not included an assessment of the broadcasting system, although</td>
</tr>
<tr>
<td>Criteria</td>
<td>Evaluation of OU Broadcasting Activities</td>
<td>Evidence</td>
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<tr>
<td></td>
<td>future studies of the Institute of Educational Technology are reported to do so.</td>
<td></td>
</tr>
<tr>
<td>8. Evaluation of the broadcasts should focus on observable, pre-determined behavioral objectives.</td>
<td>Unsatisfactory</td>
<td>Apart from the Educational Studies faculty, the other faculties to date have made no attempt to include broadcast assessment in the correspondence or graded assignments.</td>
</tr>
</tbody>
</table>
As previously mentioned, the newness and inherent characteristics of the Open University broadcasting activities make valid evaluation very difficult. The previous appraisal of broadcasting within the Open University context should not be regarded as absolute or all-inclusive; rather, the results should be regarded as well-informed and researched criticism of certain aspects of the current broadcast operation based upon specified, educational broadcasting criteria. A more knowledgeable picture of the general effectiveness of the Open University's broadcasting system can then be seen. Those factors influencing the success of broadcasting in higher education may also be more intelligently identified.

Discussion of Evaluation Results

In applying the educational broadcasting criteria to the Open University broadcasting activities, several observations become apparent. Inferences can be drawn both from the process and from the results of assessing the broadcasting operation examined.

Evaluating an on-going system which is in its second year of operation presented unique problems. Without the availability of historical data from which to draw comparisons, it was difficult to identify priorities within the Open University broadcasting system. Another problem was the lack of current information available. An illustration was the operational strategy of the Broadcast
Allocation Committee. Substantial data were not available concerning the rationale for the Committee's decisions on transmission scheduling. It was equally impossible to determine if these decisions were based upon politics, pragmatics, pre-determined guidelines, or a combination of all three factors.

Besides noting the at-present undefinable aspects of the broadcasting operation, the evaluation process has eliminated those criteria "inappropriate" to the Open University context. For example, the structure and function of the Course Team made it unnecessary to hold "a training session of the television teacher and producer prior to production to insure an effective relationship."

As Course Team members, both producers and faculty continue to share a working relationship through the entire development of a course series.

From the criteria presented, the most favorable overall evaluation was associated with the planning process of broadcasting. Nine and one-half of the twelve criteria were satisfied. Planning appears to be a very significant consideration in the broadcasting operation. Course planning is accomplished by a Course Team arrangement whereby the expertise of the Open University producers, faculty, and Institute of the Educational Technology staff are recognized. This "mutual cooperation" between educators and the BBC has been very highly praised by both the BBC
and the Open University.  

The majority of the production criteria were also met. Two were found "inappropriate." Eight were considered fully "satisfactory" and two were considered partly "unsatisfactory." One criterion was impossible to assess due to the lack of available data.

Two "satisfactory" production activities appear especially noteworthy to the development of the Open University programs. Through the BBC's Workshops, media training of the Open University faculty members is accomplished. Second, the Course Team structure allows for the establishment of a working relationship among the producers and presentors during the production process. Hence, the faculty has the distinct advantage of media training, and both producers and faculty share an atmosphere of cooperation.

The optimum potential of both radio and television has not appeared to be yet fully realized. Although the Open University production activities may still be in an experimental stage, some faculties have already begun to incorporate special effects and other novel presentation techniques for their televised instruction.

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4See, for example, (1) The BBC and the Open University: Some Questions Answered, op. cit., and (2) The Open University of the United Kingdom and Its Instructional System, op. cit.
In the utilization assessment, four of the seven criteria were considered "satisfactory." Concerning those criteria which were not met, total integration of the print and media sources has not yet been accomplished in all the faculties. It is possible that the nature of the particular faculties may determine the relationship between the broadcasts and the printed materials. Although a "full range" of media facilities and tapes were absent from the Study Centers, this criterion does not appear to be essential if the students have access to the radio and television programs in their homes.

A utilization deficiency observed at present in the Open University broadcasting operation was the lack of training by the counsellors and tutors. There exists here a similarity with the history of instructional broadcast utilization in the United States. "Studies in this country have verified that the misuse of ITV in the classroom contributes to its ineffectiveness."\(^5\)

But in the Open University setting, the concept of utilization is different than the conventional instructional television environment. Where television has been employed as a learning resource, there has been an "inter-

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\(^5\) Dr. I. Keith Tyler, Professor of Education, "Class Notes," Education 677, Winter Quarter, 1970, The Ohio State University, Columbus, Ohio.
mediary" or classroom teacher. Pre- and post-broadcast activities in the classroom are his responsibility in order that the television or radio experience is directly related to the curriculum objective. In contrast, the Open University student usually watches and listens at home; he is directly responsible for broadcast utilization even if he chooses to attend a Study Center. He is not part of a class environment but learns from independent study.

While the Open University broadcasting system offers the convenience of instruction at home at one's own pace, it also demands a high degree of concentration and motivation. In the conventional instructional television setting, the classroom teacher provides the necessary in class, follow-up activities. In the Open University instructional television system, the "Broadcast Notes" and the student's involvement in the program substitute for the classroom teacher.

The broadcasting operation in 1972 appears the weakest in evaluation, according to the criteria presented. Five of the eight evaluation criteria were not satisfied. Broadcasting considerations of assessment, production and presentation, effects upon the learner, integration with other learning resources, the identification of certain media for certain behavioral objectives, and broadcasting's contribution to the future of the Open University have not
been researched. However, the intended research studies of the Institute of Educational Technology, which have been described in Chapter V, should result in a "satisfactory" evaluation in the near future.

