This issue is devoted to discussions of world literacy and national programs which comparative studies indicate may be used as models for future UNESCO international campaigns. Individual articles explore economic incentives for literacy motivation, radio learning projects, media programs in Jamaica, literacy improvement in Somalia, and a discussion of failed literacy ventures. A selected bibliography and resource list, literature and media reviews, and information on file with ERIC are provided.
THE ELUSIVE GOAL OF WORLD LITERACY

by

H.S. Bholad

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The Elusive Goal of World Literacy
Mass Campaigns May Be UNESCO's Next Approach

by H. S. Bhola

Literacy is accepted today as one of the basic human rights. The Universal Declaration of Human Rights, adopted by the United Nations in 1948, proclaimed that "everyone has the right to education." For the world's millions of illiterate adults this is translated most often as the right to literacy.

Despite the steps that have been taken by many countries to promote literacy, however, the problem of illiteracy is growing. While the expansion of schooling has managed to decrease the illiteracy rate of the world adult population, education has not kept pace with high population growth rates. Thus the total number of adult illiterates continues to increase. In 1970, there were 742 million illiterate adults in the world; in 1980, there are some 814 million; and in 1990, there will be 884 million, unless massive measures are undertaken in the meantime to eradicate illiteracy. If we add to these statistics the 200 million children who have no access to schools, it is fair to say that about one-fourth of the world's current population is illiterate.

Literacy has been a major concern of UNESCO since the organization's founding in 1946. UNESCO's most recent major literacy effort was the Experimental World Literacy Programme (EWLP), carried out from 1967 to 1973 in collaboration with UNDP in 11 countries. The EWLP was built around the concept of "functional literacy" — the idea that "the very process of learning to read and write should be made an opportunity for acquiring information that can immediately be used to improve living standards..." (Final Report of the World Congress of Ministers of Education on the Eradication of Illiteracy, Tehran, 1965).

The results of the initiatives undertaken by UNESCO for the eradication of illiteracy, however, have been mainly qualitative. It now seems clear that if we are to aim seriously for the eradication of illiteracy, we must undertake international actions that will link plans for the attainment of universal primary education with the launching of a world campaign for literacy. The strategy must be equal to the task.

Experience thus far has shown that there are several factors vital to the success of literacy programs:

- National political resolve.
- Dynamic social and economic structures — literacy campaigns "are more likely to succeed in a society on the move towards greater social justice."
- The awareness and participation of the population.
- Plans for literacy activities linked with the educational system as a whole and geared to economic and social development.

These conditions are closely interconnected; "they express a will, a possibility, and a desire for change which find expression in a planned effort." (UNESCO Document 20 C/71, 25 August 1978)

The sum of our experience suggests that the strategy for combating illiteracy must

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Is Literacy the Only Road to Learning?
Basic Education by Radio Is an Alternative

by Dwight W. Allen and Stephen Anzalone

Despite the concerted efforts of the last two decades and a generally declining rate in the percentage of illiterates in the world's population, the absolute number of illiterates continues to rise. The illiterate population increased by 72 million people during the 1970s alone. With the lingering discouragement over the results of UNESCO's large-scale Experimental World Literacy Programme (EWLP), it might appear that the world is ready to give up on literacy.

And maybe we should give up on literacy. Has our objective ever really been literacy? Our objective has been to make a reality of the right of every individual to education and bring to all mankind the global knowledge of twentieth-century society, together with the skills and resources to use such knowledge to improve the quality of life. But our conceptualization of the basic education guaranteed every individual has crystallized around the pole of literacy. Literacy, if not synonymous with basic education itself, clearly has been treated as the vestibule to all other learning, a mandatory first stage in the learning process for every individual in every society.

If basic education for the too-many millions of poverty-stricken people living predominantly in the rural regions of the developing countries must hinge on literacy, the future looks bleak. There is no escaping the fact that the operational record of success with literacy programs has been dismal. We have been able to help too few people to become literate, at costs often monumentally uneconomical, and where there have

(Continued on page 4)
World Literacy
(Continued from page 1)

involve national mass campaigns, composed of a series of determined actions within a well-defined time span, with total commitment of the nation's will, and with resources equal to the needs.

The ICAE/UNESCO Study
Many nations, particularly those that have experienced profound social and economic changes and those that are determined to make rapid progress, have conducted nationwide literacy campaigns to encourage and facilitate modernization. In order to capitalize on the experience gained from these campaigns, UNESCO has commissioned the International Council for Adult Education (ICAE), in Toronto, Canada, to prepare a comparative study of the role of the successful national literacy campaigns of the twentieth century in the development of the nation in which each was conducted.

