Radio and television in literacy

A survey of the use of the broadcasting media in combating illiteracy among adults

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**REPORTS AND PAPERS ON MASS COMMUNICATION**

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td><em>Current Mass Communication Research 1 - Bibliography of Books and Articles on Mass Communication Published since 1 January 1955, December 1956.</em></td>
</tr>
<tr>
<td>22</td>
<td><em>Periodicals for New Literates: Editorial Methods, June 1957.</em></td>
</tr>
<tr>
<td>23</td>
<td><em>Cultural Radio Broadcasts: Some Experiences, December 1956.</em></td>
</tr>
<tr>
<td>24</td>
<td><em>Periodicals for New Literates: Seven Case Histories, November 1957 (out-of-print).</em></td>
</tr>
<tr>
<td>25</td>
<td><em>Adult Education Groups and Audio-Visual Techniques, 1958.</em></td>
</tr>
<tr>
<td>26</td>
<td><em>The Kinescope and Adult Education, 1958 (out of print).</em></td>
</tr>
<tr>
<td>27</td>
<td><em>Visual Aids in Fundamental Education and Community Development, 1959 (out of print).</em></td>
</tr>
<tr>
<td>28</td>
<td><em>Film Programmes for the Young, 1959 (out of print).</em></td>
</tr>
<tr>
<td>29</td>
<td><em>Film-making on a Low Budget, 1960 (out of print).</em></td>
</tr>
<tr>
<td>30</td>
<td><em>Developing Mass Media in Asia, 1960.</em></td>
</tr>
<tr>
<td>32</td>
<td><em>Film and Television in the Service of Opera and Ballet and of Museums, 1961 (out of print).</em></td>
</tr>
<tr>
<td>34</td>
<td><em>Film Production by International Co-operation, 1961.</em></td>
</tr>
<tr>
<td>36</td>
<td><em>Methods of Encouraging the Production and Distribution of Short Films for Theatrical Use, 1962.</em></td>
</tr>
<tr>
<td>38</td>
<td><em>Social Education through Television, 1963.</em></td>
</tr>
<tr>
<td>39</td>
<td><em>The Teaching Film in Primary Education, 1963.</em></td>
</tr>
<tr>
<td>40</td>
<td><em>Study of the Establishment of National Centres for Cataloguing of Films and Television Programmes, 1963 (out of print).</em></td>
</tr>
<tr>
<td>41</td>
<td><em>Space Communication and the Mass Media, 1964.</em></td>
</tr>
<tr>
<td>42</td>
<td><em>Screen education. Teaching a critical approach to cinema and television, 1964.</em></td>
</tr>
<tr>
<td>43</td>
<td><em>The Effects of Television on Children and Adolescents, 1964.</em></td>
</tr>
<tr>
<td>45</td>
<td><em>Professional Training for Mass Communication, 1965.</em></td>
</tr>
<tr>
<td>46</td>
<td><em>Rural Mimeo Newspapers, 1965.</em></td>
</tr>
<tr>
<td>47</td>
<td><em>Books for the Developing Countries: Asia, Africa, 1965.</em></td>
</tr>
<tr>
<td>48</td>
<td><em>Radio Broadcasting serves rural development, 1965.</em></td>
</tr>
<tr>
<td>49</td>
<td><em>Radio and television in the service of education and development in Asia, 1967.</em></td>
</tr>
<tr>
<td>50</td>
<td><em>Television and the social education of women, 1967.</em></td>
</tr>
<tr>
<td>53</td>
<td><em>Communication satellites for education, science and culture, 1967.</em></td>
</tr>
<tr>
<td>54</td>
<td><em>8mm film for adult audiences, 1968.</em></td>
</tr>
<tr>
<td>55</td>
<td><em>Television for higher technical education of the employed. A first report on a pilot project in Poland, 1969.</em></td>
</tr>
<tr>
<td>56</td>
<td><em>Book development in Africa. Problems and perspectives, 1969.</em></td>
</tr>
<tr>
<td>57</td>
<td><em>Script writing for short films, 1969.</em></td>
</tr>
<tr>
<td>58</td>
<td><em>Removing taxes on knowledge, 1969.</em></td>
</tr>
<tr>
<td>59</td>
<td><em>Mass media in society. The need of research, 1970.</em></td>
</tr>
<tr>
<td>60</td>
<td><em>Broadcasting from space, 1970.</em></td>
</tr>
<tr>
<td>61</td>
<td><em>Principles of cultural co-operation, 1970.</em></td>
</tr>
<tr>
<td>63</td>
<td><em>The mass media in a violent world, 1971.</em></td>
</tr>
</tbody>
</table>
Radio and television in literacy

A survey of the use of the broadcasting media in combating illiteracy among adults

by John Maddison

Unesco
Despite increasing efforts to combat illiteracy the number of illiterates is growing throughout the world, because population increase is still outstepping educational efforts. Traditional methods of personal instruction alone cannot reverse the trend; new methods and the use of the media of radio and television can be applied to the eradication of illiteracy. Radio and television are important, not only in the direct instruction of illiterates, but equally in the mobilization and motivation of those who are literate and in the training of instructors.

To collect information concerning experience to date and to lay the groundwork for future intensive action on a broad scale, Unesco carried out a survey which is reported and analysed in the present publication. Information has also been provided as a result of the missions of a staff member (Mr. Vladimir Skofenko) and three consultants (Mr. Leo Lesch, Professor Italo Neri and Mr. John Maddison) who visited selected Member States for more intensive study.

The present report is based then on experience in 38 Member States and on documentation already published. It is designed to serve in the fight against illiteracy and to assist those concerned with educational broadcasting, where radio and television could be used on a larger scale and applied in new forms to draw the maximum benefit from these media of communication.

The report has been prepared by one of the three consultants mentioned, Mr. John Maddison, who has had wide experience in the mass media and is President of the International Film and Television Council. Responsibility for the choice and preparation of facts presented and views expressed rests with the author.
## CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>A RISING CURVE</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Concise survey of the world pattern and some trends</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>PROBLEMS AND ACHIEVEMENTS</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>An analysis of current experience</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>SUMMING UP AND LOOKING FORWARD</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Basic considerations and future perspectives</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>THE QUESTIONNAIRE</td>
<td>39</td>
</tr>
<tr>
<td>II</td>
<td>DOCUMENTS AND SPECIMENS</td>
<td>47</td>
</tr>
<tr>
<td>III</td>
<td>BIBLIOGRAPHY</td>
<td>81</td>
</tr>
</tbody>
</table>
A CONCISE SURVEY OF THE WORLD PATTERN AND SOME TRENDS

The following survey gives information on the uses of radio and television in connexion with literacy work in forty countries in various parts of the world. Much of the information in it comes from the replies to the questionnaire on the subject sent out last year by Unesco and reproduced in Annex I and from replies to another more general questionnaire on literacy, also issued in 1969 (1). These sources have been supplemented by other trustworthy and available documents - reports and articles and accounts written by Unesco experts of visits they have made to some of the countries.

While it is not claimed that the survey necessarily covers all activities of the kind in all countries, it does appear to be the most comprehensive document so far published on the uses of radio and television in adult literacy campaigns throughout the world. The value of this aspect of the survey need not be underlined. For the first time, it is possible to stand back and take an overall look of this sort at the developing pattern of these important mass media in the context of the fight against illiteracy.

Particular facets and trends are explored later. But one or two general tendencies stand out.

The first of these is that in recent years the use of radio and television in literacy work has been expanding, quite significantly so. This becomes apparent if one compares the results of the present survey with those of an earlier one, based on a questionnaire sent to Ministries of Education in 1964. While the report on the 1964 survey states that 17 countries "desired to send information about the possibility of employing" radio and television in literacy work, only 10 countries reported actually using radio or television in one way or another in reply to the appropriate question covering audio-visual aids. (2) On the basis of these figures, there would seem to have been a fourfold increase - or even more if one allows for the fact that some of the new countries are not the same as the earlier ten - in the number of countries reporting the use of radio and television in literacy work. The earlier reports make no comment on the quality of the broadcasting. There is no reason to believe however that quality has suffered through increased broadcasting, but rather the reverse.

This expansion has largely taken place in the second half of the nineteen sixties. In other words, the curve has risen sharply in the later phases of the First Development Decade of the United Nations. Without exaggerating any relationship there may be between these two phenomena, the still wider and better application of the broadcasting media to literacy campaigns could be an important growing point in the Second Development Decade of the United Nations.

Another general point to emerge is that, though the use of sound radio is reported from virtually all the forty countries in the survey, television was being used in only twenty one of these countries in 1969. Some of the reasons for this are obvious. But until such time as both costs are reduced and the range of television broadcasting extended to bring them closer to those for sound radio, the latter must, one imagines, continue to play the predominant role. This will remain true whatever the relative educational or other qualities of the two media, which are discussed later in this paper. The introduction of communication satellites will help television to enjoy the geographical spaciousness of radio. For many illiterates, however, low price transistor radio sets will continue to be their only "magic casements" of broadcasting, opening on to the widening knowledge and increased powers as human beings to which literacy contributes.

One further point brought out by the survey is the great variety of uses broadcasting can be put to for literacy work - in promotion and publicity, in direct instruction and in the training of literacy teachers. It is indeed difficult to imagine a literacy project on any appreciable scale in which one or more of these approaches could not usefully be adopted.

The survey does not provide any overall statistical picture. But it is clear that, although the curve of utilization is rising, for the majority of the eight hundred millions or so of the world's illiterates, these new broadcasting techniques for helping combat their disabilities still remain out of reach. Some of the positive achievements in literacy work recorded in the replies to the questionnaire, which are considered more fully in the next chapter, lead one to think that this is a much more serious disadvantage than might have been supposed.

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THE SURVEY

The entries are arranged alphabetically country by country under the main regions. By and large, they refer to conditions as in early or mid-1969. The length of an entry does not necessarily reflect the relative importance of the project concerned, but has usually been governed more by the amount of information available.

The aim has been to make the entries factual, descriptive and as succinct as possible. No particular pattern has otherwise been imposed on them, given the great variation in the data from which they are compiled. In this connexion, it was not always easy to determine what kind of literacy teaching was involved but the projects described were all said to come within one or other of the accepted categories of adult literacy work. In one or two cases exceptionally, the programmes described might by strict definition be placed within the categories of fundamental education broadcasts addressed to illiterates rather than directly instructional ones.

The relation between the media and work-oriented and other types of literacy is discussed elsewhere in this paper.

AFRICA

ALGERIA

Literacy lessons for adults were begun in January 1969 as part of a Unesco Literacy Pilot Project - "Algérie II". They consist of four programmes a week, broadcast in Arabic by the national television service. The programmes are prepared jointly by the Audio-visual Section of the Pilot Project and the National Literacy Centre. They are an element in a multi-media audio-visual campaign.

CAMEROON

Sound radio is used for motivation (slogans, news, talks, advice, etc.) through a twice-weekly programme followed by some 3,000 adults in 120 radio clubs. Two pilot projects in the use of broadcasting

in literacy instruction are reported. A project covering the use of television in education is being studied. In West Cameroon (Buea region), a daily radio programme "African Dialogues", giving instruction in spoken French is transmitted for adult English-speaking listening groups. There is similar provision for primary school classes.

CENTRAL AFRICAN REPUBLIC

The functional programme for literacy classes will include a half-hour weekly radio broadcast in French and in the local language to run for two years and consist of five series: Health and Hygiene; Nation and Civics; Family Life; Transport and Traffic; Economic Development. In addition, there will be a special monthly broadcast "Courrier des Auditeurs" (Listeners' Postbag).

A radio club will be set up at each literacy centre to enable students to follow and discuss the broadcasts. For adult education "radiovision" (radio programmes illustrated by projection of film-strips) has been used but is considered too expensive for use in all the literacy and adult education centres.

CHAD

Radio programmes are used for recruitment of literacy students. Some four thousand listeners regularly follow broadcasts in literacy centres.

CONGO (Brazzaville)

The use of sound broadcasts in the literacy campaigns was begun in 1967 and at the beginning radio was successfully used for motivational purposes. The present pattern is a weekly half-hour programme transmitted on short and medium wavelengths. Each programme is put out in three language versions - French, Munuktuba and Lingula - and transmitted three times in the afternoons (for women's courses and factory audiences) and three times in the evenings (for neighbourhood groups).

In 1969, the radio courses were followed by an estimated 53,147 persons of whom 16,147 were
in organized radio-club groups and 37,000 followed the courses at home.

ETHIOPIA

Between 1963 and 1969, seven small-scale experiments were included in a project undertaken by the Ministry of Education with the help of a private organization and later with bilateral aid from the Netherlands Government. These experiments all used simulated radio programmes recorded on cassettes and played back by amplifiers and receivers in a number of classrooms.

A weekly half-hour radio farm forum type broadcast is put out over the national network three times a week and, while intended for rural audiences, reaches the whole population, since it is transmitted during regular programme hours. It covers new techniques in agriculture, new seeds, new equipment, in particular for coffee cultivation.

An audio-visual radio and TV programme for literacy is under consideration, and a great deal of experimentation is reported with radio and television and cassettophones. Supervision and training courses are about to begin.

GABON

There are two weekly radio programmes: "Alphabétisons" in which texts are explained; and "Mieux faire la classe" (Towards better class teaching) for training teachers and information staffs.

An experimental educational television project using specially produced films and group viewing was due to begin in January 1970.

GUINEA

Radio programmes are used for motivational purposes in the literacy campaign. These reach some 20% of the population.

IVORY COAST

A successful experiment in the use of closed-circuit television in 1963 and 1964 for literacy instruction by the Audio-Visual Centre of the Ministry of Defence, Youth and Civic Service led to the adoption of television on a wider scale. In October 1964, a television course consisting of daily literacy lessons in French for group viewing by about 1,000 selected workers were begun. These were broadcast nationally by Radiodiffusion - Télévision Ivoirienne.

There is a monthly television programme for teacher training and a half-hour weekly sound radio transmission for the same purpose. Teacher training, together with primary and post-primary instruction, is also part of a Unesco project in the field of educational television.

KENYA

Radio and television programmes were used in launching the National Literacy Campaign in English and Swahili. These included a series of thirteen television broadcasts and time is provided for television interview programmes for guest speakers from the Adult Education Division. Three special radio programmes ("Elimu Kwa Radio", "Tijenge Taifa" and "Jifunze na Uendeles") are broadcast each week for adults.

MADAGASCAR

Projects in respect of the use of radio for teacher training and of television for parent-teacher cooperation are in preparation.

MALI

Radio plays a part in the Unesco Pilot Project for Functional Literacy in Mali. In August 1969, a rural promotion section was inaugurated following on a training course organized by the National Literacy Centre and the National Network, Radio-Mali, which broadcasts in French and six national languages from one medium-wave and three short-wave transmitters. The section produces educational programmes for rural audiences (agriculture, fishing, and stock raising, health, social affairs and general education) and a programme for both town and country listeners called "Regard sur le Mali". A mobile unit (formerly "La Caravane") makes sound recordings in all regions of the country which are used not only for literacy programmes but also in programmes for women, youth, etc.

"Apprendre pour produire" ("Learn in order to produce") is the general heading for all the literacy broadcasts.

Since January 1969 evening programmes transmitted from Monday to Friday, have been produced on the basis of texts prepared by the National Literacy Centre to inform and condition listeners for literacy programmes. Dealing with all aspects of the national literacy campaign, these broadcasts represent the first phase of the organization of educational radio (literacy). It is proposed to continue these broadcasts in French, Bambara, Peul, Sonrai and Tamacheq, for present and potential audiences in both the traditional and functional types of literacy centres.

In the period from November 1969 and March 1970, preparations will be made for establishing the necessary service to carry out Phase II in connexion with the opening of 500 new centres. In Phase II radio programmes will be produced for training all types of personnel engaged in functional literacy in the agricultural sector of the Pilot Project.
NIGER

An instructional literacy programme using the radiovision technique (sound radio commentary with synchronized projection of filmstrip) is broadcast weekly.

RWANDA

The URG (or Université Radiophonique de Gitama) a private non-profit body, founded in 1963 with the agreement of the Government, provides a weekly half-hour programme for adults of a fundamental education type. This is broadcast over the national network - Radio-Rwanda.

SENEGAL

The experimental educational television station, established within the framework of the Unesco Pilot Project for the use of the audio-visual media in adult education, has produced and tested a number of literacy programmes for urban workers designed to teach both written and spoken French using the vernacular Wolof as the language of instruction. A major problem encountered was to render these programmes sufficiently functional for an industrial audience with very varied occupations, and to make the most imaginative and flexible use of the visual opportunities offered by the television medium. The first three programmes were tested with sample audiences and indicated the considerable impact of the television medium. The project was, however, discontinued with a view to determining more clearly the common linguistic denominator of functional instruction, and exploring a more diversified format going beyond direct verbal instruction into relevant substantive fields.

SUDAN

Some radio programmes for experimental use with the literacy classes are envisaged in the framework of the Work-Orientated Adult Literacy Project.

TUNISIA

Sound radio and television broadcasts form an integral part of the national literacy campaign, alongside traditional methods. Programmes in both media are put out during normal hours of transmission over the national broadcasting network, Radiodiffusion Télévision Tunisienne which shares responsibility for the programmes with the Institut de l'Enseignement des Adultes (Adult Education Institute), with the help and guidance of a national literacy council, representative of all sides of national life. These sound and television broadcasts in Arabic are addressed to an experimental sample population of some 3,000 students in organized centres, and to ordinary listeners and viewers (estimated at about 25,000 in 1969) following the courses through public viewing facilities or in their homes. The television programmes are broadcast each evening and the sound ones each morning. The period from January 1968 to June 1969 was devoted to the pre-experimental and experimental phases. Since October 1969, the first year courses on both radio and television have no longer been experimental but run on a definitive basis. From October 1969 to June 1970 however the second year courses will continue to be experimental.

The texts of television lessons are published each day in the main national Arab-language newspaper. Students' handbooks are issued for those following the courses and are on sale at newstands. Of the three volumes published (reading, writing, arithmetic), 150,000 copies have been issued.

In addition to the above daily literacy broadcasts, a half-hour radio programme for rural audiences is transmitted each week.

In Tunisia, literacy through television is considered of urgent importance and is much counted on for speeding up the fight against illiteracy, especially in rural areas.

UNITED ARAB REPUBLIC

In the field of sound broadcasting, the Department of Education Programmes of UAR Radio initiated in March 1969 a course of lessons of 15 minutes duration broadcast six times a week, on the main channel V covering the whole country and directed at individual listeners. The course is unusual in that no supplementary printed material is used and the method is based on the verbal description of Arabic characters. The Department of Education Programmes keeps records of more than 5,000 listeners participating in the course. To check progress and effectiveness, a special control course is run at the radio station at which 30 to 50 representative students follow the course, their exercises being subsequently evaluated and studied.

In November 1968, the national television network, UAR TV, began broadcasting a course of 90 half-hour literacy lessons, each lesson being transmitted three times weekly. In planning the course, the organizers took into account the results of two scientific experiments with television literacy courses in 1964-1965 and 1965-1966 and evaluated by ASFEC. Three books entitled "We read and write" were issued to accompany the broadcasts and provide guidance for follow-up lessons.

During 1968-1969, some 10,500 students followed the course at 350 viewing centres set up in 18 governorates under the supervision of monitors who had themselves received practical training through television. In addition, a large number of viewers followed lessons in other centres or at home.

The project is a joint effort undertaken by television and other authorities, including the Ministry of Education, the political organization (The Arab Socialist Union), the Youth Organization and the
Higher Council of Rural Information. Overall control is exercised by a Higher Committee, chaired by the Director-General of the TV Corporation. The first yearly phase of the project ended in September 1969, when examinations were held and the processes of assessment began.

Along with newspapers, radio and television broadcasts are also used to publicize literacy campaigns and show illiterates the value of education.

UPPER VOLTA

Up to 1967, sound programmes of an experimental character were broadcast. At present, programmes for teaching spoken French of the "bains sonores" type, which go out to some seventy school classes, are also available for adults.

ZAMBIA

A Unesco project in the use of radio for literacy work was started in September 1969 by the Ministry of Rural Development (Department of Community Development).

Programmes are now being broadcast weekly in the Bembi language to literacy groups in the Copperbelt Province. Feedback reports are being received from about 80 literacy classes.

After a trial period, the Government intends to extend the scheme to all the provinces and produce literacy broadcasts in all the major languages of the country.

NORTH AMERICA

CUBA

Broadcasting made an important contribution to the literacy campaign. According to the IBE/Unesco report referred to on page 1:2, in 1962-1963, 617 programmes for adults were broadcast on television and 1,548 on radio. During 1963-1964, systematic encouragement of radio, television and audio-visual aids was intensified. The Ministry of Education set up a directorate composed of three main departments: educational broadcasting; correspondence courses; and audio-visual aids.

GUATEMALA

In the framework of the National Literacy Programme organized by the Directorate of Literacy and Adult Education, radio programmes for the instruction of illiterates and semi-literates are provided by the Federación Guatemalteca de Escuelas Radiofónicas (or Guatemalan Federation of Radiophonie Schools) set up, with the approval of the Government, in 1966. It is a non-profit organization whose objectives are community development and the extension of primary school education in rural areas.

The Federation's Radio Department is composed of a central radio station in Guatemala City and four less powerful ones in regional centres. Literacy programmes for adults are put out daily at 18.00 hours and last for two hours with short breaks for music and items on agriculture, health, etc. The course lasts six months.

An hourly educational broadcast on agricultural and health themes is transmitted usually from five to six o'clock each morning before country folk begin work. About 1,500 students, mainly from rural areas, follow courses through each of the six radiophonic schools in the country, meeting in small groups of about twelve people with a monitor.

The Federation also runs a training centre for programme and field personnel.

JAMAICA

The initial radio/television programme was launched in January 1966 by the Literacy Section of the Social Development Commission. It ran until the following June and consisted of a pilot study of the possibility of using broadcasting and tape recording as aids in teaching reading skills. Closed circuit broadcasting was used, with simultaneous beaming of radio and television programmes. The experiment was carried out with 211 students in 12 classes - 6 using television, 5 radio, and one a tape-recorder.

In September 1967, literacy broadcasts in both media began on open circuit. Television programmes are put out on the one existing national channel while sound programmes are broadcast on standard frequencies from two stations - Radio Jamaica and Rediffusion (RJR), a commercial network, and Jamaica Broadcasting Corporation (JBC), a public corporation. The greater part of the island (roughly 70% of the area and 80% of the population) is covered by the transmissions.

Radio programmes (averaging 29 minutes) and television programmes (averaging 24 minutes) are both broadcast twice a week. They reach about 5,000 students, mainly from rural areas, in organized "media" classes, although a recent survey by the JBC revealed that programmes were actually reaching 9,000 out of a present target audience of 10,000 persons.

Classes which average ninety minutes including broadcasts, are held in various places such as schools, churches, church halls, community centres and even private homes. While in 1969 there were more face-to-face classes than media classes, the situation was changing rapidly. One hundred and fifty new classes opening in October were all scheduled as radio or television classes. This development is felt to call for greater specialization in teacher training.

Broadcasts are prepared under the authority of the Social Development Commission in consultation with the JBC, the University of the West
Indies Radio Unit, the Jamaica Information Service, with the assistance of the Unesco expert attached to the literacy project.

MEXICO

Radio has been used since 1961 in literacy work, and television since 1965. The Directorate of Audio-Visual Education (Dirección General De Educación Audiovisual) of the Ministry of Education is responsible for both media. The radio and television courses use the same text and workbook as the course for direct group teaching, called "Yo puedo hacerlar" ("I can do it"). The book is designed for listeners and viewers studying on their own or in small groups. Based on tests carried out with the help of monitors under controlled conditions, the audio-visual materials, produced in the studies of the Directorate of Audio-Visual Education, were recorded on tape, film or videotape in their final shape by commercial studios free of charge. The course designed for adults comprises 90 kinescopes or videotapes and 114 radiotapes. Each campaign lasts about six months: the seventh of these was being prepared in March/April 1969. Each broadcast lesson usually lasts 27 minutes, the traditional duration of commercial programmes. The textbooks, printed by the Government, are issued free of charge, the recipient filling in a form giving name, age, address, job. For each campaign 500,000 copies of the book are issued.

The literacy course is broadcast by 150 radio stations which reach nearly 100% of potential students throughout the country. In addition, 11 television stations, make the course available to about 20% of these students. By Federal law radio and television stations must transmit 30 minutes daily of programmes on educational, social and cultural themes. This legislation is said to have given an early fillip to the use of the media in education. In the Federal District, lessons are broadcast in the early morning or the afternoon, elsewhere in the afternoon. Commercial stations broadcast the lessons free of charge.

Between 1966 and 1968, about 2,000,000 people are estimated to have derived real benefit from the courses.

In the field of sound radio, mention should be made of a private organization E.R.H. (Escuelas Radiofónicas Huayacocotla) whose licence dates from 1965 and extends to 9 States with a population of about 8 million. Originally launched by the private university, Universidad Ibero-Americana, E.R.H. is now an independent organization with a Committee of Patronage for promotional and financial aid. The radio courses are designed for instruction in literacy, arithmetic, and social and community studies at four different levels for students meeting at 85 radio centres in rural areas or very small towns under the supervision of one to three monitors. Currently, there are some 1,500 registered students, of whom 300 have reached the fourth or highest grade. Each grade is based on 100 lessons, lasting 20 minutes each and is broadcast each evening from Monday to Friday.

UNITED STATES OF AMERICA

The expanding ABE (Adult Basic Education Program) is characterized by the expanding use of educational technology. Within this framework, the better utilization of resources such as television is one of the main priorities for experimentation and several of the special projects funded under the Adult Education Act of 1966 are focusing on this area.