Summary

A method of involving the application of special criteria to the Open University broadcast operation, in addition to the gathering of evaluative opinions from several sources independent from the Open University context, have been given. Results have been noted in the areas of broadcast planning, production, utilization, and evaluation activities. The broadcasting operation has been critically examined and found to be overall "satisfactory"; 23 from a total of 40 criteria were assessed "satisfactory" with several criteria considered "inappropriate" and "undetermined by the research efforts."

According to the criteria presented, the Open University broadcast operation was found to be the strongest in its planning activities and the weakest in evaluation activities, although conducting more broadcasting evaluation studies in the future seems likely. The data from those interviewed who were not affiliated with the Open University revealed both their irregular viewing/listening patterns and their opinions regarding the Open University programs in general.
Having evaluated the characteristics of the broadcasting operation in Chapter VI, the investigator presents in the final chapter some appropriate conclusions, implications, and recommendations concerning the Open University and the overall function of broadcasting in the total enterprise.
CHAPTER VII
CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

This descriptive-critical study suggested several conclusions about the Open University concept's contribution to educational development. Data collected by the research study has provided insight into both the Open University and its broadcasting component. Chapter VII analyzes the implications of the Open University in higher education and the significance of the broadcast operations. Such conclusions form the basis for appropriate recommendations.

The Implications of the Open University

One of the most persistent advocates of the Open University concept, Lady Jennie Lee, has said: "It is going to be one of the really great universities of the future. We must be pioneers and pace-setters. . . ."¹ The full impact of her prophesy will not be determined until the Open University has existed for perhaps ten to twenty years.

But the "pioneering" aspect of the Open University is already a fact. Considering the British elitest tradition

of higher education perpetuated by qualifying exams such as the 11+ (now 13+), the prestigious symbols of Cambridge and Oxford, and the lack of university accredited continuing education, the philosophical structure of the Open University is revolutionary. There was no precedent for "open admissions" in a "university without walls" environment for the "second chance" students. The interdisciplinary, "general" B.A. degree by credit accumulation is another uniqueness of the Open University within the British context of higher education.

The most universally significant, pioneering effort of the Open University, however, is its instructional system. Specifically designed for the at-home, adult student, the system combines the resources of print, television and radio, counselling and tutorial services, Study Center activities, a one-week summer school experience for first-year students, and a computerized feedback system. The international literature of instructional technology and educational broadcasting has not provided evidence of a similar, multi-media instructional system. The mix of conventional face-to-face tuition with the visual and aural advantages of the broadcasting media plus printed materials, Study Centers, summer school, and feedback system has the additional novelty of an integrated design. The Open University's total teaching package ideally is an integrated strategy of various learning resources. Its
specified purpose is quality education on a quantitative basis for those who have been denied previous access.

From the high percentage of first-year students who sat and passed the final examinations, it is apparent that this instructional system is operating with some success. Considering its teaching effectiveness and its low cost per student, the Open University has significant continuing education implications for application in other countries. The Open University instructional system may also have impact upon higher education for eighteen-year-olds, depending upon the outcome of its forthcoming "pilot project." The findings of applying Open University materials to four American universities in the Fall of 1972 will also be relevant to higher education for eighteen-year-olds.

Another future contribution of the Open University instructional design may be the encouragement of broadcasting and other media utilization by secondary and higher institutions. Following the example of the Open University, these institutions may begin developing a multimedia environment for individualized instruction. The discovery of new media design and student utilization in the educational setting may yield more knowledge about the learning process itself. Identification of which learning objectives best relate to which medium under what conditions will also contribute to the theory of instructional technology.
Although the Open University is a "pace-setter" in many ways, it has also adopted a number of conventional university policies. For instance, the faculty were recruited upon the traditional basis of scholarly achievement and subject matter competence. Tutors and counsellors were selected on the same basis as full-time faculty. Professional educators, correspondence school administrators, or adult education personnel were not deliberately solicited for any Open University position. Open University students also have the same examination schedule and pass-fail requirements as any other conventional British university. This year outside experts from other academic communities have been invited to participate in various programs, especially the Arts.

It is the investigator's opinion that the establishment of the Open University in these conventional ways augments the credibility of the University. In order for Open University graduates to achieve maximum recognition in British society and in order for students to transfer to resident colleges if they so choose, the entire university community must consider the Open University as an accredited institution of higher learning. Without such credibility in educational circles, the Open University will lose its significance as a desirable alternative to the existing structure of British higher education.
Both domestic and international interest in the Open University while only in its second year of operation is evident. The high enrollment figures for the past two years and those who have already applied for 1973-74 admissions appear to be some indication that the Open University is fulfilling an educational need in Britain. The conservative party in power has a keen interest in the Open University as evidenced by their recommendation to include 500 eighteen-year-olds. In addition, the increasing popularity of marketing Open University correspondence materials throughout the world and the number of foreign visitors to its campus illustrate international attention.