The primary resource material for the ICAE/UNESCO study will be a series of case studies of significant literacy campaigns, representing a wide variety of historical, political, social, economic, and cultural settings. The countries selected for the case studies are Algeria, Brazil, Burma, China, Cuba, Kenya, Somaliland, Tanzania, the USSR, and Vietnam. While these ten countries will constitute the basic pool of data, experiences elsewhere will not be excluded from the analysis. (The recent mass campaigns of India, Kenya, and Iraq could not be included in the study because it is still too early for data to have accumulated and, results analyzed.) Because of the dearth of reliable documentation, the case studies were specially commissioned within the framework of the ICAE/UNESCO study. Each of the selected countries was invited to contribute a case study and asked to emphasize certain aspects of the campaign, for example:

Algeria
1. The objectives of the campaign were socialist and sought to consolidate national independence, suppress exploitation, and foster the social development of the individual.
2. The campaign comprised three sub-campaigns: a mass campaign that stressed political, social, and economic education while focusing on the three Rs; a functional literacy campaign in the agricultural sector; and a functional literacy campaign in the industrial sector.
3. The campaign strategy was used to maintain a balanced emphasis on both a selective and a mass approach.
4. Literacy courses in the self-managing agricultural and industrial sectors have been integrated into the work schedules.

Brazil
1. The government's commitment to the campaign has been strong, based on the belief that literacy must serve as the foundation for modernization. In 1979 more than 100 million dollars were spent on literacy programs.
2. Highly sophisticated administrative and technical systems that were established centrally were complemented by decentralized implementation strategies.
3. The single national primer used to teach functional literacy was designed to elicit and to be supplemented by locally generated and locally responsive materials.
4. By offering a 12- to 18-month integrated program of instruction equivalent to one to four years of schooling, the literacy campaign was directly linked with the formal education system.
5. The literacy organization, MOBRAL, has used whatever would work in terms of teaching methods and materials, including television, radio, conventional classroom teaching patterns, self-instruction, and each-one-teach-one approaches.

Burma
1. The campaign is truly a "mass movement," in that the government of Burma offers only advice on means of increasing "organizational power," but no special financial allocations. The costs involved in becoming literate are incurred by the people who receive the training.
2. Four-tiered organizational structures with personnel at the central, divisional, township, and grassroots levels have been established. These have both horizontal and vertical integration among the three parallel systems of the government, the party, and the literacy committee.
3. Although the campaign is national in its vision, it is implemented in increments. An area is targeted, the population is motivated and mobilized, and the campaign is launched, lasting until the populace of that area is literate.
4. The literacy classes initially stress reading, writing, and arithmetic, with functionality and work-oriented aspects appearing in the post-literacy phases.
5. The complete attainment of literacy is ascertained by the use of rotating evalu-

A Note on Literacy Statistics
Most of the statistics referred to in this issue of DCR are UNESCO statistics and projections. UNESCO qualifies its literacy statistics in several ways. First, there are gaps in the data available from certain nations, and UNESCO overcomes these by supplying estimated figures. Second, UNESCO's statistics are based on updates or projections of the results of surveys (sometimes made at long intervals), on observed trends in the educational system, and on the demographic estimates and projections of the United Nations. This method is subject to fairly wide margins of error in that it may not take into consideration the results of newly launched out-of-school programs, accelerations or improvements in school enrollments, or changes in population trends. Third, the concept of a literate person varies widely from country to country, ranging from the ability to decipher a simple text to the completion of full primary schooling. Given these reservations, the statistics are provided to set a context for discussion.

Estimated percentages and numbers (in millions) of literate and illiterate adults in the world, age 15 and older.

<table>
<thead>
<tr>
<th>Year</th>
<th>Literate (%)</th>
<th>Literate (m)</th>
<th>Illiterate (%)</th>
<th>Illiterate (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>44.3%</td>
<td>700m</td>
<td>55.7%</td>
<td>879m</td>
</tr>
<tr>
<td>1960</td>
<td>39.3%</td>
<td>735m</td>
<td>60.7%</td>
<td>1134m</td>
</tr>
<tr>
<td>1970</td>
<td>32.4%</td>
<td>742m</td>
<td>67.6%</td>
<td>1548m</td>
</tr>
<tr>
<td>1980</td>
<td>26.9%</td>
<td>814m</td>
<td>71.7%</td>
<td>2004m</td>
</tr>
<tr>
<td>1990</td>
<td>25.7%</td>
<td>884m</td>
<td>74.3%</td>
<td>2560m</td>
</tr>
</tbody>
</table>

Education has not kept pace with population growth; therefore, while the percentage of the adult population that is illiterate has declined, the total number of illiterate adults continues to grow.