Among special projects, the Southwestern Cooperative Educational Laboratory Inc., New Mexico, is developing television programmes for the Mexican-American population in the Southwest. The staff of the University of Arizona is producing 72 television types, 10 of which will be used to teach reading and writing to Spanish-speaking adults. This venture is being carried out with the co-operation of the Arizona Department of Public Instruction, the California Department of Education and the University of Colorado (Boulder).

Radio and television are used as means of recruitment for the ABE programme. Both media are also used as instructional aids. Thus daily television programmes in conversational English reach Spanish-speaking adults in one city. A Navajo-English radio programme is heard daily on a Navajo reservation. Educational television stations are, in common with local education agencies and other non-profit or public agencies, eligible for grants under the Special Experimental and Demonstration Projects which strengthen the continuing ABE programme by experimenting with new teaching methods.

From 1958 onwards, television programme series for illiterate adults were devised and broadcast in various parts of the United States, e.g. in 1958, Streamlined Reading began in Memphis, Tennessee; in 1960, P.S. S4, began in St. Louis, Missouri, and Learning to read began in Baltimore, Maryland; and in 1961 Learn for Living began in Yakima, Washington. In 1961 also, the best known of such ventures, Operation Alphabet, began in Philadelphia. Operation Alphabet is a television literacy series of 100 half-hour videotaped programmes, developed by the Philadelphia Public School Adult Education Program, and later distributed on a nation-wide scale by the National Association for Public School Adult Education. By 1964, one hundred cities - including nearly all of the largest in the United States - had shown the series. In 1963, when the New York State Education Department launched a massive attack on illiteracy, Operation Alphabet was used to supplement traditional methods.

Mention should be made of two continuing demonstration or experimental television literacy projects begun in 1963. The first is RFD - Rural Family Development (July 1969-June 1972), organized...
by the educational television station run by the University of Wisconsin, designed to test combining TV, home study, and home teacher visits. The second is Project Reach (June 1969-May 1971) run by the University of Notre Dame, Indiana and designed to train adult basic education students to fill important positions on the project staff; to combat, through a broadcast enrolment programme, distrust and apathy; to provide a closed circuit television instruction course combining television lessons with highly individualized classes of adults of varying achievement levels. Both projects are funded and co-ordinated by the United States Office of Education.

The above and other aspects of the utilization of the media in literacy work are covered in works listed in the Bibliography.

SOUTH AMERICA

BOLIVIA

Radio programmes are used in the literacy centres.

A new body, the Instituto Boliviano de Aprendizaje or IBA (Bolivian Apprenticeship Institute) plans to include broadcasting (sound and television) in its activities.

BRAZIL

The National Education Department of the Ministry of Education and Culture is promoting a pilot project covering functional literacy and further education for adults and adolescents. For this, 36 television programmes have been recorded with the collaboration of TV - GLOBO, and a student's handbook (O Povo - The People) has been produced. The scheme is due to be launched simultaneously in the States of Guanabara, Espirito Santo and Pernambuco, through a network of reception "tele-schools" (TV Escola).

The educational foundation FEPLAM (Fondacao Educacional Padre Landell de Moura) uses both radio and television for literacy work with the rural population of the State of Rio Grande do Sul, FEPLAM is a non-profit technical body, created in 1967 but created under another title SERTE in 1965, following an agreement between the Secretariat of Education and the Federal Ministry of Education. FEPLAM's two first experimental televised courses were given in 1966 and rebroadcast in an improved form in 1967-1968. They have created a network for both radio and television reception consisting of "radiopostos" and "telepostos" covering over a hundred communes in Rio Grande do Sul and nine in Santa Catarina. FEPLAM carried out from 1967-1969 a functional literacy pilot project using sound radio to reinforce the work of monitors in teaching groups of adults in the coastal region of Osorio-Torres. The course comprises a total of 180 one-hour lessons, broadcast at the rate of five a week.

The MEB ("Movimento de Educacao de Baso" or "Movement for Fundamental Education") of the National Confederation of Brazilian Bishops maintains a system of 21 "radiofonic schools" (Escolas Radiofonicas) reaching 70,000 students in eight States. It produces textbooks and audio-visual materials.

The Federal University of Rio de Janeiro through its Rural Training Centre (CRUTAC) runs fundamental education programmes on both radio and television, for training 10,000 persons in rural and urban areas.

CRUZADA ABC ("A Crusada Basica Crista" or "Basic Christian Crusade"), a body working in the field of adult education, has since December 1968 recorded in Rio de Janeiro its television literacy courses, broadcast from a commercial station in Recife, where for some years previously similar courses had been both recorded and transmitted.

 Mention should be made of the work of the State Institute of Education of Guanabara where, since 1967, a centre for educational television has operated using closed circuit to produce instructional and recreational programmes.

CHILE

Through an agreement with the Radio School Foundation for Rural Development, the Ministry of Public Instruction (through the "Jefatura Planes Extraordinarios de Educacion de Adultos") is taking part in a co-ordinated project for using radio in functional literacy work with rural communities in the western sector of Osorno Province. The objectives are to provide a closed circuit to produce instructional and recreational programmes.

With regard to television, the Adult Education Service is currently running an experimental programme on the network Canal 13 of the Catholic University of Chile. Like the arrangement with the Radio School Foundation described above, this activity is the subject of an agreement between the Government and Canal 13. Programmes are designed for Mothers' Centres, students of the Adult Education Schools, etc. The objectives include encouraging adults to teach themselves and technical manual education at the artisanal level. The programme is also experimental in that it provides material for drawing conclusions for use in preparing next year's programmes under the responsibility of the Adult Education Service and for settling day-to-day problems encountered.
by the State Television Channel and the national network.

COLOMBIA

Broadcasting for literacy is mainly carried on by two organizations - the Fondo de Capacitacion Popular, and the Acción Cultural Popular, better known as Radio Sutatenza - which serve different areas and types of students.

The first of these, the Fondo de Capacitacion, is a special organization, directly under the Presidency of the Republic. It produces programmes and broadcasts them in the evenings from the studio of INRAVISION, from which television programmes for schools go out in the evenings. The Fondo's programmes are aimed at the "marginales" that is, adults living in the slums of the principal cities, and seek through instruction to make their lives more productive, more economically viable, more interesting and worth while. The Fondo's broadcasts go out on the television channel, Canal 11, which formerly served only Bogotá but whose new transmitter covers a big area of the High Plateau.

The first year's activities of the Fondo were of an experimental and research character on closed circuit until, on 18 November 1968, the President of the Republic inaugurated the first nine-monthly TV literacy course on open circuit. The course comprises 150 hourly programmes in four ten-minute parts (reading, writing, civics, religious education), separated by five-minute musical or recreational breaks. The course was followed initially by students at 55 "telecentres" in the southern and eastern districts of Bogotá. From the second year, it is hoped to have 1,000 such centres for 30,000 adult students.

Radio Sutatenza (so called because it catered originally for the agricultural Sutatenza region of the High Plateau of the Andes) began under religious auspices in 1947 and was for fifteen years a local enterprise. It is now a major nation-wide broadcasting organization run from Bogotá whose network of transmitters covers almost the whole of Colombia and some neighbouring ones. In 1968 the Pope inaugurated one of these at San Campo. The organization has two centres at Sutatenza and one at Caldas for training teams of young men and women for field work. A magazine El Campesino is published with an annual distribution of 3 to 5 million copies.

Radio Sutatenza puts out nineteen hours of programmes daily of a general informational, cultural and recreational character. These radio broadcasts include a half-hour on life-long education, and a half-hour of literacy teaching and fundamental education for adults, both courses being repeated a number of times. Listening is mainly by individuals or in family groups.

ECUADOR

Radio and television, along with the press, have been used on a national scale for promotional and motivational purposes.

Among projects using radio as an aid to literacy teaching, Escuelas Radiophonicas Populares (Popular Radiophonic School) of the Province of Chimboranzo provides courses for 300 centres each with an average of 20 students, under the auspices of the Adult Education Department.

There is also the Programa radiofonico de Tabacundo, a canton in the northern part of the Province of Pichincha, with a 500 watt transmitter, personnel and a work plan for reaching 20 'schools' of 30 people each on average. This project receives financial aid, technical guidance and materials from the Adult Education Department.

The Department is programming the establishment of televised literacy classes, using the country's existing TV channels. For this work, specialized technical expertise from within the country and abroad is being called upon.

PARAGUAY

The TV Channel 9, Cerro Cora, is used from time to time to make the public aware of literacy work. It reaches urban dwellers and a large part of the rural population.

PERU

Educational radio programmes including those done for adult literacy work have from time to time been broadcast by the numerous local radio stations which the geographical configuration of the country makes necessary. An example is Escuela Radiophonica Popular de Cuzco, Popular Radiophonic School of Cuzco, run from this mountainous department of southern Peru. It serves some forty rural communities of Indians, giving simple instruction in 'quechua' in the first phase, and in both 'quechua' and Spanish in the second phase.

Various educational broadcasting ventures run largely by Catholic missionaries include: "La Voz Cultural de la Amazonia" run from San Jose, since 1963; "Radio Escuela Madre de Dios" from Puerto Maldonado, since 1965; and "Radio Escuela San Ignacio" from San Javier del Maranon, since 1967.

Of special note is the TEPA ("Telescuola Pópular Americana") which began operations in 1962 from Arequipa, the largest of Peru's provincial cities. Started by Catholic priests and teachers it uses both media, but especially television. The radio courses consist of one-hour programmes and are broadcast by two local stations. One of the stations, Radio San Martin puts out half-hour programmes for women "Educación para el Hogar" ("Education for the Home") each morning, and these are followed by the mothers' clubs or 'clubes de madres'.
The main activity of TEPA - television - includes a series of lessons for adults and adolescents, roughly corresponding to first four grades of elementary school education, broadcast on a local commercial channel - Canal 2. They go on the air during weekday afternoons.

The State-run channel, Canal 7 of Lima, also broadcasts elementary lessons but these are for children, There are also television programmes for teacher training.

A small station, Canal 13, run by the students of the University of Lima puts out educational programmes for adults with a literacy element.

**ASIA**

**BURMA**

During 1969 a pilot project has been mounted by the Ministry of Education in the Meiktila District of Central Burma, and this will provide experience for an expanded project in larger areas.

Broadcasting is not being used for instruction but for motivation. To keep alive the interest of the people in literacy, sound broadcasts have been used to transmit news about preparations in towns and villages for evening classes. Those broadcasts have dealt with accommodation, materials for classrooms, and enrolment of trainees and voluntary labour. Songs, music, and radio plays are among the motivational materials broadcast.

**CHINA (Republic of) (Taiwan)**

Educational radio stations of the Ministry include literacy programmes in their nation-wide broadcasts.

**INDIA**

In India, considerable work has been done in developing radio in the service of rural adult education, particularly since 1956. Before this date, a small beginning had been made through the formation of about 200 listening clubs. Then, following upon a decision of the General Conference of Unesco, a radio farm forum pilot project was begun, using techniques developed in the quite different environment of the north of Canada. Although this venture does not come strictly within the category of literacy broadcasting, its success is not without relevance to such broadcasting. Nor is the fact, as reported in 1965, that All-India Radio broadcasts rural programmes from 30 stations in all languages and about 50 dialects for nearly 30 hours a day. Significant too is the supply made over the period under a special subsidy scheme, of close on 200,000 community radio receivers to villages in India.

The radio farm forum is an essential and integral element in a new Unesco/FAO project entitled "Farmer Training and Functional Literacy", scheduled to run for 2½ years. The project involves three Ministries: (1) Food and Agriculture, Community Development and Co-operation; (2) Education; and (3) Information and Broadcasting. These three units of the National Government are to give priority to this co-operative project working directly with and through State Government units in districts where the Government of India's high-yielding varieties programme of food-grain production is being launched. Among other things, the project will assist All-India Radio to provide regular broadcasts related to local farm problems for farmer discussion groups. United Nations Development Programme experts in rural broadcasting and evaluation will work with All-India Radio in preparing these programmes. A radio receiver will be provided by the Government for each discussion group.

**IRAN**

The use of radio has formed part of the Work-Oriented Adult Literacy Project (1967-1970) organized by Unesco, and the United Nations Development Programme and the Ministry of National Education. In the part of the project based on Isfahan, radio has been particularly used for the "in-service" training of inexperienced teachers by various methods including recordings of live outside broadcasts of model lessons.

Radio has also been used to speed up apprentice training of students especially with the use of wall posters as supporting materials. During 1968-1969, there have been half-hour programmes for women each week-day morning, and in the evenings three quarter-hour programmes for men (agricultural workers, industrial workers and teachers respectively). Besides the organized class listeners, there is evidence that many others listened outside the classes. About 1,000 took part in class listening. The total figure rises to 5,000 if women listening at home are included.

Programmes were prepared by the experts of the pilot project and broadcast on medium wave by the Government radio services.

The national literacy campaign has used radio experimentally, and closed-circuit television for teacher training, also experimentally before the work-oriented literacy project began.

Apart from the above, radio and television broadcasts have been used for special occasions, such as International Literacy Day.

In 1969, an agreement was reached with the Ministry of Agrarian Reforms whereby, in the cultural centres established by this Ministry, a first place would be given to the needs of new literates, including facilities for listening and viewing.

**LAOS**

Radio was selected for use in the Functional Literacy Programme of the Mekong Development
Programme (1969-1972) so as to reach a widely dispersed public and overcome distance. Programmes were planned by the School Broadcasting Service (which has worked closely since 1964 with the competent specialists of the Ministry of Information) in collaboration with the Directorates of Primary and Adult Education. The courses occupy six hours of broadcasting time on the national network each week and are accessible to the intended audience - about a million rural adults and adolescents of both sexes - of whom about 40% to 50% are reached.

Most rural community education centres (about 3,305) provide a meeting place for listening and discussion. Instruction is given in Lao and covers also social subjects, health, agriculture, home crafts, etc.

EUROPE

ITALY

The series of television literacy broadcasts "Non è mai troppo tardo" ("It's never too late") in Italy were broadcast from November 1960 to May 1968 by the national network, RAI - Radiotelevisione Italiana, from its Telescuola Centre. The fall in the numbers of illiterates and semi-literates has been such that it has now been possible to replace the literacy courses by other types of educational broadcasts. But the following details of this internationally-known venture are noteworthy.

The project was planned and jointly run by the RAI (Telescuola Centre) and the Directorate General for Popular Education of the Ministry of Public Instruction, with the collaboration of a great many national institutes and associations. The television project was completely integrated into the national literacy campaign and used the same educational infrastructure, including the inspectorate at the national and provincial levels. For the first six-monthly course, 3,305 groups were organized in various parts of Italy, especially the south. The teachers in charge were appointed by the inspectors of the educational area or "Academy" concerned. Each of the pupils (men and women from 30 to 50 years of age, brought together through local campaigns), received free of charge a package containing a specially printed textbook, an exercise book, a pencil and a ruler. Classes met in schools and halls put at their disposal.

Courses were of two types: A for illiterates; B for semi-literates. Each of these six-monthly courses comprised 60 lessons, composed of three half-hour evening transmissions weekly which formed the central focus of two hours of class teaching. A system of examinations and certificates completed the structure of the venture.

For the first six years, lessons were broadcast on Channel 1 of RAI, and for the last two, Channel 2, and were accessible to vast segments of the population.

The courses did not aim at functional literacy. But the televised lessons introduced aspects of daily work of interest to pupils. Between 20,000 and 30,000 students a year followed the courses in later years with a maximum of 55,000 annually in the first and second years. In addition, half a million individual viewers are reckoned to have followed the courses. The audience research service of RAI puts at 11½ million the number of those viewing these programmes "Non è mai troppo tardo".

SPAIN

Radio programmes are used for propaganda and information. Half-hour broadcasts are put out by the Third Programme and relayed by various regional stations.

YUGOSLAVIA

A special project "Literacy Action by Television" began in October 1968 and will go on until 1975. It is being run by the Educational Broadcasting Department of TV - Belgrade, on its own responsibility but in harmony with the activities of the Youth Union, the Education Secretariat and other national bodies working on the national literacy campaign, through the Republic Action Committee. Those producing programmes can draw on the cooperation of eminent educationalists, learned societies, the workers' universities and the national education institute.

Initially, the programmes are not being directed at particular social or professional groups but to all groups though they can be applied to particular milieux.

Two half-hour programmes a week are broadcast. In addition, TV Belgrade broadcasts over a period of three months a series of twelve 25-minute programmes to promote the educational programmes and give news of events concerning the campaign. The programmes, broadcast in Serbo-Croat, include: "ABC by Television" to encourage illiterates to learn the written language; "Mathematics" covering the elementary arithmetical processes; "History" and "Conjugal Consultations". In these early stages of the project, the producers have sought to devise types of programmes able to attract a mass audience in competition with other attractions. Thus "ABC by Television" carries the dramatized story of an illiterate country woman who overcomes the difficulties of living in the city by learning to read and write.

The department for the study of TV programmes and viewer reactions records the following figures: 500,000 people regularly follow "ABC by Television" (more, in effect, than some entertainment programmes) and 200,000 regularly follow "Mathematics". The impact on social and political life of these nationally networked programmes is said to be very great, and this brings home to the public the importance of literacy.
CHAPTER TWO

PROBLEMS AND ACHIEVEMENTS

AN ANALYSIS OF CURRENT EXPERIENCE

"Un père de famille nous a rendu dernièrement visite. Il a déclaré entre autre: En octobre 1968, j'étais analphabète; j'ai suivi régulièrement vos cours... Au début de l'année c'était mon fils ainé qui m'aidait après chaque émission, à la fin de l'année c'était moi qui contrôlais le travail scolaire de mes deux enfants de 1ère et 2e années de l'Enseignement Primaire". (1)

From the reply to the Questionnaire from Tunisia.

This chapter seeks to carry a stage further the process of looking at the pattern of usage of radio and television in literacy work in various countries. To adopt the language of television (and of film production), the previous chapter may be compared to an establishing overall camera view, taken in long shot. We are now, so to speak, moving into mid-shot and sometimes into close-up.

This Chapter too is largely factual and descriptive. But the approach here is comparative and analytical. The subject matter is not arranged country by country. Rather is it the aim to provide a profile or composite picture of practices and experience in various countries.

For the most part, the replies to the questionnaire on pages Q1 et seq have provided the departure point for this closer examination of trends, problems and achievements. Other sources of the kind already referred to have also been used. But it is important to realize that, in the particular field of the present inquiry, the published literature is very scarce indeed. There has of course been a considerable amount of research and fact-finding in respect of the relationship between the audio-visual media, including radio and television, and the processes generally of teaching and learning, especially in the United States of America. Remarkably little even of this latter work seems however to have been devoted specifically to applications of broadcasting to the eradication of illiteracy (2). Research into the use of radio and television in teaching other subjects to younger age-groups (and particularly foreign languages to literates) and in other conditions and circumstances has presumably some degree of relevance to the problem of applying these media to teaching adult illiterates to read and write and figure. There seems to be no reason whatsoever to suppose that this process is exempt from the principles which govern the human acquisition of knowledge and skills in general. But what does seem to be needed is more systematic research into the whole complex of problems - not only pedagogical but also economic and social - which the use of the media with illiterates raises in the developing countries where the need is greatest. A number of the replies to the questionnaire drew attention, by implication or directly, to the need for more such research.

As may be seen, the questionnaire was a quite detailed and searching one. Not surprisingly, replies varied greatly, one or two being rather brief. By and large, however, those who replied did so seriously and answered all the questions. Some were indeed exceptionally full and informative. Three of these replies are reproduced in extenso in Annex II.

Why was broadcasting chosen to be used in literacy work in the countries concerned? How were these operations organized? What general approaches were adopted? These were some of the questions which the earlier part of the questionnaire sought to elucidate. Replies varied: but there was nevertheless a good deal of common ground.

1. "A family man came to see us recently. He told us, among other things: 'In October 1968, I was illiterate. I have followed your courses regularly since then... At the beginning of the year's work, it was my older son who helped me after each broadcast. By the time the year ended, it was me that was checking and helping with the homework of my two children, who are in the first and second grades at primary school.'"

2. An interesting review of this American research, such as it is, is given in the unpublished thesis by Angelica Watson Cass, referred to in the Bibliography.
REASONS FOR USING BROADCASTING

The reasons given for adopting broadcasting were interesting not indeed because their content was unexpected but rather because many of the views expressed were so widely held. They touch on, and sometimes illuminate, all the various known advantages of radio and television in education or in this particular context.

There were few attempts to differentiate between radio and television in the replies. But from one African country, where television sets are few and concentrated in the capital conurbation, the reply brought out a consequence of the economic factor which is sometimes overlooked. In this African country, television sets are mainly owned by comfortably-off middle class people who are not the sort the literacy project aims to reach. The class composition of the audience varies of course from country to country. In many industrialized countries, the audience for television is predominantly working class, as the forests of aerials in the poorer districts so amply testify. Of conditions in another (Central American) country, one Unesco expert reports strikingly: "For many people - rightly or wrongly - a television set is more important than good food." Statements like this pull one up sharp. But they remind us that people have other needs than physical subsistence, and the right to satisfy these needs; and that television is a popular medium to which ordinary people are greatly drawn. Moreover the capacity of television to entertain, to "take people out of themselves", is not unrelated to its power to promote instruction and understanding, and certainly not necessarily in conflict with it. A number of the reports illustrate this, and show how broadcasting infrastructures created for other purposes can strengthen or make possible the use of television for literacy, and render it more viable economically. There were, however, in this connexion surprisingly few examples quoted in the replies of collaboration with other services, for example school broadcasting in the joint use of facilities.

The first reason for using radio (and, to a lesser degree, television) given in most of the replies was its power to annihilate distance and to reach remote, inaccessible and isolated communities. One report held that television not only multiplied "classrooms" (or places to learn in) but also teacher potentials. Another stressed that, for a developing country, the direct teaching function of television outweighs its role as an aid complementing the work of the teacher, an aspect more usually stressed in developed countries, and that through it one can reach millions without conventional instructors. In the same strain, others recalled the urgency of their needs, and the great shortage of qualified teachers, and how radio and television can help by speeding up or "multiplying" the learning time factor. Advantages mentioned by some, and echoed by others, include:

- eclecticism - the best teachers and teaching methods can be exploited on a wide scale and influence teaching standards;
- the use of television more explicitly for helping the "in-service" training of teachers and instructors, and guiding them and keeping them in touch with new methods, especially audiovisual techniques which can so effectively be demonstrated by television;
- the universality of broadcasting; its repeated day-after-day action; the simplicity of operation - in the case of radio - at the receiving end; and the attractiveness for ordinary people not only of television, discussed above, but also radio in the "age of the transistor". One report attributed the attractiveness of the television screen to its "newness" and its potency as a national link and focus of interest. This same potency was related in some replies to the value of television in motivating the home student.

The above points are familiar enough. What is new is, as we have suggested, to find them consistently affirmed by the experience of experts in a number of widely separated countries.

PROMOTIONAL USE

One important use of both media which a number of correspondents mention tends to be under-emphasized. This is their use in promotional campaigns to create favourable climates for literacy projects. The reports from Burma and Kenya in Chapter I (pages 13 and 7), relate how both media were used there to launch their literacy campaigns. The report from Tunisia illustrates how both media combine the teaching function with publicizing the national literacy campaign and making the whole idea of literacy a popular one. In this, the Tunisian, and also Algerian, projects enjoy valuable support from the press. Besides the fact, reported in Chapter I, that in Tunisia the national press in Arabic prints the texts of broadcasts each day, the television critic of the national French language daily regularly features the literacy programmes in his column. In Algeria, lessons are published in the press fifteen days in advance in the form of a brochure supplement covering eight television programmes. How television can help publicize literacy campaigns is strikingly illustrated by the following observations from the Yugoslav reply to the questionnaire "Television has given a new impetus to literacy work already going on. Thanks to the literacy type of programme shown on TV, the problem of literacy was brought home to the public in all its sharpness. It may be said that illiterates and the difficulties they face became a topic of general conversation and were taken up on radio and in the press and at meetings of the Republican Assembly".

It is perhaps noteworthy that these promotional uses of the media are usually adopted when the national public broadcast networking is involved.
ORGANIZATIONAL ASPECTS

The questionnaire sought information on the kind of organization responsible for the use of the media in literacy. Replies showed few variations. In the U.S.A. local public and private bodies, including universities, are often involved, though sometimes with help from Federal funds. Religious or philanthropic foundations sponsor projects in some Latin American countries. But, not unexpectedly, organizations responsible for projects are mostly governmental ministries, usually those for national education and their agencies for literacy and adult and fundamental education and social development. These include services for the audio-visual media, but this was less frequent than might have been expected.

Only one reply to the questionnaire speaks of inter-ministerial friction or inertia as an obstacle to progress and significantly this refers to a case where responsibility for various aspects of the use of the media is shared by a number of government departments. Experience with educational broadcasting generally has shown that the less ambiguous and the less divided the responsibilities the better, and this seems to be true of the use of the media in literacy.

As the survey in Chapter I showed, broadcasting networks or services are wholly or partially responsible for literacy broadcasts in some countries. Relations between national literacy campaigns and broadcasting services are, in one or two cases, covered by formal written agreements, the texts of which are given. An interesting formula for cooperation is the sharing of responsibility between an educational body and the national broadcasting network. A joint team spirit is aimed at and seems to be achieved. This is one solution to a problem which arises in all forms of educational broadcasting - how to reconcile the attitudes and methods of the educationists and teachers on the one hand, and those of the professional broadcasters and communicators on the other. In literacy work, the "symbiosis", to to speak, between these two approaches seems to be particularly important if the full potentials of the media are to be realized.