That aspect of the Open University receiving the most negative criticism, particularly from the British press, has been the social and occupational backgrounds of the students. Articulated by Harold Wilson and the 1967 Planning Committee as a university for those denied the opportunity for higher education and self-enlightenment, the majority of the first- and second-year students appear to already have had some higher education and can be classified as "middle class." It might appear, therefore, that the Open University is not serving its intended working class, student body. Yet, the occupational analysis of these beginning students only examines their current income and occupation. They themselves could have achieved social mobility, and their families may, in many cases, be lower-
income oriented. The University has reiterated this point by stating:

We have often been criticised for not appealing to the "working class" or to the "educationally deprived." The facts, of course, are that, whereas in the conventional university students can be said to come from the "working class" because of their father's occupations, our students as adults are categorized in terms of their own occupations. Many of "working class" or "educationally deprived" background may well, by virtue of their own drive and ability already have climbed a few rungs of the social-class ladder; it is expected that such people will be amongst our most enthusiastic students.2

The diffusion of innovation studies by Rogers et al. also suggests that people adopt societal innovations at various stages. For example, he classifies the "early adopters" as those who have access to information and are willing to take risks.3 In addition, Open University publicity was largely concentrated in papers and journals mostly read by the middle class. "The man on the street had not yet heard about us. . . . We can advance only slowly and by percolation of the idea through the population primarily through our students."4

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4 Report of the Vice Chancellor: The Early Development of the Open University, p. 78.
Before discussing the significance of the broadcasting component, it is appropriate to briefly analyze the advantages and disadvantages of the Open University. Recognizing that absolute evaluation of the system or its materials is premature, the investigator will attempt to identify key strengths and weaknesses presently apparent in the overall operation.

The Open University is advantageous in several ways:

1. It provides a "second chance" educational experience.
2. The tuition is inexpensive.
3. Students receive instruction in the convenience of their own home.
4. Those over 21 have the opportunity to receive university credit.
5. The learning resources are readily available either from weekly broadcasts or monthly correspondence, or Study Centers within a ten-mile radius of most students.
6. Instruction is self-paced, excluding the regular radio and television programs.
7. The packaged written materials and the broadcasts have been carefully designed by a number of expert sources such as the faculty, Open University producers, and educational technologists in a Course Team arrangement.
8. Usually, the instructional materials have been pre-tested in pilot studies for clarity and comprehension.

9. The entire instructional system has been purposively designed to be self-improving so the student has the additional benefit of frequent assessment. The University has a separate faculty of Educational Technology for this purpose.

10. The multi-media approach provides another dimension and perspective to conventional university teaching.

11. The University is "nationwide" throughout the United Kingdom. It provides a national standard of instruction yet, at the same time, it is regional. Study Centers and student representation on the General Assembly create the advantage of local educational involvement and communication with the Open University.

There are also some disadvantages:

1. The Open University concept relies heavily upon student motivation. Apart from voluntary Study Center attendance, there are no classroom discussions or lectures from an instructor. Studying the estimated 10 to 20 hours per week per course also requires persistent concentration and motivation.
2. The University is dependent upon the mail and electricity for distributing its correspondence and broadcasts. The instructional system temporarily "broke down" during the postal strike and electric power failure, which occurred six months after its operation.

3. Course changes are made slowly. Due to the time and cost considerations of revising both the voluminous printed materials and the broadcasts, major changes cannot be made for four years. Hence, the instructional materials can never be completely topical which can be a problem for some courses. Unlike the typical instructor who can quickly modify his daily lesson plan, the Open University instructional system is very intricate and complex.

4. Perhaps the greatest disadvantage to some students is that a B.A. degree is estimated to take from five to six years. Other students, in contrast, may appreciate receiving the B.A. at their own pace.

The Open University no doubt will have an effect upon British society. More students have access to higher education than ever before in the history of the United Kingdom. The Open University may also influence the education currently received at "traditional" British universities.
Additional "pioneering and pace-setting" characteristics may be identified as the University continues to exist.

The Implications of the Open University Broadcasting Operation

The study has gathered descriptive data and applied evaluative criteria to the actual use of broadcasting as an Open University learning resource. The planning, production, utilization, and evaluation processes of the BBC's Open University Productions have been identified and assessed according to validated educational broadcasting criteria. The criteria were found generally applicable to the broadcasting operation with only a few considered "inappropriate" to the Open University situation. According to the criteria, the broadcasting activities are generally described as "satisfactory" within the Open University. Although the University currently lacks a systematic, thorough attempt at evaluating program production, program presentors, course objectives, media effects, and the efficiency of broadcasting, The Institute of Educational Technology expects to research these and other areas of broadcast activity in the near future. The Institute's backlog of research projects and the consequent analysis of data are overwhelming.

A significant aspect of the broadcasting operation appears to be the Course Team concept. Here a combination of producers, faculty, and educational technologists have
the responsibility for planning, designing, and producing a course. It is unique that the BBC producers have equal faculty status with Open University academics. These producers were also selected in terms of knowledgeable subject matter, competence, and adult education experience. The role of the Open University producer, therefore, is not restricted to a technician. Rather, he has the opportunity to contribute creatively to the Course Team. His philosophical ideas, perception of course objectives, and media knowledge, along with that of the other Course Team members, strengthens the quality of the final Open University instructional materials. An atmosphere of mutual respect between the broadcaster and the educator is also created.

The Course Team's emphasis upon an exchange of ideas and a high commitment to student learning is a tremendous asset to the Open University's instructional system. An informal method of quality control is possible by the critical dialogue evident in the Course Team sessions. The decision to retain or remake the radio and television programs is the responsibility of the Course Teams.

Although the pressures of correspondence publication deadlines and production schedules of the BBC are unavoidable and a source of common complaint, the Course Team members, for the most part, have been able to work satisfactorily. There is less of a Course Team approach, however,
in the productions of the broadcasting programs. Here smaller "working groups" of a producer and faculty member usually are directly responsible for implementing the actual program production based upon their own suggestions and those of the Course Team.