Graphics by Timothy Bradford Ward

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tions conducted by neighboring villages on one ano-

China
1. The motives for the campaign included the diffusion of the Marxist philosophy, the encouragement of political socialization, the destruction of class barriers, and the economic development of the state.
2. The literacy campaign was intertwined with the reformation of the language and the simplification of the writing system.
3. The literacy classes became linked with a more or less formalized system of spare-time education.

Cuba
1. The campaign was massive and quick, lasting only eight months (in 1961) and making literate 90 percent of the previously illiterate population.
2. The campaign was charged with the dual functions of eradicating illiteracy and integrating the people into post-revolutionary Cuba.
3. During its course, the literacy campaign was under physical attack by counter-revolutionaries.

Tanzania
1. The literacy campaign was the result of the national political will, with firm support from the president and the ruling party.
2. The results of the pilot projects, which tested fieldwork, training, and pedagogical procedures, were used to conduct the full campaign.
3. Elaborate systems were established for training personnel and producing instructional materials, especially using the workshop mechanism.
4. All elements of the campaign's administration were well coordinated.
5. Four levels of achievement were conceived for those attempting to become functionally literate, with a national testing program to identify the level of achievement.
6. Recognition of the need for primary education emerged as a consequence of the literacy campaign.
7. The campaign is known all over the world for the excellent help it got from Radio Tanzania and the Institute for Adult Education in Dar es Salaam. The radio campaigns on nutrition and health infused great vigor into the literacy campaign.

Vietnam
1. The campaign was directly related to the Vietnamese culture and social reality.
2. Language reform and the democratization of the language were two of the noteworthy elements of the campaign.
3. A major policy of the literacy campaign was its integration with different kinds of post-literacy programs and with the formal primary education system.
4. With the literacy campaign continuing under the conditions of war, it was characterized by mobility, flexibility, and innovativeness.

The Final Report
The project's tentative schedule calls for the completion of the individual country case studies by May 31, 1980. At this point, H.S. Bhola, the Project Director, will proceed to compare and analyze the political, economic, sociological, and psychological aspects of the campaigns. Conclusions will be offered in the final report in a summary memorandum to policy makers and planners. Pending acceptance by UNESCO, the final report, including distilled versions of the case studies, will be published in English, French, Spanish, and possibly Arabic, and presented at a Dissemination Seminar tentatively planned for Udaipur, India, in December 1981.

In its function as a policy brief, the final report will give policy makers and planners arguments to justify the promotion of literacy and the allocation of scarce financial resources to this task. It should also present the mass national campaign as a promising and preferred alternative. As an organization manual, the report should make clear the social, economic, and political conditions that would make a country ripe for a national literacy campaign. It should communicate to planners and organizers a real sense of the level of response and the depth of commitment necessary for organizing a national literacy campaign. And finally, it should provide general suggestions, based on evidence, for the actual organization of literacy campaigns. Let us hope, for the sake of the millions who do not wish to remain illiterate, that experience will once again prove itself a good teacher.

For further information contact H.S. Bhola, Indiana University, School of Education, Bloomington, Indiana 47405, U.S.A. Portions of this article were adapted from the final report on a seminar held in December 1979 in conjunction with this project, sponsored by the German Foundation for International Development. This report, "Literacy Campaigns in the Context of Development," was edited by Gary Brown and is available from Dr. Josef Muller, Education and Science Branch, German Foundation for International Development, Simrockstrasse, 1, 5300 Bonn, 1, Federal Republic of Germany.

H.S. Bhola, professor of education at Indiana University, was editor of the recent series of training monographs, Literacy in Development, published by the International Institute for Adult Literacy Methods in Tehran, Iran. He is director of the 1CAE/UNESCO project, and will write the final report to UNESCO.

It can be estimated that there are at present probably 800 million adults, i.e. approximately three adults in every ten, who can neither read, write, nor do a simple sum. Sixty percent of these illiterates are women, and their number is increasing faster than that of the opposite sex.