Generally speaking, the bodies already mentioned as having overall charge are also responsible for the initiation and co-ordination of research and for such matters as administration, technical facilities, staffing, finance, etc. A useful procedure adopted in some cases to cover such points as research, educational and functional validity and so on is to entrust them to an advisory or promotional committee or council widely representative of national or regional organizations - teachers and student bodies, specialized agencies in agriculture, health, industry, social and community development, trade unions, cultural or religious bodies and the like. Planning and preliminary research were also carried out by the bodies already indicated. A number of replies stress the valuable and often indeed key rôle played by Unesco and other outside experts in such planning.

Preparatory or gestatory periods appear sometimes to have been quite lengthy - from one to three years - and were said to have been spent in bibliographical studies, visits, field research, the preparation of materials and the training of personnel. In one or two cases, research carried out seems to have been very thorough. For example, the reply from Colombia lists an interesting range of factors taken into account in planning various aspects of a television literacy project. These include: level of audience identification of picture shapes (the reactions of 42,000 viewers to 500 specimen drawings were analysed and those showing 90% or more identification were used in texts and broadcasts); the relationship of colour to this process of identification (it added little and black and white at a sixth of the cost was used); vocabulary capacity and word frequency (20 key words out of 500 were eventually used); ocular adjustment (words with letter combinations of dominant optical identification efficiency); and best viewing times (a third of potential viewers could be reached between 4 p.m. and 10 p.m.). Other factors investigated included tastes in music and entertainment, and the values and attitudes particularly of the main audience aimed at, in this case the "marginados" in the big city slums.

CONCEPTS OF LITERACY

What are the concepts of literacy on which the use of the broadcasting media, or the projects of which they form part, are based? These concepts vary greatly. They range from "simple" or "elementary" literacy (training a person to read with understanding and write a simple message related to his everyday life) to "functional" literacy (comprehensive education and training for illiterate, or even semi-literate, adults, with a literacy component built in) and "work-oriented functional" literacy (technical/vocational training with a literacy component). The projects described in the replies also illustrate the two basic strategies in literacy campaigning - the "extensive" or "mass" approach (aimed at teaching the basic mechanisms of reading, writing and calculation to the greatest possible number of illiterates through large-scale campaigns) and in contrast to this traditional approach, the newer "selective-intensive" strategy (in which literacy is planned for and located in specific and high priority sectors of the national plan, in specific (usually development) areas and adapted to the...
needs of specific occupation groups and is intensive in the sense that it stresses quality rather than quantity and calls for longer and deeper training. However, most replies claim some degree of functional approach in their projects although it is clear that the term is sometimes used rather widely. And, of the three categories of literacy, it is the second or functional category into which projects using radio and television seem mainly to fit. Their aims are generally described as helping to eradicate illiteracy in the larger context of human, economic and social development. But, as we have seen, one important reply, the Italian one, does not claim that the famous Telescuola literacy project was functional in, as they put it, "the Unesco sense". This project indeed represents the mass or extensive campaign approach in applying broadcasting to literacy par excellence.

In most cases, the subjects taught were not closely specified except for reading, writing and arithmetic. But practically all the projects cover health, civics, and human, economic and social enrichment. The project in Guatemala aims at producing "good readers, good citizens, better farmers, better consumers". The subjects taught there are: "elementary mathematics; basic idioms; duties as fathers, citizens, neighbours; advice on soil science, seed selection and land utilization techniques; combating pests; marketing; and preventing disease; water conservation and use; sanitation". The reply from Congo (Brazzaville) underlined that radio has been integrated into a broader socio-economic campaign and a logical scheme along with other audio-visual aids, radio broadcasts being used to present a specific situation, usually through a sketch. In the Indian Farmer Training and Functional Literacy Project, All India Radio will provide regular broadcasts on local problems for discussion groups; these will be co-ordinated with an extension programme; and a functional literacy programme will complement or support the extension of farm radio efforts. In another project, the Laos Functional Literacy Programme in the framework of the Mekong Valley Development, radio is being used as part of the work of providing vocational, as well as civic and social, training for young workers employed on the barrage construction.

Generally speaking, where broadcasting carried the main teaching burden (and this is mainly true of projects using television) these came closer to the extensive campaign burden and away from the selective-intensive approach, though even so the majority claimed to be to some extent functional.

AUDIENCES - GROUPS AND INDIVIDUALS

Some interesting trends in the nature of audiences emerge from replies to the questionnaire. One of the most significant of these was not specifically the object of a question - it concerns the great disparity between the size of audiences reached directly (i.e., at organized centres or through registered courses) and indirectly (by individuals in their homes). Figures for the latter were sometimes obtained by audience research methods or deduced from the sales or supply of supporting literature. The audiences reached indirectly greatly outnumbered and in some cases continue to outnumber those reached directly, the proportions varying roughly from 2 to 1 in Jamaica and Laos, 4 to 1 in the Congo, 8 to 1 in Tunisia, and 50 or more to 1 in Italy. While the value of organized listening and viewing through groups and centres is undoubtedly greater (and indeed one report states flatly that the indirect type of listening is useless), the individual student at home also represents a sector whose needs should obviously be studied and catered for on a number of grounds. One of these is the need for privacy which home listening or viewing provides and which some students find essential. This need for privacy led some students in one country to prefer radio so as to avoid the "humiliating exposure" of collective TV viewing. However, there was evidence that home television viewing can also ensure essential privacy for individuals, for example, wives of officials anxious to get rid of the handicap of illiteracy vis-à-vis their husbands appreciate the opportunity of doing so unobtrusively through the television literacy course. In Yugoslavia the television literacy programmes are followed by small groups assembled in private houses and sometimes the less literate participants are helped by the more educated ones.

Another factor is the rate at which the home audience, especially for television, seems bound increasingly to exceed the organized student body, as the number of receiving sets and viewers increases. This can be very rapid indeed. Thus in Iran, the indirect audience will, it is hoped, increase so as to outnumber class students not as in 1969 by 5 to 1, but by 12 to 1. Since the 24,000 who follow the television courses in Tunisia represent a high proportion of the total viewing population, it is clear that, as the number of receivers grows, so will this diffuse but nevertheless highly significant home student population, and the cost per viewing student per broadcast will proportionately decrease. Cost per student becomes very small indeed when figures of a million viewers, as in Mexico, or one and a half million as in Italy, are achieved.

What kinds of people are reached by radio and television literacy programmes? Tunisia reports that, according to a survey in June 1969, women (mainly housewives) outnumber men by two to one among those indirectly reached by television lessons, though men outnumbered women by over three to one among students in organized groups. According to one report, 70% of those following sound radio literacy courses in the United Arab Republic are women who can only be reached in their homes in this way. In almost all other cases,
whether for organized courses or home listening and viewing, men outnumber women. Only one country (Iran) reports the transmission of specialized programmes for women listeners, though many women's groups and classes follow the broadcasts elsewhere.

The predominating type of student would seem to be drawn from the male population from fifteen years, (the lower age limit usually accepted for adult illiterates) to the late thirties. Age levels averaged mainly from 18 to 40 years of age with very few adults of over forty taking part. In two cases, a substantial proportion of young people and children participated with their elders: in Brazil 43% of the students were under fourteen years old while in Tunisia some 11,000 out of 23,000 general viewers were children or young adolescents.

In this respect, the audiences for broadcast literacy programmes follow a pattern noted elsewhere in conventional literacy work, for example, in Latin America where many adult literacy courses are in fact delayed primary school courses.

With regard to occupations and milieux, the audiences are predominantly rural though industrial workers are aimed at and reached in some cases. Housewives are often a numerous category. In Brazil, the composition of audiences at the listening centres ("radiopostos") is similar to those at the less widely available television viewing centres ("telepostos") according to a Unesco expert who suggests that motivations are also probably similar for the two types of audiences.

With regard to motivation, these remarks from the Report of the Unesco Workshop on the evaluation of literacy projects mentioned above seem to apply to students of broadcasting courses: "... in many countries adults were often motivated towards literacy classes by the desire for conventional education and for certificates comparable with those gained in schools. This might apply, for example, where husbands had proceeded further with formal education than their wives. With literacy classes designed to satisfy needs of this sort, the parallel with the formal school structure might not be inappropriate".

TRANSMISSIONS, RECEPTION AND PROGRAMMING PATTERNS

What are the arrangements for transmitting programmes and for their reception by the various kinds of students described above? With few exceptions indeed, the channel used in each country, for sound or vision, is or has been the national network, often covering the whole country or shortly to do so, and providing broadcast schooling to any individual with access to a receiver. Studio facilities and professional broadcasting personnel and expertise are usually provided by the national broadcasting services, especially of course where these have overall charge of the project. But in one instance, the project organizers bought television screen time from the broadcasting company. In many cases, however, there is an obligation - sometimes statutory - on the broadcasting authorities to provide air time for adult education, which can be used for literacy work.

The usual pattern is that of a half-hour broadcast in the early evening just after work, but morning programmes for women or audiences on the factory floor are met with in one or two instances. These half-hour programmes form part of longer classes or forums lasting up to two hours. Where programmes are longer than half-an-hour, their content is not unrelievably instructional. In Colombia a one hour-long programme is divided into 40 minutes of lessons and 20 minutes of entertainment (music, humour, folk dancing, etc.). The longest broadcasts (in Guatemala) run for two hours but the teaching part is leavened with intervals of music, agricultural news, personal greetings and theatrical turns. An interesting variation is found in Iran where there are morning half-hour programmes for women and in the evenings quarter-hour programmes for men - 15 minutes for farm-workers, 15 minutes for industrial workers and 15 minutes for teachers in training. Programmes are often broadcast daily (Mondays to Fridays or Saturdays). Some are given two or three times a week, Repeat broadcasts are reported in only two cases (Yugoslavia and the RFD project at the University of Wisconsin). The organizers of the Wisconsin project estimate that students will have to spend about 8 hours in home studies each week. In the Italian Teleescuola project, separate programmes for literates and semi-literates were given on alternate evenings.

Courses last on average from six to eight months during the year or 100 to 150 hours in aggregate. Certain complete courses run for two years or more.

Broadcasts are or have usually been designed to teach literacy in one (the national) language. Exceptions, some of which have been mentioned in Chapter I, include Congo (Brazzaville) where instruction is given by radio in literacy in Manukutuba and Lingala, followed a year later by instruction in reading and writing French; Tunisia where two-year radio and television courses for literacy in Arabic will be followed by similar courses in French; Kenya where there are programmes in English and Swahili; and Southern Peru where radio programmes in Quecha precede those in Spanish. An unexpected and perhaps suggestive result of the use of radio is reported by a Unesco expert from Ethiopia: "One extremely interesting experiment showed that it is no more difficult or time-consuming to teach reading and writing in Amharic to a non-Amharic speaking group than to a group of which Amharic is the mother tongue."

Student groups number 25 per broadcast or less, one averaging as low as 12 persons. This means that a great many such reception points are
called for if a reasonably substantial student population is to be reached. In one project, only 5 per cent of the 6,000 or more illiterates in the region attend the 25 listening centres. But listening points are more numerous elsewhere. Laos reports the existence of 880 centres and adds that villagers owning sets put the volume up for the benefit of neighbours! Of the television literacy programme (1968-1969) in the United Arab Republic, one Unesco report states: "At the receiving end, 350 viewing centres were created in the 18 governorates (districts). Each centre was attended by an average of 30 students which makes an official total of 10,500 students". From the reply by the UAR to the questionnaire, we learn that audiences there are expected to double by 1970. An interesting breakdown of television receiver ownership is given in the report from Tunisia, where out of some 52,000 sets in use, as many as 12,000 are available in "public places".

MAINTENANCE AND SERVICING OF EQUIPMENT

Maintenance and servicing of receiving sets at listening and viewing centres is sometimes done by the broadcasting organization or by the firm or agency supplying the equipment. This is of course a crucial part of any project using broadcasting in literacy. There was evidence that it could be and sometimes is the weakest link in the chain of operations. One incident related by an expert illustrates how things can go wrong particularly with television reception. He reports: "While waiting at the secondary school in P, we tried to see the (evening adult) course on the school's TV set. It was not possible. The antenna was aligned to receive the (morning) school broadcasts". To judge by the replies such incidents seem fortunately to be infrequent. But they underline the importance not only of efficient professional servicing but of schemes for training teachers and monitors in the handling and simple maintenance of equipment, and reception control positioning of aerials and speakers, and so on. Such training schemes form part of some of the projects. In these projects, teachers and monitors also held supplies of batteries and the more essential spare parts.

The provision of receiving equipment for study groups is an essential part of many of the projects. In Colombia, the authorities are bulk-buying the first ten thousand television receivers and selling them to recognized literacy groups on easy instalment terms at a fifth of the retail price. The reply from Colombia indicates that, poor as they are, the "marginados" are expected to contribute something to the purchase of the television sets. In Tunisia, duties have been removed from the importation of television sets.

STAFFING AND TRAINING

An impression left by a number of replies is that, by professional standards, the training and provision of staffs producing and presenting the programmes, is rather inadequate. Not entirely typical is the project run by a single professional broadcaster with the help of a small and largely untrained team. Here, as a contrast, is the staff complement for a well-run daily half-hour literacy programme on television in a developing country:

(i) Administration: 5 persons (with university entrance certificates or university degrees)
(ii) Maintenance and running of equipment: 6 persons (with technical diplomas)
(iii) Procurement of programme materials: 3 persons, (including 1 documentation specialist)
(iv) Teaching functions:
At the creative and programme production end: 13 teacher-producers - including 5 college professors and 6 school-teachers (some of the producers also act as presenters or "screen teachers")
At the receiving end: 60 teachers from the Ministry of Education responsible for evening classes at the literacy centres. They are backed up by inspectors, regional commissioners and social education organizers. These teachers attend training and refresher courses.
Research: 6 permanent staff, under an educational psychologist who occasionally uses students from the National College for Social Service for field inquiries and data analyses.

In practice, this provision is not over-generous and staff are used to their full capacities. The programmes are of good professional quality, and are videotaped on the equipment of the national television network which also of course broadcasts them. It is interesting to compare the provision here at the receiving end with that for a project on a much larger scale - the Telescuola literacy programme in Italy. It was backed up in the field by a large corps of specially trained people - 2,000 teachers (didactic directors), and 200 local inspectors, and it was looked after by fifteen senior inspectors of the central administration. This sort of provision is of course only possible for really major projects. Staff training for more modest schemes is usually done locally, sometimes with the help of outside experts from Unesco or through bilateral aid, though in one or two cases training was given abroad. Some of the training mentioned sounds extremely short e.g. in one case three weeks for training those responsible in their turn for training unpaid local group leaders. In the replies to the questionnaire, only that from Guatemala mentions the use of a special training centre. Only one report refers to co-operation from the national professional broadcasting and cinema school: in Yugoslavia, summer schools for teachers using television literacy broadcasts are being developed with the co-operation of the Academy of Theatre, Film, Radio and Television,
Training seems to be a field in which well-established broadcasting organizations could give more help to the expanding effort of developing countries in using radio and television in literacy work.

**RADIO OR TELEVISION?**

A number of the replies to the sections of the questionnaire on methods and materials enable one to fill out the picture of what is done at the broadcasting and the receiving ends and by whom and why.

Very few of the replies comment on the relationship between the use of radio and television. Where both are used, television is very much the senior partner. In Tunisia, the radio lessons follow on the previous evening's television transmissions in the off-peak morning period and are complementary and radiophonic versions of these transmissions. The reply from Jamaica goes into the greatest detail about the functions of the two media. If radio and television did not at the time of writing carry the main teaching burden there, they soon would do so (i.e., by October 1969). The reply continues: "All subjects and teaching functions are allocated to radio and television. Even writing is taught on radio during the course of the first book ("Our Class and Our Family"). We are doing this because we think that every subject can be taught with success on radio and television". Both radio and television in this Jamaican project follow the same general programme pattern: (1) Introduction (2) Motivation/Information (3) Reading (4) Word Building (5) Writing. But, the Jamaican reply stresses that, if the teaching content of the lessons are the same, the treatments in the radio and television scripts, even though written by the same presenter, are done separately and are quite different. The reply concludes:

"The main differences between radio and television programmes are:
(a) the use of short films or skits in the motivation part;
(b) the use of animation films as a break between the different parts;
(c) a greater use of word games, especially crossword puzzles (even at an early stage);
(d) the use of numerous captions, visual aids of all kinds (charts, graphs, slides, scale models, flipcards, etc.)."

It was exceptional for radio and not television to be chosen for literacy work, where both were available. The reasons for this choice are not stated, but it seems safe to assume that they are basically economic, as shown by the reply from Congo (Brazzaville) quoted in Chapter I. Cost is given as a factor against the use of a special technique, radiovision, as this isolated reference to it from Central Africa indicates: "For adult education we have so far used radiovision, . . . Though effective, these filmstrip projections are expensive and for this reason we shall not, without outside help, be able to install them in all the adult education centres now being established." Equipment for radiovision is of course cheaper than that for television. One of the surprises of the inquiry is indeed that this way of combining broadcast sound with still picture projection is virtually disregarded in literacy work. Some of the ways in which, according to the replies, visual material are used at the receiving end by instructors in conjunction with broadcasts, are a sort of radiovision of a less pre-controlled kind. An example is the project in Iran. Here pictorial illustration backs the radio message so as to increase visual and auditory memory. The instructors are supplied in advance with pictures. Radio lessons begin with the dramatization of a subject from the week's work in the conventional literacy course for face-to-face classes. Ten sentences with new words are then read at slow dictation speed, while the instructor points at a wall illustration. At each new word, a bell rings and the instructor underlines the word heavily in red. (The Jamaican radio project uses chimes to alert the monitor of impending action.) The ten sentences are read again with the bells. The broadcast ends, down comes the wall chart and the instructor begins the follow-up lesson. The Iran reply refers to broadcasts to give "légalguidage" or "remote-control" guidance to teachers. Part I of each teacher guidance broadcast begins with news of literacy and the campaign, and topical items of interest to the teachers; Part II gives advice on running a class on functional literacy according to project standards, and the use of audio-visual aids (in which all the teachers also followed three courses in 1968-1969); Part III is a live broadcast of a pilot-lesson in an actual teaching situation, a sort of "Radio-vérité" with the microphone following the master and catching pupils' replies, accompanied by a brief running commentary.

**THE BROADCASTING END-METHODS, MATERIALS, EXPERIENCES**

The information in the replies about methods used in devising and presenting programmes, particularly the television courses and series, is often detailed and informative and reveals some vivid and interesting contrasts. It is not however easy to generalize from the examples given. It seemed better therefore to let the reports and replies speak for themselves. Here then with copious extracts from replies and first-hand accounts, are some of the experiences of producing broadcasts for literacy work.

Some of the programmes described show considerable ingenuity in seeking to motivate and interest ordinary people, none perhaps more entertainingly than an earlier example from Brazil where the great footballer Pelé took part in a film for the opening programme of the TV Escola project, of the do Anaral Foundation. The lesson's theme and
indeed that of most of the course was football. In the film Pelé is seen to fall and as he gets up, he holds in his hand a book - his autobiography "I am Pelé". The screen teacher then underlines that Pelé, a man of humble origin, can read and write and has even written a book, and he then begins the lesson. At the end the music of a Brazilian "samba" is used for revision, based on the vowels 'a, e, i, o, u', and the football match returns to the screen, in a sequence (recalling George Méliès and the birth of the cinema) in which the players have letters instead of numbers on their backs. The "score" of the match provides the lead-in for the arithmetic lesson. An accident on the football field and the administration of first aid introduces the third part of the lesson on health.

The Yugoslav programme "ABC by Television" employs the technique of the TV serial, in order to compete with the entertainment programmes. The story is told, in episodes, of an illiterate woman, who leaves the country to live in town, her difficulties in everyday situations, her struggles and her triumphant mastery of the power to read and write. The Yugoslav reply also tells of a follow-up campaign there called "100 Village Action". In reporting this, the use of radio recordings and television cameras help to make a literacy competition into what sounds like a first class broadcasting and journalistic event.

The United Arab Republic television literacy project "The Future Begins Now" is an example of a scheme run entirely by a major national network and as such presents a number of interesting features. The project was evolved under the close supervision of a distinguished academic authority, Dr. M. R. Khater, Professor at the Teachers' College described as "an expert in stamping out illiteracy in the Adult Education Centre at Sirs El Layyan". The working team of literacy project supervisors had been professionally trained in educational broadcasting techniques in the United Arab Republic and at the Centre for Educational Television Overseas in London from 1964 to 1966 during two earlier programme series of an experimental character. Both academic and broadcasting expertise was used in transforming the subject matter of the national literacy programmes into television scripts bringing in all the audio-visual aids to put across the lessons to the student in a useful and interesting manner - films, slides, dramatizations, cartoons, puppets and so on. The team trained the "screen teacher" in television presentation techniques and the use of demonstration materials - those already listed and the blackboard, flannelgraphs, mock-ups, captions, cubes, back-projection, still photographs, etc. Selected after a camera test, the screen teacher is a member of the staff of the Dar El Ouloum College of Cairo University, with a doctor's degree in the Arabic language. The following is a first-hand comment on "The Future Begins Now" by an expert from Unesco:

"The whole scheme of the project which started in November 1968 was most conscientiously worked out. The organizers took into consideration the results of two scientific experiments with television literacy lectures carried out in 1964-65 and 1965-66 and subsequently evaluated by the experts of AS FEC. The main objective of the project was to give the students (illiterate workers and peasants) the standard of the fourth form in a primary school through a total number of 90 television lessons. Besides teaching reading and writing, the programme was aimed at "combating social and political illiteracy". The television course was designed by AS FEC specialists under the supervision of Dr Khater. Three books entitled "We read and write" were prepared to accompany the lessons and to provide guidance for follow-up exercises. The lessons included topics of general interest to the widest possible audiences and covered various working and social situations. Television lessons lasting half an hour were broadcast three times a week. I saw two video-taped programmes which were technically well produced and included dramatized sequences and illustrative materials. Short dramatized scenes were used for motivational purposes. Some of the words mentioned in the dialogue were used in the repetition of previous material, after which a television teacher presented a new topic illustrating new words to be written during the lesson."

The same expert provides an interesting comment on a sound radio project for literacy teaching in the UAR. He writes:

"In March 1969 the Department of Education Programmes of U.A.R. Radio started a new project which was both interesting and controversial from many points of view. Radio programmes of 15 minutes' duration are broadcast 6 times a week and directed to individual listeners. No supplementary printed material is utilized and the whole method is based on the verbal description of Arabic letters. The only things that the listeners have to acquire are a mirror to check pronunciation, a pencil and a note-book. Sound techniques, elaborated by Mr. Kamhawy (the teacher and radio producer), include songs, sound effects and explanations of the various components making up compound Arabic letters. Mr. Kamhawy and his colleagues are very enthusiastic about this method and believe that this unusual way of teaching reading and writing is suitable to the specific characteristics of the Arabic language. Listeners are supposed to prepare home exercises in two copies, one of which is sent to the radio station and the other remaining in the listener's own note-book.

On the recommendation of the radio teacher, the listeners have to find someone to help them in checking their homework. This person could be a member of the family, a neighbour or a volunteer instructor etc.

For the purpose of checking the progress of listeners and the effectiveness of the radio lessons, a special control course has been established in the radio station whereby some 30 to 30 representatives are invited to listen to the radio programme and do their exercises in the normal way for subsequent study and evaluation by Mr. Kamhawy.

The teaching methods used in this course have been strongly criticized by various pedagogical authorities in the UAR but the Unesco expert feels that it possesses some valuable features. He continues:"
"It is interesting to note that 70% of the listeners to these courses are women, who could not otherwise be reached outside their home. It is also important that the listeners are assisted by wide sections of literate people which means that radio creates contact between the literate and illiterate, forms a favourable climate against illiteracy and mobilizes new teaching resources."

The Tunisian literacy broadcasts illustrate the formula we have referred to of a joint set-up provided by a national educational body (the Institute for Adult Education) and the national network (Radio-diffusion Television Tunisienne). As was seen, sound radio is used to complement the television lessons. What might be called the general method and philosophy in which the producers conceive the programmes is formulated in the following manner in their reply to the questionnaire.

"Besides the instructional broadcasts (reading, arithmetic, history, geography, civic and religious instruction) we put out programmes of an educational and general cultural nature. These broadcasts touch the adult in three main centres of interest - in the family circle, in the social and professional milieu and in confronting universal problems.

The educational action is based essentially on three sorts of interrelationship - adults to adults, adults to children, and adults in charge to subordinates - and equally on problems of mutual aid and solidarity at the level of the family, of the nation and of the world."

Examples of how this works out in practice are:

the study of the letter "R" in Arabic is used to discuss savings, the reasons for them and how they work: "M" in Arabic provides the opportunity for discussing the geography of Tunisia and its relation to Africa and the rest of the world: "N" is illustrated by the development, economic and touristic, of the south of Tunisia: other letters lead to discussion of the United Nations and Unesco, human rights, the conquest of space and the solidarity of the human race.

Another expert sent by Unesco writes of the production of television broadcasts in Tunisia:

"Predominantly, the instructors at the broadcasting end are teachers from the primary or secondary schools or less frequently from the university or teacher college, who have been trained in the handling of radio or television techniques and presentation and are in effect teachers turned broadcasters. I found them persons and telegenic and professionally competent. In Tunisia, as in the UAR programmes are video-taped. In the Tunis studio, which RTT allocates for two days a week to this activity, I saw the recording of three programmes in one day by the team, all in their twenties. The skill and enthusiasm of this team, mostly trained by ETT with the help of Unesco experts and others from Italian and French television, and their ingenuity in using the relatively limited materials was impressive. Nevertheless, their programmes could probably greatly benefit from relatively modest additional resources - more studio time, for example, since programmes are little rehearsed before being taped. The team has no film animation equipment but quite good animation of simple arithmetic processes is achieved with an ordinary 16 mm camera. But clearly the use of animation in the programmes could be greatly enlarged if the necessary facilities were available."