The investigator concludes that with the future addition of third- and fourth-level courses, the primary function of the Course Team may be more editorial and supervisory than that of a course designer. Since upper level courses are of necessity more specialized, operationally it appears that the specialty of smaller "working groups" within the Course Teams will be required. The general contribution of the Course Team as a whole may not be needed in developing a course but rather in supervising smaller "working groups" and validating their completed course instructional materials.

There are several other unique characteristics of the Open University broadcasting operation:

1. Unlike the Chicago TV College, the Oklahoma Television Network and other examples, the Open University broadcasting component is not operating in conjunction with an existing institution(s). In the Open University setting, broadcasting has a partnership alliance with a completely new, autonomous institution, which grants its own degrees.
2. A carefully planned strategy has combined broadcasting with other learning resources; broadcasting was not designed as an "alternative" to the tutorial, Study Center, or correspondence materials.

3. The broadcasting system has been utilized as a source of direct, primary teaching for college credit in addition to functioning as enrichment or supplementary instruction.

4. The Open University Productions have the benefit of an Educational Technology staff for conducting research in broadcasting, among other areas.

It is appropriate at this point to note the Open University's evolution during the past two years. The first year witnessed a prescribed number of radio and television programs assigned to each faculty. The Broadcasting Allocation Committee assigned one radio and television program per course unit for four years. For the four first-year foundation courses, this has amounted to one television and one radio program every week, which are repeated. In 1972, the second year of the Open University, the addition of more courses required more programs, but there have been less BBC transmission hours available for the Open University programs. It appears that more radio and television programs increase the number that ought to be aired when at the same time the amount of available
hours for programming on BBC 2 television and BBC 4 VHF radio remains the same. Future scheduling problems may cause the Broadcasting Allocation Committee to consider which programs need to be repeated and which do not.

The advantage of a "fourth network," previously described in Chapter V, exclusively for education becomes very apparent upon examining the Open University scheduling problem. It is plausible that the Open University would alleviate its programming and allocation problems by having its own network or access to an educational network, perhaps chartered to the BBC or ITA. On the other hand, pegging all BBC and/or ITA educational programming into one channel might mean for the general audience less diversity of programming. Once education becomes a separate entity, then the resulting programming on other channels may be void of any "educational" or even "educative" programming. For example, it is not unreasonable to assume that if the three charter objectives of the BBC, "to inform, entertain, and educate," are taken separately, then BBC 1 might be only information, BBC 2 only entertainment, leaving education to the "fourth network." As the Director of Public Affairs for the BBC suggested, such delineation of program objectives would not be advantageous to the viewer.

The Open University weekly radio and monthly television "Forums" have been created as the broadcasting system
evolved. Using the broadcast media as a feedback vehicle from and to the student and as a source of immediate communications have proven very valuable. Considering the geographic isolation of the Open University student body and their lack of direct, personal contact with the headquarters of the Open University, broadcasting here has fulfilled an important non-teaching function.

The "Postscript" idea was also added as broadcasting developed in the Open University setting. Originated in 1972 from the Economic foundation course, the "Postscripts" are summaries, afterthoughts, and points of clarification. Lasting for about ten minutes, the "Postscripts" proceed the instructional programs. This newly created function of broadcasting is more remedial and reinforcement than direct primary teaching or enrichment. With the Open University's four-year revision policy, the "Postscript" provides the additional advantage of continually improving the instructional value of broadcasting. Employing broadcasting for revisions is quicker, less cumbersome, and more efficient than printing and mailing extra text editions.

Another change in the broadcasting operation has been the format of presentations. The first year foundation course programs, especially in television, followed the traditional "talking face," or "voice over pictures" format.
Various reasons for this adherence have been mentioned such as the faculty's initial unfamiliarity with the media. However, the thirty programs monitored by the investigator representing several faculties illustrated a trend away from the conventional presentational style toward interviews, film footage, case studies, and other novel formats. The third and fourth level courses in the Open University curriculum may reveal other presentational modes in their programs. As with all Open University programs, however, the method and content of presentation must be appropriate to one another. Conflict of form and message will produce anxiety and frustration for the students.

During the past two years, the broadcasting operation at the Open University has developed new functions. In addition to instruction, the media are being used for other forms of communications. The future may continue to expand the services of broadcasting at the Open University.

There are several advantages of implementing the Open University broadcasting system:

1. The involvement of the resources of the BBC with its tradition of educational and educative programming is a definite asset. Its production facilities at Alexandra Palace, its outstanding film and reference library, and its expert staff in both subject matter and
media design are important contributions to the Open University programs. Likewise, the BBC itself enjoys a prestigious reputation for quality programming. It is a national broadcasting organization with national coverage.

2. The University's open circuit broadcasting is "public," accessible, and convenient for those at home and already employed.

3. It can transmit both visual and aural messages.

4. It is anonymous.

5. Broadcasting also offers additional advantages to education such as vicarious experience, immediacy, and adaptability to other media forms. Through viewing and listening to broadcasting, the student can vicariously experience applications of concepts and become involved in processes. He is not restricted to learning in a vacuum or in a relatively closed environment usually characteristic of a resident, conventional university.

But there are disadvantages to the Open University's use of broadcasting such as:

1. The fact that the delivery system is open circuit broadcasting means that the audience is not confined to the target students on BBC 2 television or BBC VHF radio. The eavesdropping viewers and listeners, as well as Open University students, comprise the total audience for the broadcasts. It is difficult, therefore, to identify those
characteristics which are unique to the Open University audience.