UNESCO, August 1978
Learning by Radio
(Continued from page 1)
been no real prospects for providing the resources to maintain these skills.
It might be recalled that the EWLP was aimed at one million adults, and only some 120,000 reached literacy. Other programs have not even been this successful. High dropout rates in literacy projects are compounded in succeeding years when successful completers lapse back into illiteracy. This is often painfully dramatic. In one Asian country it was found that the majority of pupils finishing four years of primary education became illiterate again within three years. (Manzoor Ahmed, The Economics of Nonformal Education: Resources, Costs and Benefits. New York: Praeger, 1975.)

The high dropout rate tends to produce economic anomalies. Ahmed cites a case where the high dropout rate (49 out of each 50 failing to complete) resulted in a cost per literate of $1,600 instead of the $32.80 that would have occurred had all completed. Even more successful programs are still not cost-effective.

We must devise a program of basic education for the rural masses not being effectively served by schools, and we must reappropriate the role of literacy in such an undertaking. We should consider the possibility that a comprehensive program of radio education may be an alternative to literacy for the rural poor.

The Legacy of Literacy
In today's world the uses of literacy are many — and they are obvious. Perhaps this reality has been so overpowering that it has caused us to believe that literacy can be and will need to redefine what is meant by basic education. A good starting point is the definition advanced by the World Bank: Basic education is an attempt, despite severe resource constraints, to meet the needs of substantial portions of the population who do not have access to even minimum educational opportunities. It is a supplement, not a rival, to the formal educational system, and is intended to provide a functional, flexible, and low-cost education for those whom the formal system cannot reach or has already passed by.

The objectives and content of basic education are functionally defined in terms of "minimum learning needs" of specially identified groups, and as steps in the educational hierarchy.

A recent study prepared for ... (UNICEF) has defined "minimum learning needs" for individuals as a threshold level of learning required for participation in economic, social, and political activities. These essential learning needs include functional literacy (four emphasis) and numeracy (skill in using numbers), knowledge and skills for productive activity, family planning and health, child care, nutrition, sanitation, and knowledge required for civic participation. They can be operationally defined as "minimum learning packages" to be attained by all, comparable to the term "poverty line" which refers to minimum family income.

The chief objection to the World Bank's definition is the ascription of "functional literacy" as the first of several minimum learning needs. This is certainly in keeping with tradition, and the World Bank is not alone in this regard. We might naturally expect that, unless literacy is explicitly given a different role from the past, then literacy as a minimum learning need in a basic cycle of learning will continue to be the starting point and the currency necessary for all other learning. We find ourselves pointed at the same historical impasse where our only option remains the same — some combination of expanding primary-school enrollment, multiplying the number of functional literacy projects, and hoping that in the process literacy can be made functional for everyone by a thus far unforeseen explosion of printed materials with sufficient fallout to paper the remote rural areas. Again, we are peering through the same keyhole where literacy is the key to learning.

is likely to be preempted as before because those people unable to become or stay literate are not able to acquire or maintain the currency necessary for continued learning.

The authors do not believe that literacy should be considered a minimum learning need at all—however fundamentally important literacy always will be in places where its use is functional. To define literacy as an "educational poverty line" in a traditional society is to set this line neither too high nor too low but rather through the wrong criterion, where it can block access to the information and skills needed for well-being and development. Instead of literacy being defined as a prerequisite to basic education or as the currency of the learning process, literacy might find its proper place at some midpoint in the learning process when access to print materials becomes a reality, when a person prepares to enter a formal system of education, or when literacy becomes truly functional to his or her life.

The issue of literacy aside, the World Bank's suggestion of minimum learning needs provides a useful outline of the possible content of basic education programs. The authors' purpose here is to propose that in the coming discussion on basic education the connection of literacy to this undertaking be treated as problematic. We believe there are alternatives. We feel strongly that a comprehensive program of radio education should be developed as the principal means of delivery for basic education.

Basic Education by Radio

The technical feasibility of radio for mass education is not in question. Radio is cheap, simple, reliable, and appropriate. In 1972 the International Commission on the Development of Education noted the promise of education by radio; it is surprising that a major proposal for the use of radio for basic education has not already been advanced. The commission notes the following:

Radio is the only advanced communication technique which has found its proper place in developing countries. Where conditions have permitted, it has become well established and widespread. Yet, it seems to us an insufficient educational use is made of this virtually universal method of distribution. People often seem to be deterred by the reputed greater efficiency of other media which, however, have the major defect, compared with radio, of being unable to hope for such widespread distribution—or anything like it—for a long time to come. The very low cost and adequate reliability in all climates of miniature transistor radios mean that radio broadcasting should more and more be recognized as a particularly suitable medium for educational purposes.