The reading and writing and the arithmetic programmes I saw were all enlivened by opening dramatized sketches simple but lively and dealing with the sort of everyday situation which stimulates argument and discussion after a broadcast.

Where they kept to simple exposition enlivened by brief sketches, the programmes were, I thought, excellent. More ambitious programmes (on the solar system for example), were rather less effective because they went beyond the available resources in filming and other processes.

My overall impression was that the careful preliminary research and the prior production and use of experimental programmes and the creation of a well-knit team of young teacher-broadcasters was paying off very amply."

An interesting sidelight on the structure of a televised literacy lesson in French is given by a comment on an earlier experiment in the Ivory Coast (1964-1965) by a Unesco expert:

"After a two-months' period of adaptation, the structure of the televised lesson was as follows:

<table>
<thead>
<tr>
<th>Language combined with reading</th>
<th>15 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arithmetic</td>
<td>10 &quot;</td>
</tr>
<tr>
<td>Reading (revision of letters and sounds)</td>
<td>10 &quot;</td>
</tr>
<tr>
<td>Reading (exercises in analysis and synthesis)</td>
<td>10 &quot;</td>
</tr>
<tr>
<td>Reading (presentation of the new letter or sound)</td>
<td>5 &quot;</td>
</tr>
<tr>
<td>Written exercises (writing, dictation of words, arithmetic)</td>
<td>10 &quot;</td>
</tr>
<tr>
<td>Reading (words, texts on material just learned)</td>
<td>15 &quot;</td>
</tr>
</tbody>
</table>

total 75 minutes

The complete broadcast was given by one of two teams, working alternately and each composed of an elementary teacher from the French Technical Assistance and an Ivory Coast educator. They presented live broadcasts, using copious visual material pinned on a felt board. Apart from letters and figures, this material included:

- strips of thick paper, 45 x 9 cm, on which were written words, phrases, complete sentences not exceeding 20 letters, spaces or signs; limit of legibility: 6 m, from a 59 cm screen;
- drawings on white cardboard or straw, half-page Ingres format, made with a black left pen, often with colour-wash background for emphasis;
- photographs, format 24 x 30 cm, or 30 x 40 cm, cut out if the background was too prominent.

The purpose of the illustrations was to make the written words and sentences, and the reading or grammatical problems, easier to grasp. The models of written exercises were shown by the "VuGraph" method. A dozen texts from the book were illustrated by a short silent film accompanied by a synchronous reading of the texts off-tube: for the language lessons, the method of live dumb show performed by the teachers was often used."

Experiences in the United States offer both contrasts and similarities with those in the Ivory Coast and Tunisia. Here there is the problem of an appreciable minority of illiterates and semi-literates within a community with a very advanced system of audio-visual communication. The effort is, as we have seen, based more on local government or academic initiative with sometimes

1. From "Learning to read by television" by Jean Mayer, EBU Review (November 1965) 94 B. p. 54.
contributions from Federal funds. The most interesting prototype is the series "Operation Alphabet", begun in Philadelphia and used widely throughout the country. In "Operation Alphabet", great stress was laid on the personality of the television teacher and eventually Dr. Alexander Shevlin, a professional broadcaster and former high school teacher, was chosen for this rôle which he filled throughout the series. He met all the various criteria, for the job, including the ability to establish rapport with the viewers, mastery of television presentation techniques, particularly what is called the "eye-to-eyeball" technique of looking directly into the camera as much as possible and skill in explaining difficult parts clearly and encouraging students with patience, humour and a modicum of praise (and never censure). Using research by the organizers, he was able to anticipate and respond to questions the viewers might want to put.

Each of the hundred half-hour videotaped programmes of "Operation Alphabet" aimed at presenting a story composed of three or four sentences. The stories were related to everyday life, transport, food and so on. The screen teacher wrote the texts in large well-spaced manuscript hand characters on flip charts. Programmes began at the stage of complete illiteracy and progressed in difficulty every twenty programmes or so until the conscientious student could be expected to reach a third grade reading and writing level by the end of the whole course. For four days (usually Monday to Thursday), a few new words were introduced for sight recognition each time and one new script letter brought in to the practical writing part. The fifth day programme (Friday evening) was a revision lesson. The sentences were broken down one by one into words: key words were recognized and stressed; and then broken down into syllables, sound and letters. The course was planned to present content in small learning units of gradually increasing difficulty at a slow pace with frequent repetition. This is essential, because the student cannot ask the screen teacher to go more slowly or to pause and the teacher must generally allow for variations in the individual viewer’s pace.

Other features of "Operation Alphabet" were the use of a well-planned multi-media pre-publicity campaign run by an advertising agency both to stimulate community involvement and promote student enrolments; and care in evolving lesson scripts which combined experience in adult teaching and television production, and were adapted with the help of professional television writers and producers.

A report from Algeria gives a useful insight into how a different sort of literacy course on television for adults, was begun there at the beginning of 1969. Two years of contacts, talks, and exchanges of views between the Algerian National Broadcasting Service (R.T.A.) and the National Literacy Centre (C.N.A.) culminated in the launching of a series of four weekly literacy transmissions in Arabic, broadcast on the national network. This network, which is being rapidly extended to cover the whole country, reaches large audiences and has a big impact on illiterates. It is for this wide public audience that the television literacy broadcasts have been conceived. The programmes form part of campaigns using various other media - films, photos, filmstrips, panels, posters etc. - and are prepared jointly by the Audio-visual Section of the Pilot Project and the Arab-language specialists of C.N.A. Each lesson has one part on language, one on reading and one on writing. The Report, written by Marcel Herz, continues:

"Each broadcast has a theme linked to the interests and activities and the daily life of the majority of viewers.

The first effort towards making the programmes functional relates to the choice of the themes and problems to be used as the basis for the lessons themselves. During a second phase, we anticipate extending each lesson, expanding its scope to bring in technical, historical, scientific, economic and social aspects arising from the theme of the programme. So the broadcasts will evolve and be enriched progressively. It was decided in fact to start off this literacy television programme quickly, even if the definitive and ideal formula hasn’t yet been hit upon.

It is not a question of a series of broadcasts of limited duration, but a continuing programme which will in time find its content and its form and in the light of viewer reactions and educational evaluations.

The lessons in language, reading, writing are based on the mixed (or semi-global) method which begins by presenting a real situation on film, then by fixed image (photographs or stills of the real situation), then codifies it through drawings, and leads on to the global introduction of the sentence, then of the word.

Once prepared, each lesson is handed over to the technical unit which makes a shooting script from it, and produces the broadcast. The audiovisual specialists of the C.N.A. follow this process throughout. The aim is indeed to comply with both teaching and technical requirements. It is not a matter of filming a traditional class, or a course run by a master, but of expressing oneself in a television language which uses all the medium’s resources and all the effects of visuals and sound and even certain technical artifices. One must make the television tube "speak", as the technicians put it, and "get all it has out of the machine". This is why wherever the need arises, we use close-ups, superimposed images, repetitions, and all the tricks which along with the key figure on the screen enable the unseen technical Manipulators who are his true accomplices to contribute effectively. For this reason, a special set has been conceived and built in the studio for the sole use of these broadcasts so that a number of cameramen can operate simultaneously thus giving the producer a bigger range of pictures and allowing a greater flexibility in choosing from them. Apart from this, specialization on the part of the cameramen (by using always the same teams) lends a particular form and a necessary uniformity to the broadcasts. Here again, the cameramen are not merely "picture-fixers" but are led step by step to understand the pedagogical aspects of their work."

In Mexico as in Algeria, the broadcast use of television is part of a general audio-visual programme. Responsibility for using the mass media in literacy has for some years been assigned to the Dirección General de Educación Audiovisual,
a department of the Ministry of Education which produces and supplies to schools of all kinds a great variety of audio-visual material such as posters, maps, slides, models and films. The following is a first-hand account by a Unesco expert of the television literacy course in Mexico:

"Yo puedo hacerlo" (I can do it) is the title of the literacy course and of the combined text and workbook produced in 1944. The same book is being used for direct group teaching as for radio and television five times weekly, Monday through Friday. It was produced by a small group of less than ten specialist teachers and "evaluated" or rather tested on about 100 adult students in the Centro de Experimentación de Educación Audiovisual during several months in 1965. Although used for direct teaching as well, it was especially designed for listeners and viewers studying on their own or in small uncontrolled groups. The "evaluation" or rather the testing was carried out with the help of monitors working with the students in controlled and supervised classrooms. All these students are said to have learned to read and write.

Only then were the final radio tapes, kinescopes and videotapes made in commercial studios free of charge. All audiovisual material included in these programmes was produced by the Dirección General de Educación Audiovisual as part of its normal activity in its own studios. One of the television chains is more public-spirited than any others. Among its contributions was a gift of 160 videotapes.

The printed course is divided into 80 lessons, though this same material has been gradually re-grouped to represent 90 kinescopes or videotapes and 114 radiotapes. Each campaign takes 5-6 months to run. At present — March/April 1969 — the seventh campaign is being prepared.

Each lesson normally lasts 27 minutes, and is designed for adults, though some children are known to follow the course. The radio version uses two to three voices. The television version is built around the female teacher and only very occasionally are other voices heard — sometimes as part of filmed inserts relevant to the text of the lesson. As mentioned, the breakdown of the course with regard to classroom, radio or television teaching varies.

Taking television as the example, this is the system: Part One has some 6 lessons dealing with vowels. Part Two has about 44, concerned with consonants. Part Three has about 24, studying syllables. Part Four uses some 15 lessons to impart confidence in the reading and writing of normal texts and the use of capital letters.

There is one lesson solely devoted to the alphabet. The letters used are printed ones, avoiding the teaching of two alphabets.

At the end of the textbook there is advice to persons who might act as auxiliaries to individual students or even groups.

The television teacher's personality and skill are good, her part in the learning process is designed to be preponderant and she employs well the usual visual aids. She is supposed to establish a "warm personal contact with students" and to act as a sort of fairy godmother and conscience.

The film sequences try to provide additional motivation by emphasizing activities from the daily life of country people. Just before the end of the lesson the principal scene or theme of the day shone brightly. The idea was to give pupils a sense of mastery and the device was called "The Table of Conquests". There was also a magnetic blackboard on which the screen teacher could put together visually clear, cut-out letters. He also had a projector for the writing exercises. With this he could show the correct hand position. While this silent demonstration proceeded, classical music was played. Finally, there was a robot figure who appeared from time to time during the lessons, and who spoke with the voice of an actor off-screen. He became a sort of amicable stooge for the screen teacher, repeating letters and words after him. Other devices added later included the projection of transparencies, blow-ups of pages from the instructional manual so that all alike, the masters and the pupils in the back rows, could read together in comfort; and simple cartoon short sentences. In the latter section of the course these might not have been printed fully in the textbook. She then writes the sentences for the students to check their own work.

Students are given small tasks of reading and writing to complete before the next broadcast."

To round off this series of impressions of literacy courses at the broadcasting end, it is interesting for comparison to take a second and closer look at the programme production aspect of one of the major enterprises in this particular field of educational television - the Italian series "Non è mai troppo tardo". Broadcasts for schools began in Italy in 1958, but new sorts of problems were posed in 1960 by the need to produce television programmes for adults and, even more, to get these adults to follow the courses, particularly the two million or so of them who had so far escaped the well-constructed "net" of the Central Service for Popular Education. The audience aimed at was largely an elderly one, composed of people who had to take time off from their work or family cares in order to attend the broadcasts. Moreover they were usually too poor to own a television set. The thorough and well-planned arrangements for group viewing and group evening schooling we have already described were therefore essential.

As in "Operation Alphabet", the qualities of the screen teacher were of prime importance. A primary school teacher, and carefully selected, had to be someone able to communicate simply and engagingly and sketch quickly and wittily before the cameras. All the spectacular potentialities of television were put to teaching ends. No students were brought into the studio, as in the case of the Tunisian programmes described earlier. For the Italian project, various special pieces of apparatus were devised, one was a luminous ABC table with each letter of the alphabet, and one or two difficult letter combinations, arranged in boxes, and for each lesson a different letter and illustration in the middle. At the end of each lesson, the letter for the day shone brightly. The idea was to give pupils a sense of mastery and the device was called "The Table of Conquests". There was also a magnetic blackboard on which the screen teacher could put together visually clear, cut-out letters. He also had a projector for the writing exercises. With this he could show the correct hand position. While this silent demonstration proceeded, classical music was played. Finally, there was a robot figure who appeared from time to time during the lessons, and who spoke with the voice of an actor off-screen. He became a sort of amicable stooge for the screen teacher, repeating letters and words after him. Other devices added later included the projection of transparencies, blow-ups of pages from the instructional manual so that all alike, the masters and the pupils in the back rows, could read together in comfort; and simple cartoon
sequences, or sequences using hand manipulated cut-outs. Other films, from the film libraries or specially shot were used, as well as dramatic sketches, using two or three actors and lasting up to seven or eight minutes. A special sort of playlet was brought into use in the second year of the scheme. Correspondence and field observation had shown that pupils of the first course who had learnt the letters and word formations still had difficulty in reading. These little sketches, running for about ten minutes, were a way of making them do a regular reading exercise. The silent film technique was used, with sub-titles giving the action. These sub-titles were very brief, appearing on the screen for about 30 seconds and using letters and word formations of gradually increasing difficulty. The viewers had to concentrate on the sub-titles to understand fully these little silent comedies. The class teachers in the field had received the list of sub-titles in advance so as to help them to prepare the pupils to read them. In addition, the screen teacher stopped the film at the end of each sequence to explain the more difficult words in the sub-titles.

The examples we have quoted of methods and materials used at the broadcasting end reveal then a variety of approaches. But there are some interesting common strains. One of these is the importance of the personality of the broadcast teacher. This is especially true of television where the rapport the screen teacher establishes with the students, his powers of expression and exposition and his mastery of television presentation techniques seem to be basic factors. The importance of television techniques of scripting, editing and direction and of "translating" lesson content into television materials is a further point from the replies and well expressed by the Algerian report when it refers to "expressing oneself in a television language which uses all the medium's resources". Many of these replies refer to a particular aspect of this - the use of little sketches or dramatized incidents whether in the studio or on tape or film. But a number of other broadcasting techniques and types of programme are described in the replies and reports. In Yugoslavia, as we have seen, the technique of the television serial is used. From Cameroon comes an illustration of the use of the same technique in sound broadcasting. According to a report from Western Cameroon, literacy radio lessons seem to have been conceived in a most lively manner. Not only have the dialogues been given a local flavour related to everyday life, but each lesson begins with a sketch using sound effects and the same characters who return from lesson to lesson so that their adventures, week by week, build up the excitement and appeal of a radio serial. The value of this technique on television has of course been demonstrated in a related field - the teaching of modern languages to literate adults. The sports type of programme can also be made to contribute. As we saw, football helps literacy in Brazil, and other sports may be brought in. The Unesco expert, already quoted, on literacy in Colombia observes: "Radio Sutatenza carries on systematic but indirect propaganda (that is to say, slipped into various sorts of programmes) for basket ball, and while I wasn't able to assess the results, I had the feeling that radio was contributing in this way considerably towards modifying the attitudes of the young 'campesinos' to this sport, which, given the small playing area and simple equipment it calls for, is very suitable for the mountainous regions of Colombia."

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speech not lend themselves to any sort of ambiguity and must call for one single possible response from viewers.

(3) Finally, each programme was planned as a succession of linked sequences following on each other and composed of: a filmed section for worker education or technology shot usually in the factories. (Into this sequence were built the structures of the oral language, in French); exercises derived from the filmed situations in the preceding sequence so as to enable structures and vocabulary of the spoken language to be acquired; reading and writing exercises, based on words from the working life of students and selected from the first sequence; doing sums, related to aspects of vocational training shown at the beginning of the broadcast.

With this same flow of sequences, each programme as a whole provided a phase of vocational training and specialized education.

But while recording these broadcasts took several days work and seemed interminable, the viewers on the ground always followed them attentively and with no sense of fatigue. One should add that these literacy programmes had their own particular style and had been designed for the active participation of viewers, which is why no doubt they held the audience's attention.

This is perhaps the most original feature of these television literacy programmes. This flow of purposive exchange, obtained quickly between screen and viewer. The teaching was essentially a dialogue. It was unthinkable that television teaching should be this sort of activity can assume very impressive

This question of the "dialogue", as the Senegal report so aptly calls it, between the broadcaster and his audience is of course a basic one, not only in using radio and television for literacy work but in educational broadcasting generally. This brings us to what happens at the receiving end, the materials and the methods used there and the degree of feedback.

One way of creating some sort of two-way traffic between student and screen teacher is through stimulating listeners and viewers to write in, and organizing proper replies to their letters. That this sort of activity can assume very impressive proportions is shown by the experience of radio Sutatenza where, at Bogotá, a staff of about fifty is engaged in dealing with such correspondence. In reporting this, the Unesco expert writes that besides complementing teaching by radio, they aim obviously at strengthening the closely structured network covering the whole country. For someone emerging from illiteracy the achievement of writing a letter and reading a reply from some prestigious centre of interest cannot fail to take on a special significance. Under "Operation Alphabet" in Philadelphia, the practice materials included a weekly sheet on which the viewer was invited to write a letter about the lesson or about the course and to post it back to the Board of Education. With the same course, "Operation Alphabet", in New York City sample viewers were invited to telephone in their comments. We return below to the results of this form of feedback. The student must of course receive a reply. He may also be encouraged by seeing the suggestions he has made influencing the content of future programmes, as happens for example in Laos, and Congo (Brazzaville) among other places. After referring to the method whereby the student may write directly to those running the radio literacy broadcasts to ask for further information and explanations, the reply from Congo (Brazzaville) goes on: "A monthly broadcast called Courrier des auditeurs ('Listeners' Mail') picks up the main points in these letters and replies to them and so helps create a closer contact with listeners. On several occasions, new programmes have been produced on the basis of listeners' suggestions. For some time, we have been studying a system for recording listener group discussions and putting them out on the air so that listeners can hear their own voices and learn how good discussions can be conducted."

Where courses are followed in organized centres rather than in the home, the key figure at the receiving end is the "animator" (to adopt the equivalent of the French term animateur), just as the screen teacher is the key figure at the broadcasting end. This animator may be a full-time and fully trained teacher, professionally qualified to work with elementary or primary school grades. But most often he is not a professional teacher but a special type of "monitor" or "supervisor" or "group leader". He may work full- or part time and, while he is usually paid for his work, one or two replies give examples of voluntary, unpaid labour. In any case, this new kind of educational, auxiliary represents one of the most interesting and significant aspects of broadcast-based literacy instruction. With so many grave and acute shortages of qualified teaching personnel in developing countries, his importance economically - and indeed socially - and the need to study and care for his needs can scarcely be exaggerated. A good idea of the nature of his work is given by this
account written by the Unesco expert visiting the United Arab Republic:

**Work in the viewing centres is supervised by monitors (or prefects). These are usually people who, although not possessing special pedagogical backgrounds, are nevertheless enthusiastic for public service and especially in the field of combating illiteracy. The requisite age for this personnel is not less than 30 years in order that they may deal with adult students.**

All the monitors were given practical training through television. This proved to be very economical as travelling and lodging allowances were eliminated and the training itself did not affect the daily work.

The monitors in the viewing centres prepare the students for receiving lessons, conduct thirty-minute discussions and follow-up work in reading and writing and revise the previous lessons. They also fill in the feed-back forms concerned with the reception of lessons, attendance etc. which are subsequently used by evaluators for analysis and statistical studies.

The two-way traffic between the broadcasting and receiving ends, and indeed the success of literacy broadcasting for group reception as a whole, would seem to owe much to the infrastructure of group organizations available for use with the broadcasts within the general pattern of community development. The importance of this is brought out in replies and reports from a number of countries. The Indian project "Farmer training and functional literacy" illustrates a particular aspect of group organization. The broadcasting component in the project will, one gathers, be built upon a development in India which has now become well known internationally. The radio farm forums, a system of discussion groups formed around the reception of rural programmes, first developed in Canada. How these forums spread throughout India has been described by B. P. Bhatt and P. V. Krishnamoorthy(1). 

In 1965, when they wrote, the project had spread over the previous decade from a few villages to "become a living reality for almost 10,000 villages", and was increasing yearly. Reference has already been made to the farm radio broadcasts planned by All-India Radio under the new project. The purpose of this project is described as "to assist the Government of India in its High-Yielding Varieties Programme of food grain production through farmer training, utilizing farm radio broadcasting and functional literacy". Under the project, the Ministry of Information and Broadcasting will seek through All-India Radio "to intensify rural broadcasting in order to provide an educational basis for supporting maximum agricultural production and the functional literacy programme". To this end, adequate and efficient listening facilities are to be ensured. Along with the setting up of "intensive broadcasting units and provision of transmission facilities to feed homogeneous agricultural areas with problem-oriented programmes in which farmers can participate for developing an effective two-way traffic", "group rural listening is to be organized for adult farmers, rural women, and rural youth by providing a sufficiency of receiving sets for the stipulated areas". Existing radio discussion forums will be one basis for the proposed new Farmer Discussion Groups. Twice weekly farm radio forum broadcasts will be a focal point for convening the groups of farmers. Each group will appoint a convenor from its literate membership. Training the convenors and dealing with queries and group reports will be undertaken by newly developed farmer training institutes, attached in each district to an existing extension training centre, agricultural college or demonstration farm. Perhaps most significantly, this type of radio-broadcast-supported group is, one understands, envisaged by the Government of India as a permanent agricultural extension in the continuing modernization of Indian agriculture.

Discussion around a radio or television literacy broadcast forms part of most of the projects covered by the replies to the questionnaire. But materials at the receiving end both for group animators and for students do vary from, as we have seen, nothing more than a mirror and pencil and paper in one case to a range of visual and other aids in others. The RFD project of the University of Wisconsin proposes even to include some unusual forms of printed matter (bits from newspapers, phone books, magazines) as practice materials for students. In some cases, the use of radio or television forms part of a wider audio-visual or mass media literacy programme. Between them, the replies show that most of the customary aids are used in one country or another to supplement broadcasts at the receiving end - 8 and 16 mm films, filmstrips, flipcharts, flannelgraphs and so on and in a few cases instructors receive some training in the use of these aids and in creating such materials as posters on the spot. Predominantly the supporting materials for class and student use consist of printed matter - texts and pictorial charts. Mention was made in Chapter I of the mass circulation in Colombia of the Radio Sutatenza's magazine "El Campesino". In West Cameroon, students receive each fortnight an illustrated magazine composed entirely of strip pictures which take up the stories of the sketches used in broadcasts and provide simple exercises. Listeners pay for these publications which are said to play a useful supporting rôle and their entertainment value greatly helps to publicize the literacy broadcasts. Apart from text and workbooks, a most important medium associated with broadcasts is obviously the poster or pictorial wall chart. Considerable skill and ingenuity seems to have gone into devising some of these.

The main supplementary materials were of course the texts for students, either in book or sheet form. For "Operation Alphabet" in Philadelphia, practice materials for home students were issued in the form of separate sheets roughly

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In virtually all the projects there is evidence of some form of feedback which one reply describes as the "barometer of radiophonic action". Reference has already been made to the use of sample telephone reactions at one phase of "Operation Alphabet" in New York. Angelica W. Cass describes how a final test identified individuals, reached by and staying with the series, and having achieved minimal literacy and how 2,500 certificates were issued to those passing the test. She continues:

"A week after the mailing of the certificates, 1,000 names were selected at random from an alphabetical list of all those who had identified themselves by telephone, by mail order purchase of materials or by returning the final test. A letter was sent to each one, with an invitation to telephone the Department of Labor to express his opinion of Operation Alphabet. Three hundred and fifty-seven calls were received in response to this invitation. The calls were analysed by Douglas Scott as follows: Because the sample was composed of persons who had stayed with the program series, the responses could be anticipated. They had to do with hours of broadcast, the pace of instruction, or an early re-run of the series. All respondents felt that the series was worthwhile. Many reported that they were speaking for four or five others, and one-seventh of those who telephoned reported that they had watched the program on two stations each day. A further finding should be reported: Among those responding by telephone, nearly 90% were of foreign extraction, and the rest (10%) identified themselves as native-born Americans."

This particular approach to feedback is not paralleled elsewhere nor is the proposal of "Project Reach" in Indiana to use reactions recorded on film or audio or videotape, as well as written reports from all those engaged in running the project. In testing the reactions of illiterates to television programmes, the organizers of the Tunisian project hit on the ingenious idea of using a series of five caricatures of facial expressions as shown in Fig. 1 below. This was part of the very thorough system of feedback developed there.
The reactions of those who are still illiterate are however usually gathered by means of questionnaires sent to the instructors. Thus, in Iran two forms are used, one for the teacher's own reactions and one on which he enters the replies given orally by the student. Other types of questionnaires are used, e.g. in Guatemala, for visiting inspectors or supervisors to report on the conduct of the group and the use made of equipment. The gathering of data by questionnaires is supplemented by field officers' reports and by periodical meetings, weekly or less frequently, of field staffs and supervisors. It is encouraging that this essential process of feedback seems to be carried out on the whole seriously and conscientiously, and the results analysed and used in preparing future programmes. This type of analysis is done in the UAR by special feedback researchers, drawn from the staff of the Television Service.