2. Since the BBC is the transmitting agency, the Open University programs are scheduled when there are available transmitting hours. As the University continues to expand its curriculum, it appears increasingly difficult to schedule original and repeat broadcasts according to student convenience and availability. The crucial question becomes, "How to fit Open University requirements into available BBC programming schedules without depriving the ordinary viewer?" It is the researcher's opinion that the future relationship between the BBC and the Open University will be greatly influenced by the relative priority which the BBC gives to Open University needs as reflected in the scheduling of its radio and television programs.

3. Affiliation with the BBC also presents the problem of programming competition. If the BBC schedules an Open University program during prime time viewing on BBC 1 television, then regular BBC viewers may switch to the ITA television offering. On the other hand, scheduling the Open University programs on BBC 2 television may compete with informative, cultural, "educative" programming on BBC 1 television. Audience ratings are of concern to the BBC in increasing its standing with Parliament which determines its Charter objectives.
Since the Open University broadcasting operation is still in the process of development and refinement, the advantages and disadvantages noted may change as the broadcast operation matures and gains more experience in the Open University situation.

Recommendations

This research led to a number of recommendations for the special consideration of educators, instructional technologists, and educational broadcasters. The investigator has classified the recommendations into three categories: (A) American higher education in general, (B) broadcasting in higher education, and (C) broadcasting in the Open University context.

Recommendations for Higher Education in America Based Upon the Open University Concept

1. It is recommended that the operations and results of the pilot projects making use of Open University materials in four American universities the Fall of 1972 be carefully analyzed for possible extension on a nationwide basis.

   Existing services such as the Great Plains National Instructional Television Library could serve as a rental agency for Open University materials. Rental fees could be based on the number of students at the educational
institution expected to use the materials. Distribution of the Open University correspondence, as well as radio and television programs, would be desirable in supplementing classroom instruction, or enhancing an existing independent study program, or in providing a new form of learning for the home-based, already employed, continuing education student. Certainly an application of the Open University instructional materials to our educational setting would serve as an additional learning dimension for students.

2. It is further recommended that the non-academic, "open" admissions policy characteristic of the Open University be investigated for its feasibility for those over twenty-one. Research and evaluation of the newly created Union Without Walls experiment may indicate that "student motivation, creativity, independence, job history, and previous life experiences are valid criteria for determining admission rather than test scores and grades in school."5

In our technological age, the accessibility of all members of our society for higher education should be a top national priority.

Recommendations for the Application of Broadcasting in American Higher Education

1. It is recommended that the Course Team concept combining the talents of producers, academics, and educational technologists be incorporated into an institution's pattern for the development of instructional media materials. The Course Team's organizational structure has relevance in designing and producing a multi-media learning instructional system for all levels of instruction.

2. It is further recommended that an investigation be made of the desirability and feasibility of using the facilities of a state educational network in conjunction with a consortium of existing or new institutions. Developmental responsibilities would rest with the State Board of Higher Education, interested junior colleges, extension schools, colleges (both public and private), and universities, and public broadcasting stations. Broadcasting would be a full partner in the educational establishment and would be fulfilling its mandate to serve the "public interest." A state or regional 'open university' adapting to indigenous educational needs is relevant for two or four year college curriculum, extension courses, and continuing professional education, especially since home life and employment need not be interrupted.
Recommendations for the Broadcasting Operation within the Open University

1. It is recommended that the Open University Productions staff explore the feasibility of using broadcasting, video tape, and other media (hard and software) during the Open University's required summer school attendance. The media could be used experimentally, for live demonstration purposes, for direct or enrichment teaching, or for simulation exercises to enhance the instructional impact of the summer school experience.

2. It is recommended that the Open University Productions in conjunction with the various Course Teams consider the development of a well-defined broadcasting policy. With the addition of more courses to the present curriculum, there will be the need to identify the best method of making use of broadcasting in every course. Future allocation decisions may need to determine which medium is most effective for which course. A well-formulated policy would also determine how the media can be utilized differently from conventional teaching.

3. It is recommended that the various faculties investigate the question of broadcast assessment. Unless an assessment makes clear the essential role of the broadcasts to the Open University instructional system, students, especially when lagging in their studies, may
in some cases neglect to watch/listen to the broadcasts. With computer marked assignments and tests in addition to monthly tutorial marked tests, questions directly related to the broadcasts could be included in these materials.

4. It is recommended that (a) the tutors and counsellors be trained in the effective use of the broadcasts at the Study Centers and (b) the BBC through its Open University Productions provide such training.

While tutors and other Open University staff are not needed as intermediaries to aid in understanding the broadcast content, tutors and counsellors could instruct students at the Centers on how to maximize the learning experiences gained from the broadcasts.

5. It is recommended that new "prime times" be explored by the Open University and the BBC for the radio and television programs. Early morning or late evening may be acceptable times for both the BBC and the Open University students.

6. It is further recommended that the Open University and the BBC continue to explore new forms of communications in addition to open circuit broadcasting. Video or audio cassettes, slides, and records are examples of alternative methods of presentation which may be desirable for the home-based Open University students.
Several conclusions have been drawn about the significance of the Open University and its broadcasting operation. It has been noted that the Open University evolved from a specific educational need in Britain. Its purposes, curriculum, admissions policy, degree requirements, and learning resources were especially designed in accordance with political, economic, social, and educational considerations of present-day British society. Other unique features such as its autonomy, partnership with the BBC, Course Team concept, and self-paced, independent, multimedia instruction have been identified. Recommendations from this research effort were directed to the application of Open University concepts to American higher education, to the use of broadcasting in the service of higher education, and to the broadcasting component of the Open University itself.

As the broadcasting operation continues to exist within the Open University, it is hoped that educational broadcasting principles and guidelines for utilization in higher education will emerge. Certainly, the Open University's unique instructional system provides an excellent example for the development and testing of educational broadcasting theory.
APPENDICES
APPENDIX A

STUDY OF THE BRITISH OPEN UNIVERSITY
ROOM 19, DERBY HALL, THE OHIO STATE UNIVERSITY

SUGGESTED CRITERIA FOR APPRAISING BROADCAST ACTIVITIES

Name _______________ Title _______________ Date ____________

Organization ____________________ Address __________________

DIRECTIONS: Below are listed a number of suggested criteria for appraising the broadcast operations of the British Open University. Please indicate the relative importance you would attach to each criterion by placing the appropriate number, according to the CODE, in the space in front of each.

CODE: 4 = of great importance
      3 = of some importance
      2 = unimportant
      1 = not appropriate

Planning

1. The Open University radio and television broadcasts should have a high budgetary priority within the Open University system.

2. The broadcasts should be planned according to the specified behavioral objectives of each course.

3. The broadcasts should be so designed as to integrate with other learning resources of the Open University.

4. The recognized strengths and limitations of the broadcasting media as instructional tools should be considered in the development of the Open University broadcasts.

5. Sufficient time should be incorporated into the planning activities.

6. Course Team members of the Open University should be committed to the critical evaluation of how students learn.
7. The planning of the broadcasts should be accomplished by cooperative activity of both the British Broadcasting Corporation and the Open University whereby both recognize the expertise of each.

8. The final authority for production should rest with the British Broadcasting Corporation while decisions regarding academic content should be the ultimate responsibility of the Open University.

9. The planning for these broadcasts should include procedures for production, utilization, and evaluation.

10. Others?

11. Production

1. There should exist a production standard to be applied to all broadcasts.

2. The television teacher should be trained in the use of television as a teaching tool.

3. The television teacher's role in the production process should be clearly defined.

4. The full potential of the radio medium should be exploited for maximum instructional impact.

5. The full potential of television should be exploited for maximum impact.

6. A team effort of producer, television teacher, and technical crew should exist in the production process.

7. The production activities should be conducted according to management principles.
Utilization

1. In scheduling both the original and repeat broadcasts, a high priority should be given to the convenience and availability of the Open University students.

2. Insofar as possible, the Study Centers should provide a full range of playback tapes and facilities for the Open University students.

3. Others?

4. For each Open University course, the expected student learning activities should be well defined.

5. Others?

Evaluation

1. Evaluation should continually occur through all the stages of planning, production, and utilization.

2. Evaluation of the broadcasts should involve the Open University students.

3. New production and content ideas should be pre-tested on a sample of the intended Open University student population before incorporation into a course series.

4. The results of evaluation studies should be applied to future broadcasts.
5. Evaluation should include the effectiveness of the television teacher.

6. Evaluation should include the quality of the production evidenced in each radio and television broadcast.

7. Evaluation should include an assessment of the broadcasting system as an efficient, available, and effective learning resource.

8. Others?

9. 


APPENDIX B

INTERVIEW SCHEDULE FOR BBC PRODUCERS
ALLIED TO THE OPEN UNIVERSITY

Name
Position
Production Background
Academic Background

What is your philosophy regarding the use of media for instruction?

What in your opinion are the unique characteristics of radio which are advantageous to education?

What in your opinion are the disadvantageous features to education?

What are the unique aspects of television which are advantageous to education?

Disadvantageous?

What criteria do you set for the Open University programs that you produce?

How do you conceive broadcasting in relation to the other learning resources such as the correspondence materials?

What has been the greatest difficulty(ies) you have experienced in producing an Open University program?

What are your responsibilities as an Open University producer?

How is your staff organized?

Why do you think radio and television are included as an Open University learning resource?

What is the Course Team's function in producing a program?

Who is responsible for production decisions?

What in your opinion are areas for improvement in broadcasting the Open University programs?
APPENDIX C

INTERVIEW SCHEDULE FOR MEMBERS OF
THE OPEN UNIVERSITY STAFF

Name Date

Position

Academic Background

How would you describe the "typical" Open University student?

How do you think that the British society has reacted to the Open University?

What has been the foreign reaction? Which countries appear to be the most interested?

In your opinion, do you think that eighteen-year-olds should be included in the Open University student body? Why?

Do you think the Open University is a success? Why?

What do you think are some important factors of the Open University?

Who is the broadcast audience apart from its students?

Why do you think that radio and television are included within the Open University instructional system?

What changes have you noticed since the University's inception?

What changes do you expect for the University in the future?

Other questions:
APPENDIX D

INTERVIEW SCHEDULE FOR COURSE TEAM MEMBERS

Name

Educational Background

Job Description at the Open University

What course and what level are you presently associated with?

How long have you been employed by the Open University?

How is the Course Team organized for your course?

What is the organizational structure of other Course Teams?

What is your role in the preparation of course materials?

What pre-testing of course materials was done prior to January 1971?

What were the results of these tests?

How did these results affect the development of the course materials?

Are the behavioral objectives determined for your course?

How are these objectives to be accomplished?

What do you conceive to be television's greatest teaching asset?

What is the purpose of the television broadcasts in your course?

Do you think the television programs can be improved? How?