Understandably, those parts of the questionnaire dealing with follow-up and results were less fully answered. Many of the projects were after all only beginning or still in progress or their first complete phases of operation had only just ended. But with regard to the assessment of results, there was another factor even where projects had been completed - lack of sufficient resources for adequately gathering and processing data on the results achieved. The problem was common to projects in all the regions covered, including the United States of America.

The importance of follow-up emerged from a number of the replies. Obviously, with adult students, the danger of falling back into illiteracy or semi-literacy is a real one. But in this context, radio and television enjoy one considerable advantage - their power to contribute to the social momentum towards literacy in the community. The new literate should not therefore be abandoned but encouraged to go on listening and viewing. In some countries, there are indeed special educational broadcasts aimed at new literates, and as we have seen, the Italian literacy programmes "Non è mai troppo tardo" have now been succeeded by general adult educational broadcasts. A valuable stimulant is of course emulation and the provision of incentives. This may take the form of competitions and prize awards of the sort already mentioned in Italy and Tunisia. But the terminal examination and award of a qualifying certificate is the most common end, and one would have thought most useful, form of incentive. Some projects give repeat broadcasts so that slow learners can catch up and have a second or third try at the examination. In Mexico, successful students are encouraged to go further and attend night classes and to take the more general Certificate of Primary Education. Most of them take these evening courses, though were it not for television few if any would have ever thought of doing so.

One of the most essential measures for follow-up is of course to ensure that the new literates are supplied with suitable reading matter. Some of the schemes, for example that in Congo (Brazzaville), send the literacy "graduates" of their two-year radio course, technical pamphlets and also a special newspaper geared to their needs.

If resources for evaluation were felt by many to be inadequate, their replies do nevertheless reflect a great deal of valuable achievement. Particularly striking is the evidence they provide of the low ratio of drop-outs for the courses. One case of an almost 50% rate of drop-outs is recorded but this seems to have been due to heavy over-selling of the courses in the preliminary promotional campaign on the national radio. For the rest, the proportion of drop-outs seems to have varied from 10% to 30% though instances of total enrolments actually increasing during the courses are reported. Where students stayed the course, the prescribed literacy achieved was pretty well total.

When one considers that the student bodies concerned were all of them adult and almost all voluntary and "non-captive", the low level of drop-outs is especially noteworthy. For, as various of the documents show, the pull of adverse circumstance is often very great. The factors listed as militating against regular study include:

(i) the times of the broadcasts were wrong, too early in the evening, or not geared to the shift system pattern. "The department boss" says one report "changes the employee from one shift to another, thereby making it difficult for him to follow his classes regularly". In other cases, the times have proved awkward in relation to work and leisure, coming too soon after the fatigue of work.

(ii) The seasons of the broadcast were wrong, overlapping with the cropping period or the rainy season.

(iii) The place can be wrong. The study centre is often a long way from the student's home.

(iv) The student may be a migratory worker who moves during the course.

(v) For women students particularly, the burden of household duties leave no time or opportunity for study.

(vi) For adult students, voluntary group leadership is sometimes not good enough.

(vii) Finally, they may be discouraged by lack of adequate materials.

Not all these difficulties arise in any one situation. But motivation has indeed to be strong to counteract, in such circumstances, fatigue, the difficulties of concentration and the desire for less tasking pursuits. Reading these various documents and papers one cannot fail therefore to realize that great steadfastness and courage must lie behind the achievement they record.

Of the general effect on the social life of the students in home and field and factory and on the community generally there was no doubt. It seems to have been invariably good in terms both of social behaviour and social productivity. In respect of the impact of the broadcasts on these factors, such
expressions as "remarkable", "précieux" (in French) and "positive" recur frequently. Some of the effects are indeed a little unexpected. In Guatemala, consumption of alcohol dropped and work timing improved, and in Tunisia, the evening literacy TV programme draws people from the terraces of the cafés. Not least important was the impact on public opinion and on the government in some countries.

LESSONS AND PITFALLS

The questionnaire ended with a section on the lessons learned, the best methods and materials and the pitfalls to be avoided.

The best and most successful methods and materials mentioned include: group listening and viewing and discussion; broadcasts well coordinated with the national literacy campaign as a whole; good and careful training of teaching personnel; rationally organized feedback; relating materials to the everyday life of the students; practical participation; and (in the case of television) the use of dramatic sketches. The need to bring into consultation and secure the co-operation of other national bodies was also among the points stressed in the replies.

Pitfalls to avoid include: the use of broadcasts in isolation; starting projects without the proper preliminary research or planning; the use of unsuitable personnel, especially untrained or inadequately trained volunteers; creating antagonisms between educators and broadcasters; using over-theoretical materials or those only remotely relevant to the students' interests; too many organizations sharing responsibility for projects.

There was almost total unanimity that broadcasting (radio or television or both) is nowadays essential to literacy campaigns, especially in developing countries.

There was also no doubt in most minds that, as far as literacy is concerned, radio and television can both help the teaching process and inculcate the main teaching message.
BASIC CONSIDERATIONS AND FUTURE PERSPECTIVES

Preceding chapters have shown how broadcasting is being used in the fight against illiteracy in a wide range of countries. Largely factual, the survey has nevertheless revealed - and to a greater degree than has hitherto been possible - the variety and interest of these applications of radio and television in literacy.

The time has now come to consider the significance of some of the points emerging from the survey in the light of our knowledge generally of the literacy process and the broadcasting media of expression. Three basic notions - literacy, broadcasting and adult education - and their nature and relationships would seem to be involved.

This is not the place for a detailed discussion of these relationships. But it may be useful to recall briefly one or two of them if only because, on occasion, they seem to be insufficiently understood or taken into account. To begin with, while literacy is a problem affecting great masses of human beings, broadcasting is the most powerful and often the cheapest and quickest means of communicating with such masses. It can also be the only one. Then again, and although it has other aspects - psychological, social and cultural - of great importance, literacy is in one sense an audio-visual process, involving the mastery of visual signs of significant sounds. Broadcasting, and especially television, is an audio-visual medium, and offers particular advantages in teaching an audio-visual technique. This is not a purely theoretical relationship, as some of the replies show. Finally, broadcasting and adult education have a certain degree of special relationship. Indeed, from some points of view, broadcasting is the main instrument of adult education in the world today. This is specially relevant to literacy campaigns aimed at reaching non-captive audiences of working adults in a framework of motivations, of organizational patterns, of methods and institutions which are more diversified and less rigid or traditional than those for formal schooling.

How do these and other characteristics of broadcasting connect up with the practical side of literacy campaigns?

The first point to note is one emerging from, or implied in, most of the replies. It is that the use of radio and television in literacy is only one of a great many such uses. In none of the countries covered by the present study was public broadcasting introduced originally or solely or primarily for the purpose of helping eradicate illiteracy. This may well have been among the grounds for doing so, but more usually it has been one of the beneficial by-products. Broadcasting forms part of the essential telecommunications systems of all countries in the world today. Its purpose is usually held to be threefold - to educate, to inform and to entertain. This is the pattern, though the emphasis on one or other of these three components may vary greatly from country to country. Inherent in any public broadcasting enterprise is the idea of a network, composed of transmitters and listening and viewing points; the latter can be multiplied pretty well indefinitely. The network is in effect an infrastructure and one peculiarly relevant, as we have seen, to adult education. Inherent too is the notion of programming, of providing a daily, weekly or monthly periodicity of output at specified hours. Many of the literacy courses both on radio and television referred to in foregoing chapters were part of this output and not something added outside normal programme times, as one often finds with school broadcasts. In other words, the literacy programmes are part of the output the broadcasting authority is committed to providing as a public service anyhow. A case in point is that of the television literacy programmes in Tunisia. These go out as part of the evening programme scheduled and are followed by many more ordinary viewers than those in the original classes. Certainly such literacy programmes inform, and there is also, as we have seen, reason to believe that they entertain, besides fulfilling their primary role of instruction. In this field of education, where the need to activate is great, the capacity of
broadcasting to make instruction palatable is highly significant.

The implications of this do not seem always to have been understood, especially their effect on the way we approach questions both of cost and of scale.

With regard to cost, it is obviously important to realize that, except in so far as the network (transmitters, receivers and the services needed for their maintenance) or any part of it, has been created and exists specifically and solely for use in literacy, these 'hardware' costs should, strictly speaking, fall outside literacy budgets. This can also be true of certain programme or 'software' costs where literacy broadcasts are part of the service to the public generally. Seen in this way, the costs of using the broadcasting media, especially radio, can work out much more cheaply than is realized. In some of the cases reported, the only provision at the receiving end is a cheap transistor radio for one person or a family or group. Basically, in such cases, the reception cost is a part of the cheap receiver and its upkeep, proportionate to the time spent on listening to the literacy broadcasts and total listening time. One must obviously avoid oversimplification, but it does seem essential to be clear about the assumptions on which costs are based.

In any case, overall costing is complicated in the audio-visual media and particularly so in estimating the returns from them. Understandably therefore, replies to the questionnaire on this subject had little that was concrete to offer and many stressed their need of more adequate resources for this type of analysis. There is indeed a general lack of data on this aspect of broadcasting in literacy. In recent years, the most useful inquiries have been the series of case studies covered in The new media: memo to educational planners(1). The cases described in it and the companion volumes deal largely with projects involving formal education or uses of adult education other than in literacy. One or two of the projects referred to in replies to the present questionnaire are however covered in these case studies(2). The cost analyses provided in these volumes do not, as far as one can gather, allow for the general public service budgeting provision we have referred to in the case of Tunisia and which applies in a number of countries covered by the survey. If they had, one suspects that the true costs of literacy broadcasting would be less than they calculate and even less than the lowest figures they give for school broadcasting - of the order of 5-15 cents per pupil hour for television, and 1 or 2 cents per pupil hour for radio(3).

Obviously, much depends on the scale of operation and hence, as Schramm and his co-authors point out for the projects they are concerned with, the replies to the questionnaire suggest that "the potential economics of scale have not been fully exploited". (4) There are limits below which the use of broadcasting becomes uneconomic, Broadcasting is after all one of the mass media. For teaching literacy at the level of a single industrial enterprise or for a small community, broadcasting is scarcely viable. This apart, it is not easy to generalize about what the lower limits are. But the figures given by the Director-General of Unesco for its experimental functional projects (70,000-250,000 adults) are well above the minimum limits acceptable for important minority audiences in quite major public broadcasting systems. (5) An important proviso is however that the target audience should be spread geographically over the whole network, or where regional audiences are aimed at, a regional network exists for that part of the country. Much experience has shown that minority programmes on this scale on both radio and television can popularize and teach fairly specialized subjects. Television is particularly suited to helping to teach the functional type of literacy, which consists of adult instruction in psycho-motor skills with a built-in literacy component. In saying this, one should however overlook another function broadcasting can perform, in some ways uniquely so. This is to combine instruction in literacy with the enrichment of men and women as full and effective members of their community who constitute after all the most precious of human resources.

It should be underlined that audiences reached by the projects referred to in the replies did not usually exceed 70,000 adults and were often far fewer. Another figure, for rural functional literacy projects mentioned by John Bowers, is 10,000 farmers. (6) This target figure is economically quite viable for radio and can be justified for television. Even in developed countries, figures of this order are acceptable for television for adult educational purposes e.g. refresher courses for medical doctors. However broadcasting is certainly not an economically justifiable instrument to use for projects whose targets, are according to Bowers "a few dozen operatives in a particular

1. By Schramm, W., Coombs, P. H., Kahnert, F., Lyle, J., Unesco IIEP, 1967
2. New Educational Media in Action: Case Studies for Planners; I - including The years of the radio rural forum in India; II - including Le Telescuela Popular Americana of Arequipa, Peru; and Teaching literacy by television in the Ivory Coast; III - including Radiovision as an aid to literacy teaching in Niger; and The radio schools of Honduras; and The Centro de Telescuela programme of Italy.
3. Ibid., p. 131
4. Ibid., p. 126
industry". But then neither would the production of any other sorts of media - even cheap print or posters - be justified for so tiny a slice alone of the world's eight million illiterates!

The questionnaire referred to the use of other media besides radio and television (Question Nos. 23 and 28). Most of these other media are, as we saw, being used in one way or another. But there was not as much awareness as one would have hoped of the concerted use of the so-called "new media"(1) though one would have thought literacy offered an interesting field for the "multi-media" approach which more and more educationists are favouring. This approach involves planning and using all the available instruments of teaching and communication in a well-co-ordinated fashion in which each of them fulfils the role best suited to it. There are clearly obstacles, particularly financial ones, in the way of doing this for some countries. As one reply to the questionnaire showed, adding to sound radio so simple a device as filmstrip projection (radiovision) can be beyond the present means of a developing country. Nevertheless, a number of replies did illustrate the advantages of concerted use of radio and television in a wider audio-visual complex of media. It was significant that some of the freshest ideas came from countries like Algeria which practices to some extent a "multi-media" approach.

To such an approach, broadcasting and especially television, is or should be the key factor. While sound radio is so much cheaper, television has the advantage of providing a synthesis of all the available aids to learning. It unites virtually all the other techniques, including the immensely flexible "language" of the film. Editing and such processes as animation, superimposition, stop and slow motion can be applied to literacy teaching within the framework of the immediacy and the personalized teacher-student rapport of good broadcasting. There was evidence that these potentialities are to some extent being understood. For example, certain replies underlined the value of the medium for the "teleguidance" of teachers and instructors in new methods. Television's power to demonstrate in this way new techniques and new methods is not the least of the advantages it bestows.

The influence of television on the quality generally of literacy education should also not be overlooked. The working party for the Unesco meeting on the Experimental World Literacy Programme held in Paris in December 1969 spoke of the necessity of providing exemplary "centres of excellence" for every literacy project. (2) In a different sense, a good television literacy lesson is of itself a "centre of excellence" whose impact can pervade the whole communications network of a country.

Quality obviously hinges on the adequacy of the training of those responsible for producing and using programmes. The replies suggested that training is one of the less satisfactory aspects of the use of broadcasting in literacy work. This may have particularly unfortunate consequences. Quality of communication is essential to what, for many observers, is the most characteristic feature of the audio-visual media - their role as "multipliers". These media, and especially television, multiply whatever is put out through them. Both poor quality and excellence at the source are magnified enormously. Investment in first class training, especially of creative and technical personnel, can therefore yield benefits quite out of proportion to the costs involved.

Fortunately, this is an area in which international co-operation can be especially effective. In reading some of the replies, one is struck by the value to training of the contribution of Unesco experts and those from certain countries. It is particularly heartening to find the younger technicians in some developing countries so anxious to explore and experiment with new techniques in teaching literacy, and wanting access to more knowledge of such techniques available in other countries. This is surely one of the most important of growing points.

SOME RECOMMENDATIONS

The survey has shown that broadcasting is making a valuable and in some cases essential contribution to literacy campaigns not only as a teaching medium but in other ways. It is clear also that this contribution could be greatly increased. With regard to this, two important lessons emerge from the survey:

1. Of the "new media", The Memo for Educational Planners, already referred to, writes: "This name, fortunate or unfortunate, distinguishes them from the 'older' media, such as the textbook or the blackboard. The older generation of media places a 'machine' in the communication process, in effect, to reproduce a teacher's writing for his students. The 'new' media place a machine or other electronic device in the communication process in such a way as to extend a student's sight and hearing through space and time so that he can actually see and hear the teacher or what the teacher wants to show him" (p. 13). The Memo goes on to discuss a still newer generation of teaching devices, in which the student uses a responsive machine - a printed programme, a teaching machine, a language laboratory - and practices by communicating with it back and forth.

2. ED/CONF. 53/9 Annex VI, p. 10. This paper mentions another important function of radio, covered in replies to the questionnaire, namely as "a way of disseminating the best fruits of experience via a sufficiently large but insufficiently trained group of instructors".
(a) all the various ways of using radio and television should be fully exploited in all countries with a sizeable problem of illiteracy;

(b) this should be done as part of an overall plan to develop the new techniques of communication for economic and social, and especially educational, advancement.

Putting available broadcasting resources to all useful purposes makes obvious good sense. All countries have sound broadcasting networks and the number of those with television increases steadily. Even seven years ago, Wilbur Schramm could write that a substantial number of developing countries had television and day-time (or other) screen time available for educational use,\(^1\) Since then, as the survey shows, the number of such countries has gone on increasing. These existing audio-visual structures, and others as they come into existence, can, as replies to the questionnaire have underlined, be successfully used in launching campaigns and creating favourable climates for literacy projects, in circulating information, in motivating students, in instructing them and their teachers both in fundamental literacy education and in specific work-oriented skills, and in eradicating illiteracy generally among groups and individual home students. Unless there are overriding reasons to the contrary, failure to use the broadcasting media in any or all of these ways would seem to be a failure to exploit not only the potential economics of scale but those advantages which can be obtained by diversifying the uses of available resources. The repercussions of waste in this area can be very wide indeed for broadcasting is an essential part of a nation's resources as a whole.

This thought was expressed, in terms which seem well worth recalling here, by the Meeting on Broadcasting in the Service of Education and Development in Asia, convened by Unesco at Bangkok in 1966: "Broadcasting should be considered part of the country's basic facilities like harbours, roads, electricity, for the provision of which funds are invested not merely for immediate and identifiable results, but which are rightly believed to promote a long-term increase in national production. As with investment in education, broadcasting resources should be expected to yield results in the form of an informed, motivated and skilled people, leading to the increased availability of productive manpower whether in urban or rural areas".

The use of the new technologies of communication as an integral part of wider national development is therefore sound, both economically and socially. In other words, radio and television should not be seen in isolation but in relation to national planning generally. This national planning should cover the use of all the various media of communication among which broadcasting will in the nature of things have a predominating rôle. A "multi-media" approach in education would seem to offer particular advantages in literacy projects. How this works out in practice will vary from country to country but some degree of centralized functioning would seem to be essential. Clearly, this poses problems administratively but these do not seem insuperable if an important principle is observed. Two sorts of skill are involved in using the audio-visual media in literacy work - those of the educators and those of the media professionals; the symbiosis between their two functions we have referred to is fundamental to success.

The survey suggests two further directions in which effort might be redoubled, at the very least. These are (a) research and (b) training.

**RESEARCH**

Many of the replies stressed the need for research. As to the kinds of research that are most required, we would suggest that inquiry into whether broadcasting eradicates illiteracy is no longer necessary, but that attention should rather centre on how best it can help to do so. There is a need particularly for research of the "action" type in which results are fed back continuously into planning and research.

Research into methods and also materials, both "hardware" and "software", is obviously called for.

One area of research which is fundamental seems to have been almost entirely neglected - the relationship between literacy teaching and learning and the specific qualities of the audio-visual media - the "language" of broadcasting, and the grammar and the syntax of screen expression. There is need for experimentation and inquiry into how the techniques of television (and film) editing and the camera movement and so on might best be used, and which of them are or could be the most effective in reinforcing learning in the field of literacy. Such experimentation might well include animation and reverse and slow and stop-motion cinematography and specialized see-through techniques for presenting letter and script formation similar to those used with great success in certain films on art wherein the artist draws or paints on glass screens facing the camera. Experiments of this sort might be undertaken in respect of the interpretation of language generally or of one particular language or language group. It would call for a new kind of creative co-operation between linguistic educators and experts and the professional communicators. This would be all to the good and might reveal new uses in literacy for the highly flexible resources of audio-visual expression.

As we have seen, replies to the questionnaire gave little evidence of a multi-media approach to literacy work. More demonstration and persuasion could possibly be useful in modifying attitudes. Experiment might serve to establish the value of

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the concerted use of radio and television along with other media in learning reinforcement. Certainly, research could contribute to our knowledge, at present largely empirical, of the variables involved. Suitable experiment might aim at bringing out the differing and complementary roles of sound radio, television, film, filmstrips, and other aids, as well as such techniques as programmed instruction; and the types of organization best suited to exploit their co-ordinated use. In the present "state of the art" in this field, it would be unrealistic to expect any full-blown adoption in most cases of a systems approach. But undoubtedly the more systematic application of the media to literacy is one direction from which progress may be expected to come.

The need for more efficient feedback emerges from the replies. This is true also of ways of evaluating results. In both areas, research might be directed towards the development of practical methods taking into account the nature of broadcasting and the related media and also the limited scale on which in many cases such processes must operate.

The cheap transistor has brought radio within the reach of vast numbers of people to whom television remains inaccessible, even where a transmitting network exists. The most urgent objective in the field of technical research would therefore seem to be to devise a television counterpart, i.e., a low-cost battery-driven television receiver - sturdy, reliable, easy to maintain and relatively fool-proof. Engineers and manufacturers should be actively encouraged to apply research and development to the production of new equipment on these lines. As Brian Kirby has pointed out, there would seem to be a large potential market for such a receiver.\(^1\)

Another area of research which seems to have been neglected is that of the design and content of textbooks and other printed matter in support of broadcasts. Such neglect may be due to the general tendency we have noted to use the same printed material as for more conventional literacy work and not to be aware that the broadcasting media call for special thought in the structuring and lay-out of pupils' and teachers' handbooks and guides. This applies to television and also to radio, all the more so because of the latter's need for visual backing to the sound component.

Where television literacy programmes call for filmed or videotaped coverage of a cultural, social or scientific nature, experience suggests that a good deal of unused footage which could enrich programmes of this kind exists in various countries and could be made more readily available. But this would require further study of the whereabouts of such materials, their accessibility on practical and economical terms and most of all, their genuine value in respect of subject-matter and quality and their suitability for international circulation.

By far the greater part of the materials used in television and radio programming for literacy work must in any case be provided on the spot. In respect of production facilities, there are however a number of areas in which knowledge and experience in various countries might be pooled, e.g., in solving problems of providing adequate studio space economically and the minimum apparatus, including cameras and editing and animation equipment necessary for good work. Another factor here is what resources are available from a country's national broadcasting authority. Ultimately, everything will turn on the quality of those creating (and using) the programmes. This brings us back once again to the question of training.

### TRAINING

It cannot be too strongly emphasized that the broadcasting media, and especially television, are new forms of expression and communication calling for skills of a high technical and professional quality. Standards need to be maintained and the key to this is proper professional training. The survey suggests that much more attention should be paid to the training of creative, and also technical and maintenance, personnel. This should, we suggest, cover both facilities within the trainee's own country and region and in the developed countries, criticism has been levelled at some forms of training in developed countries which have failed to take sufficient account of the home circumstances of trainees. Obviously this defect should be overcome and courses tailored to the trainees' needs and the local technical and other conditions in which he will have to work. But at present few centres appear to offer this kind of specialized service. The increased provision of facilities for the professional training of broadcasters is clearly a most important objective towards which international co-operation might be directed.\(^2\)

The greater use of the audio-visual media themselves for training purposes might also be fostered by international effort, through, for example, the production of basic training films on the techniques of making and using literacy broadcasts.

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2. The First URTNA Conference on Educational Radio and Television at Algiers in October 1969 discussed this problem in detail, and underlined the wide range of training needed, for example, in the African continent.
Finally, there is the relationship between the fight against illiteracy and the exciting new possibilities opening up in communications generally. One reply (from Yugoslavia) looked forward to the much greater use of electronics and cybernetics in this field. Certainly, the potential uses of the unfolding techniques of, for example, satellite communication need to be studied in hard, practical and detailed terms.

We began by suggesting that the use of media in the fight against illiteracy might be an important feature of growth in the Second Development Decade of the United Nations. In sober truth, the audio-visual media would seem to be capable of virtually wiping out the scourge of illiteracy by the end of the Second Development Decade. This would call for a substantially higher degree of material investment than at present but a far more modest one than present investments in certain other forms of human enterprise. It would call for something else - a fresh and exceptional effort of the will.

What would be needed would be to rethink the concepts and the methods of using these new instruments of communication in the battle for literacy. Here and there, in foregoing pages, the first signs of a new way of learning have appeared. This is the direct contact, without the intervention of other skilled or semi-skilled human agents such as monitors, "animateurs" and the like, that broadcasting makes possible between an outstanding screen or studio teacher and a nation-wide student body of individuals or of groups. To develop, to perfect and to generalize this new methodology would however require a very considerable effort indeed of experiment and research, and a readiness to accept new ideas.

The rewards would be great. The audio-visual media could, if men so willed it, reverse the present alarming trend whereby illiteracy goes on outpacing the effort to eradicate it. The Yugoslav reply called for broadcasting to come more quickly to the aid of the world's eight hundred million illiterates. And why not?
The questionnaire was sent to educational authorities and broadcasting organizations in many parts of the world in the summer of 1969. Replies were to be sent to the Department of Mass Communication at Unesco in Paris by 1 September 1969. Some of these replies were actually received between September and December 1969.

**USE OF RADIO AND TELEVISION IN LITERACY CAMPAIGNS**

**THE QUESTIONNAIRE**

The questionnaire is in two parts:

I. THE LITERACY PROJECT AND ITS BACKGROUND

II. THE RADIO AND TELEVISION ASPECTS

The questionnaire is designed to cover one single project or experiment only. Provision is made in Part I of the questionnaire for relating the project concerned to other projects and the national literacy campaign in your country.

But please supply a separate set of answers for each project you wish to cover.

Since we would like you to feel free to answer each question as fully as you consider fit, please do not insert any replies on the questionnaire itself. Replies should be provided in English, French or Spanish on separate paper, and typed on one side only.

For convenience, the present tense has largely been used in the questions that follow. Where the project has been completed, past tenses should be substituted as appropriate.
I. THE LITERACY PROJECT AND ITS BACKGROUND

A. NATURE OF THE PROJECT

1. TITLE OF PROJECT

2. DATE OF PROJECT (Years)

3. ORGANIZATION RESPONSIBLE FOR THE PROJECT
   NAME, ADDRESS.

4. SUMMARY OF GENERAL AIM AND SCOPE. Please describe
   the objectives of the project.
   Please attach any texts of basic directives or
   similar documents.