What is the purpose of the radio programs for your course?

How are the broadcast programs integrated with the correspondence materials?

Who makes the final decisions regarding the broadcast content?
Who makes the final production decisions?

How are the television presentors selected?

What has been their training in the use of the broadcast media?

Are there any staff problems with the organization of the Course Team sessions?

Are the Course Team sessions most effectively organized in light of their responsibilities?

Will the broadcast media programs be altered with increasing Open University enrollment?

Why do you think that radio and television are included within the Open University instructional system?

Other questions:
APPENDIX E

QUESTIONNAIRE FORM FOR OPEN UNIVERSITY
TELEVISION PRESENTERS

In order to investigate broadcasting at the Open University, I would very much appreciate your completing this brief form.

Name _________________________ Date __________________

Faculty ________________________

Please list the Open University course(s) which you have been affiliated with as a "television presentor."

Please describe the nature of your past experience in utilizing the broadcasting media ____________________

Please rank the criteria listed below according to their importance for effective television teaching, i.e., 1 = most important of all, etc.

____ Familiarity with media forms
____ Desire to motivate students
____ Expertise in subject matter
____ Good diction and grammar
____ Acting ability
____ Popularity with fellow faculty members
____ Frequency of scholarly publications
____ Communicative attitude
____ Prior teaching experience in the same subject
____ Enthusiasm for teaching
____ Keen interest in using television
____ Prior experience in using television in the classroom
____ A diversified teaching background of many related subjects.
____ Popularity with students
____ Other
To what degree do you feel good classroom teachers make good television teachers? Please circle one:

always  somewhat  never  other ______

Please circle the area(s) that you have modified for television instruction:

pacing of instruction  content material
organization of content

Please describe your interpretation of "effective" television instruction:
APPENDIX F

INTERVIEW SCHEDULE FOR OPEN UNIVERSITY
COUNSELLORS AND TUTORS

Name          Date
Educational Background          Location

Length of Association with the Open University?
As a counsellor, what job responsibilities do you have?
As a tutor, what job responsibilities do you have?
What is your association with the tutors (counsellors)?
How effective do you think the Open University television programs have been?
The radio broadcasts?
How have the students reacted to "learning from television and radio?"
How often do you think the students watch the television broadcasts?
What kind of student uses the Center most?
What activities does the Center sponsor?
What is the relationship among the broadcasts, correspondence, and Study Centers?
How is the telephone used as a learning device?
What are future plans for additional Study Center facilities?
Why do you think that television and radio are included as Ohio University learning resources?
Other questions?
APPENDIX G

INTERVIEW SCHEDULE FOR BRITISH EDUCATIONAL BROADCASTERS

Name ____________________________ Date ____________

Position ____________________________

How often do you watch/listen to the Open University broadcasts?

How would you evaluate the Open University television programs?

Why do you think that radio and television are included as an Open University learning resource?

How do you think that broadcasting has developed within the Open University context?

What is known about the Open University "eavesdropping" audience?

Do you think that educational broadcasting in general will be affected by the Open University programs?

What do you think is the reaction of the British people to the Open University?

Do you think that there will be a market for Open University programs in other areas of British society?

What is the difference between "educational" and "educative" programming?

Other questions:
APPENDIX H

INTERVIEW SCHEDULE FOR BRITISH FACULTY MEMBERS

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position</td>
<td>Location</td>
</tr>
</tbody>
</table>

How would you compare the Open University to your University?

What has been your reaction to the Open University?

Do you think it is "successful?" Why?

What do you think has been the general reaction of the academic community to the Open University's development?

What will an Open University degree mean to its students?

How often do you watch/listen to the Open University programs?

How would you evaluate the Open University television broadcasts?

How do you think that the broadcast media are being used by the Open University?

Why do you think that radio and television are included as an Open University learning resource?

Other questions:
APPENDIX I

INTERVIEW SCHEDULE FOR BRITISH JOURNALISTS

Name                      Date

Position

In your opinion is the Open University "successful?"

What has been the reaction of the British people to the Open University?

How have the newspapers regarded the Open University?

How often do you watch/listen to the Open University programs?

How would you evaluate the Open University television broadcasts?

How do you feel that the broadcasting media are being utilized by the Open University?

Why do you think that radio and television are included in the Open University system?

What do you think will be the future of the Open University?

Other questions:
APPENDIX J

SAMPLE QUESTIONNAIRE FOR OPEN UNIVERSITY STUDENTS

Date ____________

I would very much appreciate your taking a moment and completing this short form. Your responses will be most helpful in my study of Open University broadcasting, and they will be kept confidential. Thank you.

Your Name_________________ Age ____________________

Present Employment ____________________ Sex ______

Date of Your Acceptance as an Open University student ____

Courses you are now taking for credit, please list: _____

How often do you watch the Open University programs at the Study Centers? __________________________________________

How often do you use the Study Centers for group discussion of the Open University programs? __________________________

How often do you watch the Open University television programs? __________________________________________

How often do you listen to the Open University radio programs? __________________________________________

Please describe what you like best about the television programs __________________________________________

What do you like the least? ____________________________

Do you feel that the radio and television broadcasts are similar? __________________________________________

Please explain, if you answered "yes" __________________________

Would you like more, less, same amount of the television programs? Please state __________________________
Would you like more, less, same amount of the radio program? _________________________

Which form of learning do you like the best? Please circle only one of the following: Correspondence, Counsellor, Broadcasts, Tutor.

Other ____________________________________________________

How would you rate the quality of teaching by the Open University television presentor(s)? Please circle only one: Excellent, Good, Fair, Poor.

How would you rate the quality of teaching by the Open University radio presentor(s)? Please circle only one: Excellent, Good, Fair, Poor.

What are your negative criticisms(s) about the radio and television programs in general? Please use the space below:
APPENDIX K

STUDY CENTER OBSERVATION SHEET

Location of Center ______________________ Date ________

Facilities Available: Check

- library of video tapes
- library of audio tapes
- laboratory kits
- library of coursebook texts
- slides, other graphic materials
- television sets
- radio
- tape recorder
- other

Study Area(s). Describe physical aspect:

Opening Hour and Closing Time:

Number of personnel at Center:

Accessibility to students:

Cost of Study Center operation:

- initial cost
- maintenance
- percentage of total Open University budget

Number of students observed at Center:

Activity of students present:

Bulletin board displays, describe:

Distinguishing features of Center, list:

Other features:
APPENDIX L

OBSERVATION SHEET FOR THE TUTORIAL SESSIONS

Date ______________  Study Center Location ____________

Open University Course ________________________________________

Number of students present ________________________________

Name of tutor ____________________________________________

Name of counsellor (if present) ______________________________

Pre-Broadcast Activity:
  Check the category that is appropriate:

____ students are checking "Broadcast Notes"
____ tutor is outlining program content
____ students are talking with one another
____ students are arriving and getting settled
____ students are questioning the tutor about text, assignments
____ other __________________________________________________________________

During the Program:

____ tutor is watching the program
____ tutor is not present in the viewing room
____ tutor is taking notes
____ tutor is talking with students
____ students are watching the program
____ students are not paying attention
____ students are reading corresponding while watching
____ students appear to be responding to presenter's questions, comments
____ students are taking notes
____ other __________________________________________________________________

After the Program:

____ tutor reiterates main points of program
____ tutor does not mention program at all
____ tutor asks if there are any questions about the program
tutor suggests related themes/application of the program
students ask for program clarification
students respond favorably to the program by their comments
students disagree with presenter
students ask tutor about text
other

Describe the purpose(s) of this tutorial:

Other features:
APPENDIX M

THE OHIO STATE AWARDS ENTRY EVALUATION
Sponsored by the Institute for
Education by Radio and Television

Program Title ________________ Entry Number __________

Scale: 1 - poor  3 - Adequate  4 - Excellent

CONTENT FACTORS

SIGNIFICANCE (uniqueness, importance, relevance to problems, goals, etc.):

| 1 | 2 | 3 | 4 | 5 |

ORGANIZATION OF MATERIALS (composition, structure, writing, etc.):

| 1 | 2 | 3 | 4 | 5 |

AUTHORITATIVENESS (authentication, adequacy of research, etc.):

| 1 | 2 | 3 | 4 | 5 |

PRODUCTION FACTORS

PRODUCTION PLANNING (design of effects, format/settings, visuals, etc.):

| 1 | 2 | 3 | 4 | 5 |

EXECUTION (tape editing, sound effects, levels/camera techniques, direction, etc.):

| 1 | 2 | 3 | 4 | 5 |

PERFORMANCE (teaching or narrative personality, actors, guests, etc.):

| 1 | 2 | 3 | 4 | 5 |

RELATION OF CONTENT AND PRODUCTION TO INTENDED AUDIENCE

| 1 | 2 | 3 | 4 | 5 |

SUGGESTIONS FOR IMPROVEMENT:
APPENDIX N-1

OPEN UNIVERSITY CRITERIA FOR THE USE OF TELEVISION IN SCIENCE COURSES

The television criteria for the science courses is:

(1) items requiring demonstrations of visual movement

(2) laboratory experience

(3) remote situations which the student can experience vicariously

\footnote{The Open University of the United Kingdom and Its Instructional System, n.d., p. 7.}
APPENDIX N-2

OPEN UNIVERSITY CRITERIA FOR THE
OVERALL USE OF TELEVISION

Depending upon the course, the overall application of television to the Open University is based upon the following factors:

(1) personal face-to-face tuition

(2) illustration

(3) demonstration

(4) case study

(5) artistic performance

(6) stimular and regulator of study

(7) student announcements

(8) topical magazine purposes

(9) reinforce and amplify core of correspondence materials

\[
\text{\textsuperscript{a}The BBC and The Open University: Some Questions Answered, revised (April, 1970), p. 11.}
\]
APPENDIX N-3

OPEN UNIVERSITY CRITERIA FOR THE
OVERALL USE OF RADIO

Depending upon the course, radio is used as:

(1) remedial role at short notice
(2) music in the Humanities courses
(3) plays
(4) readings from literature\(^a\)

\(^a\)The Open University of the United Kingdom and Its Instructional System, n.d., p. 7.
APPENDIX O

INTERVIEW SCHEDULE FOR BBC PRODUCERS OF
THE "OPEN FORUM" BROADCASTS

Name

Date

Position

What factors caused the development of the "Open Forum?"

How does the "Open Forum" concept differ from other Open University programs?

What is the purpose of the "Open Forum?"

What is the length and transmission schedule for the "Open Forum" programs?

How are the programs produced?

What is the approximate annual budget for the "Open Forum" programs?

What is the typical "Open Forum" format?

What is the advantage(s) of using broadcasting for the "Open Forum" concept?

Who watches the "Open Forum" programs?

What has been the student reactions to the "Open Forum" programs?

What are the University's future plans for the "Open Forum" programs?
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