5. Does the project adopt the functional literacy
   approach and, if so, towards what aspects of
   vocational training and social and civic education
   is it orientated?
   Please attach any available syllabuses or curricular
   programmes etc.

B. ORGANIZATION

6. What is the body (or bodies) responsible for
   initiating and co-ordinating the project? (A ministry:
   interministerial committee: independent trust or
   corporation?)

7. What other bodies are involved in respect of:
   (a) research,
   (b) pre-planning,
   (c) educational content and validity,
   (d) staffing, equipment, physical resources?

8. How is co-ordination - administrative, financial
   and educational - between these bodies ensured?

9. How is the project related to, and co-ordinated with,
   the national literacy campaign in respect of:
   (a) objectives, (b) finance, (c) administration?
   Describe its place in relation to other projects
   within the national plan for literacy, especially those
   using radio and television or other audio-visual media.
II. THE RADIO AND/OR TELEVISION ASPECTS OF THE PROJECT

A. PURPOSE, PLANNING

10. At what stage(s) and for what specific purposes were radio and/or television chosen for use with the project? (As part of a promotional campaign to create a favourable climate for the project: to reach widely scattered audiences and overcome problems of distance: to train teachers and other project personnel: to accelerate and reinforce learning by the students: as teaching media in their own right: as ancillary aids to other methods.)

11. By whom was the use of radio and/or television planned? (Educational, broadcasting or other organizations.)

12. How was the use of radio and/or television planned? Describe any preliminary research carried out; planning of time-tables, equipment, costs, personnel etc. Please attach any available reports and papers on this aspect.

13. How is co-ordination ensured between the broadcasting, educational and literacy agencies?

14. Please give data on hours per week devoted to the literacy course as a whole, and on amounts of time within those periods devoted to radio and television broadcasts and to lesson times specifically based on such broadcasts. Give also the duration of the course in weeks, months, years. Please specify the times of day when radio and television are used - daytime or evening - during or after work hours. Please attach any available broadcast time-tables and programme schedules.

B. AUDIENCES

15. Describe the nature of the audiences reached by the broadcast literacy programmes in terms of their occupations, outlooks, milieux, needs and special interests. Please cover the following points: age levels: type of group - urban, industrial (light heavy industry), rural (agricultural) - men, women, mixed: illiterates or semi-literates or both: other specific groups.
What are the sizes of the audiences
(a) aimed at,
(b) actually reached?

(Give the total figures, and if possible, the breakdown figures for the categories referred to above in this question.)

C. TECHNICAL AND OTHER PROVISIONS FOR TRANSMISSION AND RECEPTION

16. What broadcasting channels are used for the project?
   (Open and closed circuit, frequencies, etc.)

17. What is the size of the territory and the population within the area covered by the transmissions?

18. What is the access of the intended audience to the broadcasts in terms of receivers per head of participating groups; or numbers having access to group viewing or listening facilities; or numbers available during programme times?

19. What arrangements are there at the receiving end?
   (Types of premises and facilities for viewing and listening and class reception etc.)

20. What arrangements are there for running and servicing equipment at the transmitting and the receiving ends?

D. STAFF PROVISIONS

21. What are the nature and size of the staff complements used in respect of:
   (a) administration,
   (b) running and servicing the equipment,
   (c) providing programme materials,
   (d) teaching functions,
   (e) research and planning centrally and in the field?

   Give details of the kinds of persons involved, especially on the teaching side.

22. Were these staffs and especially teachers, given special training in the use of broadcasts in literacy work? If so, how and by whom?
E. MATERIALS

23. Describe the types of materials used in the project:
   (a) by the teachers,
   (b) by the students,
   (c) for training teachers and instructors;
   (e.g. films, radio and television broadcasts, filmstrips,
   tapes, display materials, textbooks and manuals and
   other supporting literature and materials).

24. Which materials were provided centrally and which,
    if any, were produced locally or in the field?

25. By whom and how was the content and the form of these
    materials decided upon? Describe any steps taken to
    ensure the good quality of the materials as broadcasts
    as well as their educational suitability by joint bodies
    of teachers and broadcasters, by advisory councils or
    committees and so on.
    Please send to Unesco samples of the materials used
    or indicate how Unesco may procure them.

F. METHODS

26. What specific subjects and skills does the project
    aim to teach and in what language (the national one,
    a local language or lingua franca)?

27. Do radio and/or television carry the main teaching
    burden?

28. What subjects and teaching functions are allocated to:
    (a) radio or
    (b) television and why?

29. Please describe the form and content of broadcast
    programmes.

30. How are the materials used in relation to each other?
    (e.g. radio plus filmstrip, "Radiovision" radio plus
    group discussion, television plus group action,
    television plus team teaching, radio plus television,
    television plus class teaching etc.)
31. What types of instruction are used? (Types and professional level of instructors - teachers, field workers, group leaders, foremen: class teaching, group tutorials, individual tuition, instruction based on particular theories or systems, others.)

32. Are instructors trained in the use of the audio-visual media employed, and if so, how?

33. What arrangements are there for feed-back to the centre from the field? (e.g. Written reactions of individual listeners or viewers, questions and comments transmitted by group leaders, teachers, answered in subsequent broadcasts or used for guidance in preparing them; reports by field officers.)

34. In the case of functional literacy, how is instruction geared to the workshop or farming or vocational functions involved?

35. What arrangements, if any, are made for follow-up? (e.g. Refresher courses, group activities, programmes addressed to former students.) Please attach specimens of any documents used in gathering reactions (report cards, evaluation sheets etc.) and papers incorporating the results thereof.

G. RESULTS OBTAINED AND METHODS OF RESEARCH AND EVALUATION

36. What results have been obtained in respect of progress achieved by participating students? Describe how this progress has been measured educationally (standard literacy tests, etc.) or economically (improved efficiency and living standards). Give available statistical data.

37. How has the comparative cost effectiveness of radio, television and other forms of instruction worked out? Give any available figures and indicate how they have been calculated.

38. How suitable to the purposes of the project and the needs of students have been the materials and the methods used? Describe the methods used for assessing this side of the project, both quantitative and qualitative.

39. What are the results obtained in terms of student motivation and sustaining of interest? Give the numbers and types of those completing courses of "drop-outs" and give any information which may explain these figures. Give also attendance rates.
40. What, in your experience, has been the total impact on the audience of using radio and/or television? (Community and social effects and reactions etc.)

41. Give any further information you consider useful about your methods of evaluation and your research set-up in respect of the use of radio and television in this project. (Data collection, audience research and computing, etc.)

H. LESSONS TO BE DRAWN FROM THE PROJECT

42. In the light of experience of the project, what are the materials and the methods which have proved most successful and why?

43. What are, from this experience, the pitfalls to be avoided?

44. How essential or otherwise to literacy work do you feel the use of radio and television to be?

45. How do you personally sum up the effects and future possibilities of using radio and/or television in functional literacy promotion for adults?

I. BIBLIOGRAPHY

46. Could you list any books, articles and reports on the project or any other relevant literature considered worthy of mention? Please forward any of these available.

47. NAME OF PERSON SIGNING REPORT
   TITLE OR POST
   ORGANIZATION
   ADDRESS
This Annex brings together two sorts of materials: (A) Replies *in extenso* to the Questionnaire from three selected countries; and (B) Specimens of various kinds of printed or graphic materials, including scripts, used in support of literacy broadcasts.

A. EXTENDED REPORTS FROM THREE COUNTRIES

In reproducing the following three replies in detail, the aim was to give a more rounded picture of how those working in the use of broadcasting in literacy saw the situation in their respective countries and regions. These particular replies were chosen mainly because they were sufficiently self-contained and complete as to lend themselves to reproduction in this way. The selection of these three replies does not imply that the projects described in them are better than others covered in the Survey nor that in all respects they would be necessarily considered as appropriate for other countries. But they do give an overall impression of three interesting ventures in this field. Some of the content of these replies has been analysed comparatively in Chapter II but here the reader has the opportunity to see these replies in context.

The Jamaican and Yugoslav replies are given in full, that from Tunisia being very slightly abridged.

The replies reproduce the chapter headings of the Questionnaire, but Annex I should be referred to for the text of individual numbered questions.
THE REPLY FROM JAMAICA

I. THE LITERACY PROJECT AND ITS BACKGROUND:

A. NATURE OF PROJECT:

1. The Jamaica Literacy Project.
2. 1951.
3. Social Development Commission, 74 ½ Hanover Street, Kingston, Jamaica.
4. Policy: It is the accepted policy that Literacy is a part of a General Development Programme and that the teaching of reading and writing must bear relationship to the needs of the individual and his community. In line with this policy it is also recognized that the teaching materials produced must be functional. The students must learn something of value to their daily lives besides the technical skills of reading and writing. The criteria for literacy being the capacity to read, write and compute at a level comparable with a child who has successfully completed the Junior Primary School standard. A "Literate" adult must be able to understand what he reads and apply the knowledge gained, when necessary.

The implementation of the Literacy Programme is the function of the Social Development Commission, the Agency that is committed by Government to undertake Community Development in Jamaica.

Broad Objectives:

(i) To decrease the percentage of illiteracy in Jamaica.
   (a) among intending emigrants
   (b) among people migrating from rural communities to urban areas.
   (c) to fit people for the urbanization of rural communities due to better communication on systems of roads, telegraph, radio, press and additional facilities for reading provided by the Library Services.

(ii) To improve the standard of literacy of the industrial and agricultural labour force so as to increase productivity and raise the standard of individuals.

(iii) To see that low level reading materials is made available to the public.

(iv) To help adults in the villages to acquire or regain and also maintain the skills of reading and writing and computing so as to enable them:
   - to become effective and capable community leaders;
   - to fit themselves for wider fields of employment;
   - to improve their standard of living;
   - to make continued practical use of information given to them through the Agricultural Extension Service and other Agencies;
   - to make use of skills of reading and writing and computation as a means of communication and recreation.

5. (a) Yes.

B. ORGANIZATION:

6. Ministry of Youth and Community Development.

7. (a) Bureau of Statistics and University of the West Indies.
   (b) University of the West Indies and Bureau of Statistics.
   (c) Unesco, United States Peace Corps, Canada, Jamaica Junior Chamber, Churches and Ministry of Education.

8. The Social Development Commission is responsible for the Project; it plans, initiates and evaluates its programmes in consultation with all the various bodies concerned.

9. We do not have a National Programme now. We are however working towards this objective.
II. THE RADIO/ TELEVISION ASPECTS OF THE PROJECT:

A. PURPOSE, PLANNING:

10. The initial Radio/Television Programme was launched in January 1966, about 15 years after the first experimental literacy classes were started in Jamaica. It was then a closed circuit experiment for a limited number of students, but it was soon replaced (September 1967) by a fuller programme beamed from the Central Station in Kingston, and aimed at large areas of the island.

The use of Radio and Television was decided upon to try and reach a larger number of the population, also to guide teachers in the field and accelerate learning processes.

11. Other Organizations (Social Development Commission).

12. A Pilot study to test the possibility of using radio and television and tape recording as aids in the teaching of reading skills was carried out by the Literacy Section of the Social Development Commission from 16 January to 15 June, 1966. Closed circuit broadcasting was employed and beaming was simultaneous.

An inquiry into the effectiveness of radio and television as aids to the teaching of reading was initiated in January, 1966. The study was unique in that beaming to radio and television was simultaneous and it covered a period of approximately four months. The findings are set out below.

The plan of the study and a possible evaluation format were first discussed with Drs. Aubrey Phillips and Laurie Reid of the University of the West Indies. They suggested that Dr. James Maraj, also of the Institute of Education, was ready to have special interest in this study and his assistance was solicited. Consultations were held with Dr. Maraj and he advised on some procedures.

Plans for the study were also submitted to Dr. Seth Spaulding of Pittsburgh University who sent his comments on the plans and his advice for proceeding with the project.

Aims and Objectives:

This preliminary study was designed to determine:

(a) whether radio and television may be used suitably as teaching aids in the Jamaica Literacy Programme;
(b) the extent to which these aids provide for the motivation of teachers and students;
(c) whether the use of these aids can function as a constant guide to the teaching techniques of voluntary literacy teachers;
(d) whether they may be used in reducing the length of the course so that students learn to read in a shorter time;
(e) whether the same programme beamed simultaneously to radio and television, or recorded and then beamed, will work effectively.

Methodology:

(a) Organization:

A closed circuit radio/television system was set up in seven places:

- St. Andrew High School
- Stony Hill Approved School
- Trench Town Comprehensive School
- General Penitentiary
- St. Catherine District Prison
- Orangefield Community Centre
- Maryland

At each of five centres there was a classroom for radio class students, one for television class and a studio room.

At Orangefield Community Centre, television alone was used. There was, therefore, one classroom and a studio. The same lessons were presented at each centre. The lesson for each session was taped and used at Maryland where instead of radio or television, there was a tape recorder.

At the Prisons and at Stony Hill Approved School the groups were captive and students were required to attend classes or give legitimate reasons for their absence.

In other classes students attended of their own free will. Classes at Bybrook and Byndloss were used as "Control Groups". Teachers and students were left to carry out their work without the aid of radio or television.
**Types of Groups with centres for classes and media used.**

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<th>CONTROL</th>
<th>CAPTIVE</th>
<th>FREE</th>
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<td>Byndloss (rural)</td>
<td>St. Catherine Dist. Prison</td>
<td>Trench Town Comp. (urban)</td>
</tr>
<tr>
<td>Bybrook (rural)</td>
<td>(a) Radio</td>
<td>(a) Radio</td>
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<td>(b) Television</td>
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<td></td>
<td>(b) Television</td>
<td>Orangefield (rural)</td>
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**Equipment:**

The Jamaica Information Service was in charge of broadcasting equipment, technical arrangements and direction. There was collaboration between members of the Jamaica Information Service and the Literacy Section on these matters. A part-time technical assistant and a Peace Corps Volunteer served as technical directors.

There was one set of broadcasting equipment which was moved from one location to another for each broadcast. Each radio class had the use of a speaker and a television set was loaned to each television class.

**Class Teachers:**

Fifteen local teachers assisted with the classes, eight of these served in television classes, five in radio and two in the tape recording class. Five of the fifteen class teachers were Teachers' College trained, four were members of the teaching staff of the Literacy Section (two of the four temporarily employed for the Project).

Six "teachers" were from other varied occupations and had no previous teaching experience. Twelve of the teachers had sixteen hours of special training in Literacy Training Courses. In addition thirteen of them attended six hours of training specially oriented to the radio-television study. There were two teachers who had no training either from regular training courses or from the radio/television programme orientation courses.

**Materials and Teaching Methods:**

Reading was taught from three of the books of our regular teaching series. These books were:

- **Book I**: Pre-Primer "Our Class and Our Family" 36 words
- **Book II**: Primer (Urban) "A Day with the Gordons" 562 running words with a vocabulary of 79 new words.
- **Book IIA**: Rural counterpart of II "A Day with the Gordons" with 457 running words.

Sixty-seven of these words did not appear in Book I and twelve of them had not been used either in Book I or in Book II.

- Book I was presented in six Broadcasting sessions
- Book II was presented in fourteen Broadcasting sessions
- Book IIA was presented in eleven Broadcasting sessions

Book I was designed to give students a sense of achievement and confidence. Here writing was introduced and students learned to write their names as well as familiar words in sentences.

In Books II and IIA a number of associated words which did not appear in the books but which came within the students range of experience was taught.

The "Look and Say" method of reading was used solely in Book I and throughout the study. In the other books the "Phonetic" method was used as auxiliary to the "Look and Say" method and writing was carried out in relationship to reading.

Before the start of each lesson, each media class was given a script with the outline of the session's lecture and flash cards of words from the books which would be used in the lesson.

Two Literacy Officers who served as Presenters teaching on alternate days Monday through Thursday gave an half an hour broadcast from the studio set up at each centre.

Beaming was simultaneous so that a radio class in one room and a television class in a neighbouring room received the broadcast at the same time. While the television class read words and sentences from the television screen, students from the radio class read these same sentences from a flannel board as they were put up by the local teacher.

Each class received two (½ hour) broadcast lessons per week. Each broadcast lesson was followed by an hour's lesson under the direction and guidance of the class teacher.
It was planned that a team of three evaluators should visit each class once per week and note observations. At the end of each week the evaluating team should meet with the Presenters to discuss the progress of the study and arrange for adjustments where these were necessary. This was carried out during the presentation of the first two books. During the presentation of the third book, more often one, and sometimes two evaluators visited each class once per week and noted occurrences in keeping with the questionnaire.

13. There is a standing arrangement between the Ministry of Youth & Community Development and the Broadcasting Authorities for the use of the Studios, Personnel and Equipment etc. There are also conferences between the Officers of the Ministry and Departments concerned.

14. A Literacy class usually meets for about 1½ hours, sometimes 2 hours. In Media Classes, ½ an hour is devoted to watching or listening to the programme itself, the rest of the time (about 1 hour) to the lesson which is specifically based on the broadcast. The media programmes deal with the first three books either the Rural or the Urban series. At the completion of the Third Book, students usually reach good reading and writing standards. These three books are completed in about 25 weeks (2 programmes a week, which means a total of about one hundred hours)

Up to now, Literacy Programmes have been broadcast:

(a) on Radio, at 6:15 p.m. on Thursdays
   and 3:30 p.m. on Sundays
(b) on TV, at 6:30 p.m. on Thursdays
   and 3:30 p.m. on Sundays

15. B. AUDIENCES:

(i) The age level of the audiences ranges from 15-40 years.
(ii) The majority of these are from the Rural Areas and are mostly mixed groups consisting of illiterates and semi-literates.
(iii) The needs and special interest or the motivational factors would be economic, social, religious, special interest (e.g. migration, improved skills).

Sizes of the Audiences:

(a) Our present target is 10,000
(b) We are reaching approximately 5,000 in organized classes. However, a recent survey conducted by the Jamaica Broadcasting Corporation (JBC) reveals that the programme was actually reaching 9,000 persons.

C. TECHNICAL AND OTHER PROVISIONS FOR TRANSMISSION AND RECEPTION:

We are using Open Circuit on the one existing Television Channel and Radio Programmes are broadcast on standard frequencies on two Stations - Radio Jamaica and Rediffusion (RJR) which is a private station, and Jamaica Broadcasting Corporation (JBC), a public Corporation.

17. The greater part of the island is actually covered by the transmissions, but reception is rather poor in some mountainous or remote areas, particularly in the East. Roughly speaking, it can be said that 70% of the total and 80% of the total population of the island are covered by the transmissions (JBC survey).

18. Approximately 3,000.

19. Classes are held in various places such as schools, churches, church halls, community centres and even private homes. Teachers receive each month a small allowance for maintaining television and radio sets.

20. At the transmitting end arrangements for the running and servicing of equipment are taken care of by the Broadcasting Authorities. Television and Radio sets in groups in rural areas are serviced by the Jamaica Information Service (JIS).

D. STAFF PROVISION:

21. (a) The Project is administered by a Secretary, Director and a Chief Literacy Officer; these are assisted by 5 Senior Literacy Officers.
(b) The equipment used is not our property, consequently there is no provision in our staff structure for servicing.
(c) Three
(d) Two
(e) One

The persons involved on the teaching side are Senior Members of staff who have had considerable experience in Community Development Work. Both are trained Primary School Teachers.

22. Yes. Both members got training at CETO - 4 month period each. One received six weeks training with the Ministry of Education. One of our Officers concerned is at present under-studying Mr. Daniel Martin, Unesco Expert in Educational Broadcasting.

E. MATERIALS:

23. (a) films, radio and television broadcast, filmstrips, tapes, displayed materials, textbooks, manuals, guides, supporting literature and materials.
(b) textbooks, manuals work books, charts, supporting literature.
(c) films, radio and television broadcast, filmstrips, tapes, displayed materials, textbooks, manuals, guides, supporting literature and materials.

24. All materials are produced centrally except for a few charts.

25. Contents and form of our basic reading materials were decided upon by the Social Development Commission in consultation with Experts supplied by Unesco. Films, Radio & Television broadcasts tapes are decided by the Social Development Commission in consultation with the Jamaica Broadcasting Corporation (JBC), the University of the West Indies - Radio Unit, the Jamaica Information Service and Mr. Daniel Martin, Unesco Expert attached to the Literacy Project. Apart from the bodies mentioned above there is at present no body or committee associated with the Project: We, however, appreciate the value of such a body or committee and are endeavouring to establish same.

F. METHODS:

26. The whole course is in English, which is the national language in Jamaica. The Project aims not only to teach students reading, writing and phonetics, but also to increase their vocabulary, to better their English, to give them useful and practical information about their everyday life (food, hygiene, safety, decimalization, farming, etc...) and to help them to become informed and conscious citizens.

27. Radio and Television do not yet carry the main teaching burden in that there are at present more face-to-face classes than media classes, but this will change very quickly. 150 new classes which will open in October, will be Radio or Television classes.

28. All subjects and teaching functions are allocated to Radio and Television. Even writing is taught on Radio during the course of the first book ("Our Class and Our Family"). We are doing this because we think that every subject can be taught with success on Radio and Television.

29. A. Radio:

The Radio Programmes have a duration of 29 minutes. They are designed to involve teachers and students as much as possible, and to induce them to play an active part in the lesson.

Each teacher receives in advance an outline about how the lesson will be conducted, what it will be about, what visual material he or she will need, what he or she will have to do before, during and after the programme itself.

The Radio Programme presents the following features:
(a) there are two different voices, one male and one female, so as to give more life and more variety to the lesson.
(b) musical themes are used to separate the different parts of the programme.
(c) the presenter often strikes a chime in the course of the lesson to give teachers time for class activities during the programme.
(d) a few selected visual aids are forwarded to the teachers along with the flashcards and whatever reading material is needed during the lesson.
Each programme generally consists of:

1. A short introduction often linking the part that is to follow with the content of the lesson itself.
2. The motivation or information part on such a topic as can be related to both the lesson and the everyday lives of the students (e.g. diets, hygiene, family planning, decimalization, road safety, etc...) This is usually conducted as a dialogue, or an interview, or presented under a dramatized form.
3. Reading: The presenter reads the day's passage, teaches the new words and singles out a few sentences, insisting on the comprehension of the text and giving matter to further discussion in class.
4. Word-Building: In each lesson, one or several letters or groups of letters are studied and explained from the point of view of Phonetics. Examples are given, and from time to time exercises or word games are proposed.
5. Writing: This part, fairly important in Book I, was conducted as an experiment on Radio and proved very successful. The presenter gave instructions on how to hold the pencil and the paper, and taught the students how to write letters, relating them to simple graphic symbols; straight lines, slanted lines, circles and semi-circles.

B. Television:

The Television Programmes have an approximate duration of 24 minutes. Based upon the teacher-class situation, they are aimed at getting as much response as possible from the students in classes. Each teacher also receives an outline beforehand.

The general pattern of the TV Programmes is about the same as that of the Radio ones, i.e.

1. Introduction
2. Motivation/Information
3. Reading
4. Word-Building
5. Writing

but it must be stressed out that, although the pedagogical content of the lesson remains the same, the treatment is quite different. Radio and Television scripts are written separately by the same presenter.

The main differences between Radio and Television Programmes are:

(a) the use of short films or skits in the motivation part.
(b) the use of animation films as a break between the different parts.
(c) a greater use of word games, especially crossword puzzles (even at an early stage)
(d) the use of numerous captions, visual aids of all kinds (charts, graphs, slides, scale models, flipcards, etc...)

31. Class teaching is being done by voluntary workers. These include group leaders, field workers, housewives, teachers and students.

32. Yes, instructors are trained in the use of the audio-visual media employed. Training Days and Residential Training Courses are planned where instructors are trained in the use of the actual media.

33. Our means for feedback come from reports by Field Officers and teachers by questionnaires and teachers by questionnaires and conferences.

34. The books are geared to provide instructions in:

(a) farming - Rural Series
(b) vocational - Urban Series.

In addition to the books we have motivation periods which augments the instructions found in the books.

35. We have follow-up courses and group activities.

G. RESULTS OBTAINED AND METHODS OF RESEARCH AND EVALUATION:

36. The means by which we measure the progress achieved by participating students have been by pre-tests and tests. However one of the problems encountered during the programme was the small proportion of persons that would take these tests. One of the contributing factors to this was the psychological effect of the word "test" or "examination".

38. Although we have evidences that the materials have assisted adult needs such as living style, eating habits, health measures and agricultural practices, we have not yet assessed scientifically the results as to quality and quantity.
39. The figure for drop-outs totalled 37% but 20% re-enrolled. The reasons for drop-outs could be attributed to migration, crop season, not strong enough motivation.

*Interest and Response:*

In spite of irregular attendance, the interest of most students was maintained. At every Teacher's Conference, the teachers spoke of the enthusiasm of the students. In fact, one of the greatest problems of the teachers was that new students continually wished to enroll. It is important to note however that the interest or attendance varies according to the motivation of the individual. Some persons are satisfied when they have learnt to sign their names, others are motivated beyond this.

40. We are convinced that the use of these media has made a great impact on the programme, not only in respect of the conducting of classes but in making the public aware of the problem and stimulating interest among the population. Government strongly recommended the continuation of the programme with suggested amendments.

42. Our basic reading materials which are functional and adult in concept have proven most successful. This is so because the reading matter of this direct method is related to adult life, its needs and problems. The student learns not merely to read but gets at the same time additional knowledge which enables him to live a fuller life. The method which has proven most successful in our project is the *Combined Method* i.e. "Look and Say" and "Phonetics".

We have chosen this method because of the three stages involved in Literacy Instruction -
(a) pre-reading stage (use of scrap books, pictures, charts to develop ability to deal with and a familiarity with printed materials).
(b) mechanical stage (actual instruction in skills).
(c) transition to independent reading stage (ability to search out and use reading material on one's own). If adults are introduced too rapidly into the mechanics stage without some work at the pre-reading stage, frustration and confusion may result. If instructions end at a minimal mechanics stage without moving students to the independent stage, regression to illiteracy may result.

43. Too much reliance should not be placed on voluntary efforts. When this is done the quality and service of the teachers cannot be ensured. The Literacy Programme should not be an appendage of any Department or Organization, but should receive national support, thus ensuring proper planning, financing and administration.

44. Essential because
(a) By using Radio and Television teachers and students are exposed to the highest possible standard of teaching available.
(b) The use of Media help to improve the discipline among teachers and students alike. All concerned must be punctual if the classes are going to be meaningful. Apart from this, students and teachers work at an established pace; this may not be ideal for all, but is one at which all levels of teachers and students can operate.
(c) Media are motivation in themselves.
(d) Many more persons are reached by the use of Media, especially those persons who for one reason or the other refuse to attend organized classes.

45. The use of Radio and Television has effected the programme in the following ways:
(a) facilitated learning.
(b) was useful as a guide and for revision of teaching methods and techniques.
THE REPLY FROM YUGOSLAVIA

I. THE LITERACY PROJECT AND ITS BACKGROUND

A. NATURE OF THE PROJECT

1. **Title of project**: "Television Literacy Campaign"
2. **Date of project**: Beginning of October 1968 until 1975
3. **Organization responsible for the project**: Editorial staff of the television education programme, Takovska, 10, Belgrade.

4. Attached are the texts on the basis of which TV-Belgrade decided to introduce a literacy programme designed to promote the eradication of illiteracy in the Socialist Republic of Serbia.

5. In the initial phase of its programme, the "Television literacy campaign" makes no distinction from either the social or the vocational point of view. The television education programme can be regarded as providing the teaching needed by all groups and can certainly be adapted to the needs of specific social and vocational groups.

B. ORGANIZATION

6. The editorial staff of the television education programme is given a perfectly free hand in drawing up all the "Television literacy campaign" programmes, basing them on, and harmonizing them with, the activities of the Youth Union, the Secretariat for Education and its institutions and organs, and participants in the national literacy campaign. There is at the national level, a working committee for the elementary education of adults, composed of representatives of social and vocational organizations and institutions, together with experts on the subject. This committee was set up by the Council for Culture and Education of the Assembly of the Socialist Republic of Serbia, the Republican Committee of the Cultural-Educational Community of Serbia and the President of the Republican Conference of the Youth Union. Its terms of reference are:

   - to organize, on the basis of the programme of small socio-political communities, the work of drawing up a Republican five-year programme of action for the eradication of illiteracy;
   - to organize the study and determination of the most typical and most frequent causes of the lack of elementary education persisting in part of the population;
   - to propose to the Assembly of the Socialist Republic of Serbia and other national bodies, and to socio-political organizations and other social organizations, measures likely to promote more energetic action on the literacy problems of the Republic;
   - to undertake and continue specific action to eradicate illiteracy in the territory of the Republic, that is to say, in those regions with the greatest proportion of illiterates.

The Committee is consequently the social body responsible for bringing together and co-ordinating all the social and vocational forces engaged, or to be engaged, in this great literacy campaign.

7. For the study and planning of its programme, the editorial staff of the education programme of TV-Belgrade has secured the co-operation of the Adult Education Society and the Institute of Pedagogy, the workers' universities and distinguished methodologists. It has engaged several groups of experts to analyse the content and assess the value of the education programme.

   The staff, equipment and material employed are paid for from the television revenue from viewers' licences.

8. Participants in this work cooperate through the Republican Working Committee which draws upon the competence and administrative organization of all educational bodies and the influence of socio-political organizations. The Chairman of the Committee is the Vice-President of the Executive Council of the Socialist Republic of Serbia and his deputy is the Secretary for Education and Culture. Meetings of experts are held at the offices of the editorial staff of the education programme for the purpose of considering the current situation of the Literacy Campaign in the field and the effect of the television programme on groups of educators.

9. (a) As stated above, the television education programme, as part of the literacy campaign, attempts, in its initial phase, to ascertain the reasons why the members of the audience at which it is directed have
remained illiterate. It also helps to develop the content and didactic-methodological aspects of elementary education for adults. In the following phase, when organization will no longer be the predominant need, television will undertake the task of participating more directly in the work of organized education. An "education programme" is already being prepared for that purpose.

(c) The keeping of administrative records of the numbers taking part in this work and of the results achieved is the responsibility of the Republican Committee and of the educational organs at republic, district, municipal and commune level. Television plays no part in this work.

The project of the "Television literacy campaign", and its accompanying programme are given space in the information media which are also specifically concerned with the promotion of literacy among the masses. The Belgrade daily paper "POLITIKA" devotes a page to this campaign every Saturday, giving the contents of the television programmes, with instructions to teachers as to the method of using them, together with on-the-spot reports on those who are taking part in the literacy campaign. The special feature "Letters from and replies to the heroes of our series" ("the television spelling book") receives and publishes an abundant correspondence to which it replies in its columns. The instructions and articles published in this special feature are written by experts in methodology.

II. THE RADIO AND/OR TELEVISION ASPECTS OF THE PROJECT

A. PURPOSE, PLANNING

10. In the years following the Liberation (1945), the promotion of literacy work was intensified; literacy courses were very popular at that time. This work subsequently slackened off and, in some regions, even ceased entirely, whereas in others the problem of illiteracy was efficiently solved. In 1968 there were unfortunately only 785 pupils enrolled in the regular courses for illiterate adults. There has therefore been a serious decline in literacy work among adults.

Economic and social reform has been in progress in Yugoslavia over the last two or three years and there is already an increasing demand for educated people. In this situation, more favourable conditions should be created to permit of the intensification and extension of the campaign for literacy among adults. The responsible television authorities have realized the extent to which the small screen, this excellent means of contact with a widely scattered public, could contribute to the education of adults. In addition, modern methods for teaching literacy by television would serve as a guide for teachers who have already been trained for teaching the alphabet to children.

11. Television has decided on its own initiative to play its part in this work, that is to say, it has not been specially called in by other institutions or bodies. Television has given a new impetus to the literacy work already in course. Thanks to the kind of programme transmitted by television, the public has been made fully aware of the seriousness of the problem of illiteracy. It can only be said that illiterates and the problems they have to face have become a topic of conversation and are publicly discussed on the radio, in the press and in the sessions of the Assembly of the Republic.

12. The current education plan and the programme of elementary education for adults, together with the possibilities open to television (staff available for the programme and financial means), led to the decision to include only a limited number of periods in the programme schedule of TV-Belgrade in the initial phase of the campaign.

13. There is a certain amount of co-ordination. Our television education programme was transmitted at the same time as similar educational subjects were being taught in literacy courses in towns and in the country.

14. The programme of the "Television literacy campaign" was broadcast for six months, from November 1968 to the end of April 1969 on the scale of two thirty-minute broadcasts weekly, that is to say, 55 broadcasts for the year, or 1,650 minutes. In addition, the TV-Belgrade programme included three months of broadcasts devoted to propaganda and information concerning the campaign in the field. Usually, the transmissions, twelve in all, precede the education programme and take up 300 minutes in all. The "Television literacy campaign" programme takes up about 1,900 minutes' viewing time each year. All these figures apply to programmes that are being given for the first time. To them should be added repeats intended to reach a wider audience and also to give those who desire it an opportunity to see the same broadcast a second time. Attached as an annex is a description of the entire series of this programme.
B. AUDIENCES

15. At the end of 1968, there were 513,069 television licence-holders in the Socialist Republic of Serbia. A breakdown of their social structure shows that 36.8% are manual workers and only 3.2% are agricultural workers, while craftsmen account for only 2%. Taking these figures as our basis, we have come to the conclusion that the number of television licence holders could be increased only through a rise in the general standard of living and educational level of the population. The low percentage of agricultural workers and craftsmen is proof that the level of education is very poor in the countryside and in districts where there are very few towns. Other statistics show that workers employed in industry and large-scale farming include a high percentage of persons who have not completed elementary school education, and there is consequently a large proportion of illiterates and semi-illiterates. Our television programme is consequently directed first and foremost at them; that is to say, at a mixed audience of illiterates and semi-illiterates of both sexes, since in no case has it so far been possible for us to arrange separate programmes for different groups. The department for the study and analysis of television programmes and their effect on viewers has recorded the following figures: the series "The Television Spelling-Book" has been regularly followed by 500,000 viewers; the series "Mathematics by Television" by about 200,000.

Television statistics and analysis have shown that "The Television Spelling-Book" has been watched by more viewers than any entertainment programme broadcast over the same period.

C. TECHNICAL AND OTHER PROVISIONS FOR TRANSMISSION AND RECEPTION

16. For the "Literacy Campaign" broadcast we use the ordinary television programme, that is, the open circuit. There is no closed circuit in our system.

17. The Socialist Republic of Serbia covers an area of 88,344 km². At the end of 1968 its population was 8,169,117. This programme was followed by television viewers not only in the Socialist Republic of Serbia, but also in the Socialist Republics of Bosnia-Herzegovina, and Montenegro and in the eastern parts of the Socialist Republic of Croatia and part of the Socialist Republic of Macedonia, that is to say, in about four-fifths of the territory of the Federal Socialist Republic of Yugoslavia.

18. and 19. In the Socialist Republic of Serbia, there are 513,069 television licence holders out of 8,169,069 inhabitants. On 31 December 1968 it was found that there were 2,226 population centres with a total of 1,413,519 inhabitants without a single registered television licence holder, which represents 16.6% of the population of the Socialist Republic of Serbia given above.

The object of the literacy programme organized is to bring illiterates together in school buildings, cultural centres and workers' universities, and on the premises of rural co-operatives, and also in factory workshops and in farms. The organizers of this on-the-spot activity try, in this way, with the help of youth organizations, to arrange for groups to be able to listen and watch television programmes. Furthermore, another equally widespread and even prevailing practice at present is for isolated persons or small groups to listen and watch in the homes of people with television sets. There are touching examples of educated families inviting illiterate neighbours to their homes so that they can follow the literacy programme on television and giving them the necessary explanations after the broadcast.

20. The aim of the Republican Literacy Campaign Committee is to promote the use of television in places and for social groups where there is a desire to follow the literacy programme. Instructions have been given to educational workers and to youth militants on the way to publicize the television programme and, as mentioned earlier, the press, does this regularly.

D. STAFF PROVISIONS

21. The material required for literacy work is obtained from local sources. Educational workers are engaged in direct action and they include teachers who were trained to work with children in primary schools and who have subsequently followed courses in order to teach adults. Specialists are engaged for the programme, that is, to draw up the television programmes. They include professors from universities, teacher-training colleges, and institutes, experts in various branches of teaching and distinguished methodologists.

22. The teachers engaged in the field have not received any special training for the purposes of television. But, in the course of their studies and also through participation in special refresher seminars for teachers,
they have had opportunities for familiarizing themselves with modern audio-visual media and, in particular, with their use in television.

An "Educational Television Colony" runs two fortnightly courses each summer for teachers wishing to keep up to date in the use of television in the educational process. It is intended to continue developing this system of training educational workers with the assistance of the Theatre, Film, Radio and Television Academy.

E. MATERIALS

23 and 24. In the Literacy Campaign use is made of textbooks specially written for the education of illiterates, and also of all other supporting materials.

25. The content and form of these materials was decided upon by committees of experts and by their authors. For the purposes of television the members of the editorial department for the television education programme engaged institutions and specialists and, through joint study of broadcast subjects and of the possibilities of television, they decided upon, suitable content and form for these broadcasts. Once the content of the various broadcasts and the methods to be used had been established, writers, producers and specialist consultants were engaged and were entrusted with the preparation of scripts for the producer. Only then does the team engaged by the television authority (actors, lecturers, demonstrators and technicians) go into action to produce the series that have been planned.

We have sent to Unesco in Paris a sample of one of the broadcasts in "The Television Spelling-Book series". This broadcast was recorded on a magnetoscope and subsequently cinecopied, which is why its technical quality has suffered.

F. METHODS

26. The television programme comprised the following series: "The Television Spelling Book", a series intended to encourage illiterates to learn to use the written language; "Mathematics", a broadcast covering the four operations of elementary arithmetic; "History"; "Marriage guidance", and also information and propaganda broadcasts. All these broadcasts are in Serbo-Croat.

27. The main teaching burden is carried by television.

28. The radio has been confined to informing the public periodically concerning the literacy campaign carried on by television, and there have also been broadcasts of special programmes. To the question why, we can reply that the television staff have displayed a great deal of personal initiative and that they have all brought their creative and organizing abilities to bear on this work.

29. At the stage at present reached in the initial phase of the programme of literacy work by television, we have sought subject matter likely to attract a wide audience and of a kind capable of competing successfully with numerous counter-attractions (entertainment programmes on television, films, the illustrated press, music, sporting events, and so on) which divert the attention of the general public. Thus "The Television Spelling Book" recounts, in dramatic form, the engaging story of an illiterate woman who has come from the countryside to live in the town and who there encounters serious difficulties. She soon comes to understand that she will not easily be able to adapt herself to her new life without learning to read and write, and in sixteen half-hour broadcasts viewers can follow what happens to this woman and often identify themselves with her. This broadcast aroused great interest in the public and drew attention to the existence of illiteracy and to the lot of the illiterate.

In other series we have tried to present situations in everyday life and, with the assistance of experts, to help less advanced viewers to grasp essential features and to follow processes, observe, differentiate, analyse and draw conclusions, in short, to think actively.

30. At the end of these broadcasts, the teachers and also members of youth organizations have had conversations with illiterates and have endeavoured to give them a more thorough understanding of the subject of the broadcasts. It was suggested to them that they should observe their surroundings, study processes of the kind illustrated and various other examples and take an active part themselves. Thus, before and after television broadcasts, there was a methodological teaching process designed to co-ordinate the content of the broadcast in question with the curricula for ordinary children's schools and adult education establishments.
31. Instruction is free of charge.

32. See above for the answer to this question.

33. Literacy work at the national level is decentralized. It corresponds to social development that is to say, to the decentralization of economic, social and political life. Consequently literacy work is not centralized either. We have endeavoured to bring television viewers together in groups in schools and other educational centres and to organize this work in places where there are illiterates. We receive a great deal of correspondence from these quarters and we try to answer it after our ordinary broadcasts and through the press, as has been said above. Representatives of the Republican Committee and of special institutions go into the field and bring back accounts of the situation and these influence the subsequent course of the planning of broadcasts.

34. We have already stated that, at the present stage, television programmes are not specially adapted to the various social and vocational structures.

35. Literacy work is carried on both as a national activity and as a television activity. Persons who have completed the initial stage of literacy instruction, corresponding to the first class of the primary school for adults (or the first two classes of the primary school for children), undertake to continue learning and to complete the subsequent classes. We think it appropriate to mention here the activity that has been called "the action of the hundred villages", which originated in the mountain village of Gornja Badanja on the initiative of a deputy, who is the headmaster of a rural primary school. By agreement with the Secretariat for Education and our editorial staff, he summoned the body of teachers, the representatives of the socio-political and economic organizations of his village and the agricultural workers to a meeting at which it was decided to institute a competition with a hundred other villages. The latter accepted the challenge and undertook to teach all their illiterate inhabitants to read and write as soon as possible. A competition was thus engaged to see who would complete the task first and with the best results. Our cameras recorded the event and gave it wide publicity. Journalists visited these villages and the television gave coverage to those, both educated and illiterate, who took part, in this remarkable activity aimed at mobilizing all the vital forces of society with the object of eliminating illiteracy. This activity is following its course and will continue until total victory has been won in the struggle against illiteracy.

G. RESULTS OBTAINED AND METHODS OF RESEARCH AND EVALUATION

36. Those following the courses, whether at home or in schools, take the statutory examinations regularly and are assessed by examining boards. These boards also examine persons who have studied on their own with the help of members of their family, often schoolchildren and members of youth organizations. Success in these examinations is an encouragement to continue study. We have no statistics that would enable us to reply to the question whether literacy teaching has a direct effect on the standard of efficiency and the remuneration of those concerned. So far as we know, no survey has been undertaken on this question.

37. Since literacy teaching is decentralized, we have no precise figures for the cost of instruction. As an example, the series "The Television Spelling-Book", consisting of 16 half-hour broadcasts costing 72,000 new dinars each, cost a total of 1 152 000 new dinars.

38. The methods used in literacy work are the traditional methods of adult education. They have been adapted to the mass media (television) with the object of treating the various questions in a more vivid and convincing manner. We believe that this approach can contribute to the development of literacy teaching.

39. The general feeling among the public has been that the television programme "Literacy Teaching" has had a remarkable influence in terms of student motivation and sustaining of their interest.

40. Unfortunately, the Republican Committee, like television, has neither the resources nor the necessary professional staff to keep an active check on this work with a view to exercising greater influence on the subsequent impact of these broadcasts on their audience. We believe that information on the subject would have had a far-reaching effect. Our method has enabled the viewer to co-operate actively, through the eye of the camera, with the other actors in the broadcast when a particular problem is being studied. The viewer has the impression that he is taking part, not merely looking on. Every time we achieved this we won the favour of the audience; when we did not, our work was ineffectual. In the initial phase of this activity we cannot of course always obtain the results hoped for.
H. LESSONS TO BE DRAWN FROM THE PROJECT

43. The sort of television broadcasts to be avoided is one that does not enable the viewer to identify himself with one character and disapprove of another. In other words, he must be led to take sides with someone or against someone. When this is the case he matures, psychologically and educationally he learns how to play an active part and how to educate himself.

44. We consider that, in conjunction with other information media, television is an essential factor in literacy work. It could be more effective if methods were developed for making students more eager to learn and for providing direct education. We have not yet reached that stage but that is what we are aiming at in this great social activity.

45. Our answer to this question concerning the future possibilities offered by the use of television, is as follows. The literacy methods used in schools and with adult illiterates are the typically traditional methods based on the spelling-book. This method goes back to ancient times and, although it has undergone certain modifications, it has maintained the traditional approach to the written language. Modern achievements in experimental psychology, cybernetics and electronics, together with the needs of modern man, hold out the possibility of a much better method of teaching reading and writing. In short, the traditional teacher teaches children and adults to read aloud graphical symbols, that is to say, letters. In this way, the habit is formed of reading by means of the organs of speech (mouth and throat) and not just with the eyes. The causes and the effects of this method have been studied. The problem is to teach children and adults to read only with their eyes, for letters are intended for the eyes and sound (speech) is intended for the ears. Children and adults should therefore be taught from the outset to read only with their eyes, for themselves alone, and not aloud for someone else, as has been the case for centuries and has been the practice of priests and other educated people who read aloud for the illiterate masses. Rapid reading methods (Dynamic Reading and Skimming Reading) are designed to speed up reading but without making a better approach to the written language. The television lecturer who does not see his audience cannot ask them to read aloud; he can only ask them to acquire the habit of reading for themselves, with their eyes only and not aloud. It is an entirely new method which still needs perfecting. It has not yet been applied and it needs testing in practice. We hope to solve this problem practically in our television programme.

We think that television is destined to play a very important part in teaching 800 million inhabitants of the earth to read and write.
I. THE LITERACY PROJECT AND ITS BACKGROUND

A. NATURE OF THE PROJECT:

1. Title of the Project: Teaching of Adults and Social Education by Radio and Television.

2. Date of the Project:

   Projects already executed

   First pre-experimental phase (1st year) = 8 January 1968 to 20 June 1968
   Second experimental phase (1st year) = 21 October 1968 to 20 June 1969

Projects for the year 1969-1970

   Programmes in final form and ready for the 1st year October 1969 to June 1970 (Radio and Television)
   Experimental programmes for the 2nd year October 1969 to June 1970 (Radio and Television)

3. Organizations responsible for the project:

   The Institute of Adult Education
   Tunisian Radio and Television

4. Summary of general aim and scope:

   (a) to reach through radio and television the greatest possible number of illiterates, whether they are grouped in literacy centres or in public places or are mainly in their homes, in both urban and rural areas and throughout the territory of the Republic;
   (b) to motivate illiterate adults and give them instruction of a mainly educational and general cultural character.
   (c) to appeal strongly to adults so that they cannot fail to be influenced by the campaign undertaken;
   (d) to succeed as soon as possible, and within at most five years in:
       making literate the majority if not all of the adults and young people who have never had a chance to learn,
       giving these adults and young people an education and general culture which will enable them the better to find their place in Tunisian society, to understand and assimilate common facts and problems and consequently to become more constructive elements at both national and international levels.

5. Our literacy programmes on radio and television are not directed at specific groups, populations or regions. They do not use closed circuits, but form part of the national radio and television programmes. They can be received by illiterates, as also by semi-literates or other categories at different levels of medium or, in some cases, even higher education. A survey organized by the Research Bureau of Tunisian Radio and Television showed that in 1967-1968:
   13% of television viewers of a higher education level regularly followed our literacy and social education television courses;
   38% of television viewers of a medium education level (baccalauréat) regularly followed these courses;
   50% of the "uneducated" followed them regularly;
   33% of the "uneducated" followed the programmes from time to time.

However, as this survey was carried out solely within the city boundaries of Tunis and covered a sample that was by no means representative, our own research bureau organized a similar survey in June 1969 in the nine governorates reached by television (80% of the population of Tunisia) with a largely representative sample of
404 persons belonging to different socio-economic and cultural environments. The first results of the survey constitute the answer to question 15 (see below).

To conclude the answer to question 5, our programmes extend from the beginning to the end of the school year and constitute a unit, are aimed at all circles, and deal with almost all subjects without any distinction whatsoever and without concentrating on any particular occupation rather than another, or on any one category of listeners or viewers to the detriment of any other category (see No. 29: content of programmes).

B. ORGANIZATION:

6. Institute of Adult Education
   Tunisian Radio and Television

7. Other bodies:
   (a) none - our own research office is fully sufficient;
   (b) and (c) no body other than the Adult Education Office is directly responsible for pre-planning or for
   the educational content and validity of our programmes.

But:

The Office has adopted a method which has proved to be very rewarding and extremely effective. From November 1968 to May 1969 weekly meetings (every Monday evening), seminars and study-days were organized. These meetings, seminars and study-days were attended by the personnel of the Office and also by representatives of Tunisian Radio and Television and of all the other bodies - public and semi-private - concerned with adults who are to be taught, and whose activities are often the subject of our courses.

Examples of bodies which sent delegates regularly:

Co-operative Movement (agricultural and commercial)
National Union of Women
Agricultural Popularization
Family Planning
Tunisian Psychology Society
Economic and Social Studies and Research Centre.
Vocational Training and Employment
Nutrition Institute.

During the weekly meetings, the draft programmes for the various courses to be recorded and broadcast are submitted, discussed and put into final form. No project can be considered final and ready for execution unless it has received the approval of the Committee for the Supervision and Planning of Programmes. In addition to the permanent delegates of the above-mentioned bodies, whenever there is to be discussion of a subject such as: means of transport
tourism
the United Nations, etc.

a representative of the body concerned attends the meeting in order to give precise information on the subject under consideration or to check material produced by third parties.

(d) jointly:
   The Institute of Adult Education
   Tunisian Radio and Television.

8. By periodical meetings of representatives of the different bodies and their deputies.

9. In Tunisia there is only one project concerned with the national literacy campaign, but this employs two methods of teaching:

the traditional teaching method employed with groups of the organized sector (industrial undertakings, cooperatives, factories) meeting at education centres under the supervision of qualified group leaders (four centres per group leader; approximately 20 adults per centre; 7 ½ hours of teaching per centre per week).

A fairly large number of centres have been set up in barracks and in civilian prisons.
teaching by radio and television, intended for adults assembled in organized centres (an experimental sample of 3,000 adults) and also for all those who receive the televised programmes in public places or at home (some 25,000 persons followed the literacy courses regularly at their own choice during the year 1968-1969).

II. THE RADIO AND/OR TELEVISION ASPECTS OF THE PROJECT

A. PURPOSE, PLANNING:

10. Radio and television were chosen for the following reasons:

the need to spread education in a country which in 1966 had a total population of 4,500,000 with 2,070,000 illiterate adults and young people. The largest possible number of these illiterate persons must be reached and motivated, and it is only through radio and television that the objectives aimed at can be achieved; television is new and attractive in Tunisia, having started in 1966. It immediately attracted a very large number of viewers during transmission hours and it was essential to make the fullest possible use of it as an introduction to adult and social education;
radio and television offer greater inducements to those seeking education - the use of film sequences, sketches, etc.

11. By:
The Institute of Adult Education
Tunisian Radio and Television, and in collaboration with the bodies mentioned under item 7.

12. A team of psycho-pedagogists and artistic producers was made responsible for planning and conducting the experiment of providing adult education by radio and television. This team now constitutes the Radio and Television Educational Service, and comes under the two bodies mentioned above.

The planning of costs is now being carried out. It was not possible to do this at the beginning of the experiment in view of the fact that the Educational Television Service came under the Institute for Adult Education only and that Institute was unable to obtain a special budget, for education by television, but decided to curtail certain other activities in order to be able to start the experiment in question in January 1968 for a period of fifteen months.

14. Amount of time devoted to radio and television;

           Year 1968-1969:

Television:
A transmission of 30 minutes per day for five days = 2 hours 30 minutes.

Radio:
A transmission of 15 minutes per day for 6 days = 1 hour 30 minutes.

covering
. 2 courses on reading
. 1 course on arithmetic
. 1 course on history or geography
. 1 course on civics or religious instruction.

Amount of time during the year October 1968 to June 1969

Television: 175 transmissions × 30 minutes = 87 hours 30 minutes
Radio: 210 transmissions × 15 minutes = 52 hours 30 minutes

It should be recalled (see point No.9) that side by side with education by radio and television there is also the traditional education given to 40,000 adults assembled in various centres, for 7 hours and 30 minutes a week from October to June.
B. AUDIENCES:

15. As was stated in the answer to question no.5, our radio and television programmes are included in the national programmes, and consequently are aimed at the widest and most varied public possible. Within this audience there are our experimental samples distributed over the nine governorates reached by television in three types of experimental centres.

The level of the adults who constitute this sample is the same, as, at the start, they were all illiterate. Ages vary from 18 to 45 years (the same proportion). They belong to all milieux - urban, industrial, and rural and to different economic levels.

It should be noted that the fact that the 404 families covered by the survey conducted in June 1969 were not included in the experimental sample shows that a very large number of television viewers (illiterate in 1968, half-educated and highly educated; men, women and children) followed our programmes, some to educate themselves, some to acquire information (teachers) and some to give the benefit of those programmes to their children or their relatives.

Size of Audience:

(a) aimed at and actually reached:
(experimental sample)

- Women 705
- Men 2,455

(b) which was not aimed at but was reached:

A survey covering 404 families was conducted in June 1969 (see questionnaire document No. 29) to ascertain the number of television viewers who were not included in the experimental sample but who bought the accompanying documents and of their own will followed the courses in their homes. The survey was not a very thorough one because of the limited means (in particular, the limited material means) at our disposal but we were able to obtain the following results:

- 25,233 persons followed the courses regularly, namely,
  - 5,004 men
  - 8,731 women
  - 213 young people
  - 11,285 children of school age.

The number of adults classified by occupation gives the following table (3):

- Housewives 45.20%
- Workmen 6.40%
- Officials 2.80%

The remainder belonged to unspecified occupations.

C. TECHNICAL AND OTHER PROVISIONS FOR TRANSMISSION AND RECEPTION:

16. Open circuit.

17. 164,000 km2 ---------- population 4,500,000.

In 1968-1969: 9 of the 13 governorates were covered by television. These 9 governorates represent in all 80% of the population. This 80% has 52,000 television receivers; 40,000 in homes and the remainder in public places.

18. From the facts given in the above replies it follows that there are 3,600,000 persons in the territory covered by television. Assuming an average of 6 persons (including children) per family, there is reason to believe - taking into consideration television viewers watching programmes in public places - that 300,000 persons can be reached by television.

As television sets are exempt from customs duty in Tunisia and are therefore moderately priced, and as it is expected that the National Television will cover the whole of the territory in the coming months; it is anticipated that educational television will reach a very large number of viewers in 1969-1970.
19. During the years 1967-1968/1968-1969 experimental samples (700 and subsequently 3,000) were distributed amongst three types of centres:
- Centres directed by qualified group leaders: these centres were equipped as television classes.
- Semi-directed centres administered by representatives of national organizations: equipped like the preceding centres.
- Family centres: some 20 families of 2 or 3 students per governorate.

Other individual television viewers watched programmes at their own choice either at home or in public places.

20. The group leaders of television centres have had a practical training course in servicing and emergency repairs of equipment. The local regional dealer-technicians have undertaken to give their services rapidly in the event of a serious breakdown. There is no problem in regard to transmission as it is effected by Tunisian Radio and Television.

D. STAFF PROVISIONS

21. (a) administration: 5 persons (baccalauréat to licence)
(b) operating and servicing the equipment: 6 persons (diploma of technician)
(c) providing programme material: 3 persons, including the documents assistant (level of 5th secondary grade)
(d) teaching functions:
- at the level of conception and transmission: 13 producers: 5 professors including 3 former teachers
- 1 judge seconded to the Office (religious instruction)
- 6 teachers

(the television programmes are presented by persons chosen from among the producers).

At the reception level:
- 60 teachers from National Education. Each directs a television centre attended by 20 to 30 adults from 6.30 p.m. to 8 p.m.

They are supervised by inspectors, regional commissioners and group leaders of the social education service, and are given training and refresher courses.

(e) Research:
- 6 permanent staff members are placed under the supervision of a psycho-pedagogist.

From time to time students of the National Social Service School are called upon for surveys and analyses.

E. MATERIALS: used by:

23. (a) the teachers: sequences from documentary films
- filmstrips
- slides
- magnetic tapes
(b) the students: radio and television sets for reception of the programmes
- accompanying manuals (documents 11-12)
(c) for training of teachers and instructors:
- audio-visual equipment, projectors and documentary films or filmed courses.

24. All materials were provided centrally except in a few regions where furniture and equipment, including television sets, were supplied by the local authority.

25. The Committee for the Supervision and Planning of Programmes. The inspectors, regional delegates and group-leaders meeting in seminars and study-days check the material mentioned under item 23.
F. METHODS:

26. The educational programmes are in Arabic.

27. The teaching burden is carried jointly by television and radio. The radio programmes supplement those of television.

28. The teaching functions allocated to television and radio are the same and supplement each other. In addition to instructional broadcasts (reading, arithmetic, history, geography, civic or religious instruction) we transmit educational general culture programmes. These broadcasts appeal to adults in three main fields of interest: the family milieu, the occupational and social milieu and the study of world problems.

The teaching function is based mainly on interrelations - between adults, between adults and children, and between responsible and subordinate adults - and also on problems of mutual assistance and solidarity at the family, national and world levels.

It should be noted that even the instructional reading and arithmetic programmes comprise a considerable proportion of general culture:

- at the beginning of the year: two-thirds teaching, one-third general culture;
- at the end of the year: the opposite proportions.

30. Reception of televised courses then discussion and work on the accompanying documents.

31. Supervision is provided by:
   - teachers
   - group leaders
   - social assistants
   - inspectors
   - regional commissioners.

Instruction is given to a class. Adults who receive the programmes at home are helped by social education assistants and teachers.

32. For instructors there are training and refresher courses in the use of audio-visual media and of televised courses.

35. In the case of literacy teaching by radio and television:
   - during the year: normal teaching programmes
   - during the summer: refresher courses for adults who failed to gain the social education certificate.

These adults take the test in the September session. Those who fail can take the course again.

G. RESULTS OBTAINED AND METHODS OF RESEARCH AND EVALUATION:

(The results of the knowledge test and also the final results of the survey of 404 families for the purpose of ascertaining the approximate number of television viewers not included in the experimental sample are not yet ready. We will send you copies at a later date).

During the two experimental stages, research was carried out according to the following plan:

A. During the pre-experimental period, research was centred on fundamental studies the aim of which is:
   - (1) to ascertain the conditions under which the courses are received (state of the centres, ...) 
   - (2) To obtain as good a knowledge as possible of the mentality of the adult illiterate Tunisian (mental structures, culture motivations, etc.)
   - (3) To study the causes of absenteeism and drop-outs.
   - (4) To assess end-of-year results and evaluate the minimum and maximum levels of knowledge which the students can attain.

These studies were conducted by a team of three psychologists (licentiates in psychology) and a master of method (qualified teacher).
Visits to the centres were systematically organized and made it possible, on the one hand to establish contact with the students, the group leaders and responsible regional representatives and, on the other hand, to ascertain the material reception conditions (premises, equipment, furniture etc.).

Each of these visits is the subject of a report; subsequently an annual report is sent at the end of the year to all persons in responsible positions.

The basic matters reported on are mainly:
1. the attitude of the students as regards the subjects taught;
2. absenteeism, drop-out and student motivation;
3. methods of presentation (films, courses);
4. the knowledge test.

Thanks to these studies, it was possible to obtain, if not a total and strictly accurate knowledge of the psychology of the students, at least some interesting information which made it possible to make a better start on the actual experimental school year.

B. During the experimental year 1968-1969 efforts were mainly directed to applied research, with a view to the most rapid and efficient action possible. This research was directed by a psychologist with the collaboration of a student (part-time) and a secretary, and with the assistance of student investigators (1 month).

The method adopted consisted mainly of criticism of the televised courses by the group leaders of the centres, in view of their personal experience and especially their direct contact with the students. Then at the end of the year, in June, an opinion poll on these same courses was taken among the students.

C. Criticism of the televised courses

Criticism cards were drawn up and sent to all those in charge of centres. They contained specific questions and one open-ended question.

The specific questions: subject matter of the lesson, its level, presentation, etc. student attention, music, lighting, etc. and finally, general results, each question with three boxes corresponding to three ratings: good, fair, bad.

The group leaders give their opinion on each course (3 governorates per week, in turn) by marking a cross in one of the boxes.

The open-ended question: general observations. This enables the group leaders to express their opinions at greater length.

The cards are sorted every week; a bulletin is issued and distributed to all those responsible, in particular the course producers, the presenters and the technical team; and any necessary modifications are made in the light of these opinions.

Every three months, the weekly bulletins are bound together in a quarterly publication which includes, in particular, an analysis of the opinions expressed during the quarter.

Opinion poll among the student television audience:

The students are given a form on which is drawn a caricature of a face with five expressions ranging from great satisfaction to profound discontent and typifying very good, good, fair, bad and very bad.

Instructions are given over the television and the students express their opinion on the day's course by blocking in a little rectangle under the corresponding expression.

The first week covered all the governorates.

Subsequently, each week, the students of 3 governorates take part in this polling.

Quite obviously, the object of this opinion poll is not simply to obtain information.

The object is, above all to teach the students, for whom television is still something of a mystery, to react to what is presented to them by this device which "can just as easily form us as deform us" and also to teach them to be selective and finally to make them feel that they have to take part not only in determining the direction to be followed by these courses, but also, through this simple exercise, in the general life of their country.

Finally, thanks to these two methods of approach, there is a permanent feedback from the field (the centres) to the persons responsible at the national level.

Furthermore, in addition to these applied studies, we undertook two surveys at the end of the year.

A knowledge test in which the "questions" covered the whole year's programme and were divided into series:
each group of students who were questioned, answered one series only, owing to the large number of questions; a survey among families which own television sets, to determine the approximate number of television viewers who follow the course without making the fact known. It should be noted that, in addition to the knowledge test we also organize three quarterly examinations.

37. We have not studied this matter, but we think that teaching by television, especially when it is supplemented by radio, is definitely more efficient and more productive, whatever the costs may be. These costs, moreover, can be reasonable and can be written off if there is sufficiently careful advance planning.

39. Motivation and maintaining of interest have been remarkable throughout the whole year. The overall attendance rate has been from 80 to 90%.

40. The total impact has been great:

- a considerable number of adults have abandoned the café terraces and have acquired the habit of going home fairly early.
- new relations have been established between married couples and also between parents and children, with mutual help in better understanding the radio or television courses, and also in the better use of the accompanying documents.

A family man came to see us recently. He told us among other things: "In October 1968 I was illiterate. I have followed your courses regularly since then.... At the beginning of the year's work it was my eldest son who helped me after each broadcast. By the time the year ended it was I who was checking and helping with the homework of my two children, who are in the first and second grades at primary school". It is the opinion of many heads of firms that the attitude of workers who have followed the literacy courses has changed progressively and that their productivity has increased. (We shall examine this point further during the present year.)

In civilian prisons where literacy centres have been established disciplinary punishments have decreased considerably during the years 1967-1968 and 1968-1969, thus proving the beneficial effect of our programmes on the prisoners.

H. LESSONS TO BE DRAWN FROM THE PROJECT:

42. The means and methods which have proved most fruitful can be summed up as follows:

- participation of bodies other than the television authorities and the Office in the planning of literacy programmes;
- the weekly Monday meetings which make it possible to compare ideas and determine the final form of the production;
- visits to centres, supply of personnel to assist the adults, and maintenance of contact with them;
- introduction of sketches and cartoons in the televised courses.

43. Pitfalls to be avoided:

The sole and most important one is the creation of antagonism between the teaching staff and the technical or artistic staffs. An atmosphere of understanding and mutual assistance must exist. One single competent person must ensure co-ordination and be responsible for seeing that the various activities undertaken complement one another.

45. We have not had occasion to consider this problem. Its calls for thorough study and lengthy reflection.
B. SPECIMENS

It is not possible to illustrate audio-visual materials adequately through the printed page. Programmes must be heard and seen. But the following examples taken from scripts and other documents do give some idea of the nature of one or two of the programmes discussed in the present study and ways of using them.

FOOTBALL, ENTHRALLING GAME FOR US!

Reference was made in Chapter II (page II: 22) to the use of popular interest in football for focusing attention on television literacy programmes in Brazil. The two following specimens illustrate this. The first (a) gives the content of the first two weeks of the course: the second (b) is an extract from the script of a later broadcast. The author of the documents from which these are taken is Mr. Alfredina de Paiva e Sousa:

1st week - FOOTBALL, ENTHRALLING GAME FOR US!

1st programme:
1. Pelé has written a book - Reading and writing. Vowels.
2. At the stadium - mathematics - numbers from 1 to 9. Zero.
3. A football player was hurt - Health education. First-aid.

2nd programme:
1. Vava, another champion-player - Reading and writing - Syllables with v. Capital V for proper nouns.
2. The stadium of Maracanã, the pride of Rio - General knowledge - Life in the country and in city.
3. The game has ended - Health education - Personal cleanliness.

3rd programme:
1. Brazil world football-champion - Reading and writing - Review and evaluation of learning.
2. Oh! If I had a lot of money! - Mathematics - Units and tens. Counting by 10s to 90. Sign =.
3. Football in the past - General knowledge - General concept of history. Some historical events of our days.

2nd week - BRAZILIAN CHAMPIONS

4th programme:
1. Dida, a great football player - Reading and writing.
2. Twenty-three needed for the game - Mathematics - Numbers between the tens. To compose and decompose numbers with tens and units.

5th programme:
1. Didi is also a champion - Reading and writing. Review and evaluation of learning.
6th programme: 1. Eder Joffre, the champion with gloves. Reading and writing. Syllables with 1. Words and stories.
2. "Candangos" (pioneers), the champions of work. The construction of Brasilia.

PART 4 DRILL AND REVIEW FROM THE SCRIPT FOR PROGRAMME 55 OF THE 19th WEEK OF THE SAME COURSES

4. DRILL AND REVIEW

TEACHER: The game must have been exciting as are all of the "Fla" vs "Flue" games. So many things happen on the field during a game. The words which tell the incidents are verbs.... And you already know verbs well. I'm going to show you players in the field and you will say what is happening. José will put the verb on the board. Watch! The player after the ball is ......

VOICES: running (CHORDS)

CAMERA: Focuses the teacher

Teacher points to display:

TEACHER: The game must have been exciting as are all of the "Fla" vs "Flue" games. So many things happen on the field during a game. The words which tell the incidents are verbs.... And you already know verbs well. I'm going to show you players in the field and you will say what is happening. José will put the verb on the board. Watch! The player after the ball is ......

VOICES: running (CHORDS)

CAMERA: Focuses the teacher

Teacher points to display:

correndo (= running)

TEACHER: The game must have been exciting as are all of the "Fla" vs "Flue" games. So many things happen on the field during a game. The words which tell the incidents are verbs.... And you already know verbs well. I'm going to show you players in the field and you will say what is happening. José will put the verb on the board. Watch! The player after the ball is ......

VOICES: running (CHORDS)

CAMERA: Focuses the teacher

Teacher points to display:

correr (= to run)

CAMERA: José places on the magnetic board:

correr (= to run)

VOICES: running (CHORDS)

CAMERA: Teacher points to display

caindo (= falling)

CAMERA: José places on the magnetic board:

cair (= to fall)

VOICES: falling (CHORDS)

CAMERA: Teacher points to display

TEACHER: Now a player slips and is ......

VOICES: falling (CHORDS)

CAMERA: José places on the magnetic board:

cair (= to fall)

VOICES: falling (CHORDS)

TEACHER: And another player almost steps on him. He avoids the danger by ..... VOICES: jumping (CHORDS)

CAMERA: Teacher points to display:

saltando (= jumping)

CAMERA: José places on the magnetic board:

saltar (= to jump)

VOICES: jumping (CHORDS)

CAMERA: Teacher points to display:

pulando (= leaping)

CAMERA: José places on the magnetic board:

pular (= to leap)

VOICES: leaping (CHORDS)

CAMERA: Teacher points to display:

empurrando (= pushing)

VOICES: pushing (CHORDS)
CAMERA: José places on the magnetic board:
empurrar (= to push)

CAMERA: Teacher points to the display:
apitando (= whistling)

CAMERA: José places on the magnetic board:
apitar (= to whistle)

CAMERA: Teacher points to display:
cabeceando (= butting the ball with the head)

CAMERA: José places on the magnetic board:
cabecear (= to butt the ball with the head)

CAMERA: Teacher points to display:
passando (= passing)

CAMERA: José places on the magnetic board:
passar (= to pass)

CAMERA: Teacher points to display:
avançando (= advancing)

CAMERA: José places on the magnetic board:
avançar (= to advance)

CAMERA: Teacher points to display:
defendendo (= defending)

CAMERA: José places on the magnetic board:
defender (= to defend)

CAMERA: Teacher points to display:
empatando (= tying)

CAMERA: José places on the magnetic board:
empatar (= to tie)

CAMERA: Focuses the teacher

CAMERA: Focuses José

CAMERA: Focuses the teacher who points to the magnetic board.

CAMERA: Focuses José. He points to columns of verbs.

JOSE (PLACING): to push

TEACHER: But of course the referee did see! He is already ....

VOICES: whistling (CHORDS)

JOSE (PLACING): to whistle

TEACHER: Here is someone who looks like Pelé. He is ..... 

VOICES: butting the ball with his head (CHORDS)

JOSE (PLACING): to butt with the head

TEACHER: However, the ball must be impelled to the goal. To do this, the player kicks the ball and goes ..... 

VOICES: passing (CHORDS)

JOSE (PLACING): to pass

TEACHER: Watch out! This one comes like a tornado! He is ..... 

VOICES: advancing (CHORDS)

JOSE (PLACING): to advance

TEACHER: But the goal keeper is already ..... 

VOICES: defending (CHORDS)

JOSE: to defend

TEACHER: The game is finished and the two teams are ..... 

VOICES: tying (CHORDS)

JOSE: to tie

TEACHER: Then, did you like the match?

JOSE: Sure! Who doesn't like football!

TEACHER: From football to verbs ... Count how many verbs you have written on the whiteboard.

JOSE: It's not necessary to count. Six on one side, five on the other ... so, altogether, eleven!
CAMERA: Focuses teacher

TEACHER: Eleven! Then our team is complete! José, read the names of our players.

JOSE: correr (= to run)

VOICES: correr (CHORD)

JOSE: cair (= to fall)

VOICES: cair (CHORD)

JOSE: saltar (= to jump)

VOICES: saltar (CHORD)

JOSE: pular (= to leap)

VOICES: pular (CHORD)

JOSE: empurrar (= to push)

VOICES: empurrar (CHORD)

JOSE: apitar (= to whistle)

VOICES: apitar (CHORD)

JOSE: cabecear (= to butt)

VOICES: cabecear (CHORD)

JOSE: passar (= to pass)

VOICES: passar (CHORD)

JOSE: avançar (= to advance)

VOICES: avançar (CHORD)

JOSE: defender (= to defend)

VOICES: defender (CHORD)

JOSE: empatar (= to be tied)

VOICES: empatar (CHORD)

TEACHER: With this team it is easy to win games of words.

JOSE: And the other team? The words which are with the drawings? I'd like to see them again . . .

TEACHER: Of course, José. Here they are. You read and everyone repeat.

JOSE: correndo (= running)

VOICES: correndo (CHORDS)

JOSE: caindo (= falling)

VOICES: caindo (CHORDS)

JOSE: saltando (= jumping)

VOICES: saltando (CHORDS)

JOSE: pulando (= leaping)

VOICES: pulando (CHORDS)
JOSE: empurrando (= pushing)
VOICES: empurrando (CHORDS)
JOSE: apitando (= whistling)
VOICES: apitando (CHORDS)
JOSE: cabeceando (= butting)
VOICES: cabeceando (CHORDS)
JOSE: passando (= passing)
VOICES: passando (CHORDS)
JOSE: avançando (= advancing)
VOICES: avançando (CHORDS)
JOSE: defendendo (= defending)
VOICES: defendendo (CHORDS)
JOSE: empatando (= tying)
VOICES: empatando (CHORDS)

TEACHER: Very good! We have another complete team with eleven words . . . .
From Algeria, the opening and closing sections of an outline script of a television lesson in Arabic. The frames on the left summarize what appears on the screen. Those on the right indicate the sequence of actions and quote what is said.

**(a) Opening sequence**

| CENTRE NATIONAL D'ALPHABETISATION ALGER |
| Service Audio-Visuel |

**Production credit titles for the programme**

"Lugatuno" (Our language)

**AIM:** Presentation and global acquisition of 3 words:

| او.م.ر.ع |
| ا.م.د. ز.ن.ب.ز |

Global acquisition in speech of 3 actions:

| عمر يحرث |
| أحمد ينجر |
| زينب تخطي |

Introducing the place of the sentence

| زينب تخطي |
| عمر يحرث |
| أحمد ينجر |

The screen teacher appears. He announces the beginning of the programme. He presents the real situations shown on film.

**LOOK**

Film sequences of real situations showing

- Omar - Omar on the farm - Omar ploughing
- Ahmed - Ahmed in a carpenter's shop
- Ahmed planes
- Zineb - Zineb at home - Zineb sews

**LET'S SPEAK**


**(b) Closing sequence**

**Question:** What is Zineb doing?

**Reply:** Zineb is sewing

The three situations and the three labels

| عمر يحرث |
| زينب تخطي |
| أحمد ينجر |

Each situation is repeated

Omar...

Omar

Ahmed

Ahmed

Zineb

Zineb at home

Zineb sews
Zineb is sewing

Omar is ploughing

Ahmed is planing

LET US WRITE

The screen teacher writes on the blackboard the three sentences: Ohmar is ploughing - Ahmed is planing - Zineb is sewing

Close-up on the first written sentence. The viewers are invited to write it in their exercise books.

Close-up of the second written sentence. (same routine)

Close-up of the third written sentence (same routine)

The lesson is over
The screen teacher reappears and gives some advice to the viewers who have followed the broadcast.

The end of the lesson. But this is the point at which the programme bursts its bounds (the broadcast is opened out, visits, reportages, interviews, etc.).

Close-up of the written sentences on the blackboard
We Read
This is the bus.
This is the bus stop.
This is my bus.
This is my bus stop.

We Write

b b b
bus
WHAT IS THIS?

WRITE IT

(LESSON 1)

(LESSON 7)

(LESSON 10)

(LESSON 6)
WRITE A WORD IN EACH BLANK

1. I WAIT AT THE BUS ________________ (STOP, STEP).

2. AUGUST DAYS ARE ________________ (HOT, HAT).

3. THE STORE HAS A SPECIAL ____________ (SAVE, SALE).

4. MARCH CAN BE A ________________ (WET, SET) MONTH.

5. I WANT TO ________________ (STAY, SAY) AT HOME TONIGHT.

6. JANUARY IS A ________________ (COLD, WARM) MONTH.

7. THE MONTH AFTER JANUARY IS ____________ (DECEMBER, FEBRUARY).

8. MY FAMILY LIKES TO ________________ (WALK, WARM) AFTER DINNER.

9. MY PAY IS ________________ (SIX, SIXTY) DOLLARS A WEEK.

10. I MUST ________________ (DAY, PAY) FORM MY FOOD AT THE STORE.

11. I SAVE FIVE DOLLARS EVERY ____________ (MONTH, MINUTE).

12. ________________ (MANY, MONEY) PEOPLE HAVE A HOLIDAY IN DECEMBER.
THE VISITING SUPERVISOR REPORTS

This is the form used by supervisors in Guatemala reporting on a group class following a radio programme.

T. G. D. S.
La Voz de Atitlán

REPORTE DE VISITAS
A LAS ESCUELAS RADIOFÓNICAS DE LA VOZ DE ATITLÁN

<table>
<thead>
<tr>
<th>Centro</th>
<th>Nombre del Monitor</th>
<th>Años ha enseñado</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caserio</td>
<td>Aldea</td>
<td>Cantón</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supervisor</th>
<th>Fecha</th>
</tr>
</thead>
<tbody>
<tr>
<td>(nombre)</td>
<td>(día) (mes) (año)</td>
</tr>
</tbody>
</table>

1. Estan bien arregladas las cosas que necesitan para enseñar? ................................................ ................................................ ................................................ ................................................ ................................................ ................................................ ................................................ ................................................ ................................................ ................................................ ................................................ ................................................ ................................................ ................................................ ................................................ ................................................ ................................................ ................................................ ................................................ 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A lively picturization of one way of seeing the problem of feedback and avoiding a one-way traffic in television literacy programmes. Grafico A shows the traditional face-to-face system of personal two-way circulation of information (symbolized by the book) between teacher and pupils. Grafico B shows the incorrect use of the mass television system - information with no feedback. Grafico C shows the correct use, the programmed text used by both sides to re-establish two-way circulation.
(The following makes no claim to be a comprehensive bibliography of broadcasting or of the audio-visual media in relation to literacy. The books and articles listed cover this subject and certain works on literacy generally which seemed worth quoting. The most important references in this field are the series on new media published jointly by Unesco and the International Institute for Educational Planning in 1967: they are therefore given first. The remainder are given by alphabetical order of authors or publishers.)


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Ohlinger, J. The Mass Media in Adult Education: A Review of Recent Literature. ERIC/Ohio State University, 1967 (Section on basic education in which primary mass media emphasis is on the use of television to combat illiteracy).

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