Today, the number of radios per inhabitant exceeds the number of copies of daily newspapers per inhabitant, both for the developing world and for the world as a whole. The implications of the spread of radio are underscored by Wilbur Schramm: If there is a medium for nonformal education, it is radio. The reason for this is illustrated by Paul Theroux's study of rural radio in Uganda, in which he reported that whereas 87.8 percent of the families he surveyed have no electricity, 86.3 percent have radios. In other words, radio is the one long-range, easily deliverable medium that overlaps the commonest barriers to instruction in remote areas.

The capabilities of radio used in instruction have been clearly demonstrated, for diverse purposes and in diverse settings. Students in Japan can obtain an entire second year of education through the offerings of the Open University. Colombia's Radio Suatuenda is often cited as an example of the potential impact of radio in adult education. The Nicaraguan Radio Mathematics Project has reported great success. Other examples abound: successful language teaching and elementary education projects in Mexico—radio farm forums and adult-listening clubs in various African countries, the widespread use of educational broadcasting for school audiences in Thailand, the Radio Mensaje project for farmers in Ecuador, and the out-of-school offerings of Radio Santa Maria in the Dominican Republic. But despite radio's widespread and effective use in education, systematic development of its potential has been thwarted by our expectations—we have not really expected much from radio. Too often, radio has been used unimaginatively in a supplementary role, modeling rather than developing, according to its own dynamic. As a result, the character of radio education tends to reflect traditional, classroom-like education adapted to the medium of radio, and not an exercise in mass communications oriented to education. Program formats have been often a restrictive monotonous and ill-suited to radio's special characteristics. The immediacy and vitality of radio have been lost with the reproduction of the dull "teacher monologue" format over the air waves. A new mandate for radio education is awe to find the failures of the past as instructive as the successes.

Looking at the proven worth and even greater promise of radio in instruction, the authors contend that basic education can be delivered in a content-rich and economically viable way by radio. The most important feature of such a program of basic education is that learning would be chiefly an oral process, parallel to ways that social transactions take place in traditional societies. Literacy would not be a prerequisite to learning by radio. But literacy instruction would, of course, be included for those people able to become literate. The essential point, however, is that basic education would continue rather than begin with literacy. Literacy would no longer be the keyhole to the learning process.

The radio education program would offer a curriculum core appropriate for multiple clienteles. A country's broadcasting capabilities would be able to accommodate a variety of simultaneous offerings, in a diversity of formats, to make provision for different levels of audience ability and involvement. Priority must be given to the minimum learning needs of rural adults and children not in school. It is also desirable that the radio programs be used in such a way as to interface with the regular school curriculum. Not only would this lead to curricular improvements in the school, it would help bridge the gap between learning in the school and home environments.

We see radio education not as an "add-on" to the nonformal system of education but rather as a vital component reordering the system itself. The development of radio education's functional capacity must be assigned highest priority in basic education strategies. To be effective, radio education must be self-contained—again, a curriculum core addressing the myriad learning needs of multiple clienteles. As a self-contained component of nonformal education, basic education by radio should offer learning continuity and make it possible for some learners to go beyond minimum learning needs to literacy and for some to gain access, entirely via this nonformal route, to formal secondary schooling.

A basic education radio program has the potential to develop the outreach to reorder the entire system of nonformal education. This derives from our view that nonformal
Using Economic Incentives for Literacy Motivation

by Mary C. Rainey

The international development community is giving renewed attention to investigating the best way to aid literacy efforts in the developing world. Recognizing that the growing number of illiterates tend to impede development efforts in all sectors, planners are giving high priority to literacy training. In line with this trend, Creative Associates, Inc., is conducting the Literacy Oriented Functional Education Project, a three-year research study to explore what effect the promise of increased economic well-being has on literacy motivation. The project, sponsored by the U.S. Agency for International Development, will test ways to use economic incentives to enhance literacy motivation among out-of-school youths and adults participating in skills training programs.

Broadly speaking, individuals are motivated to become literate by a combination of political, cultural, and economic incentives. Political incentives tend to prevail in countries where the literacy program is established through a directive initiated and implemented by a national leader, as in Cuba and Somalia. (See page 8 for a description of the Somalia campaign). Cultural incentives to become literate can be historically rooted in a culture, as in China, where literacy is valued in itself. Economic incentives can be seen as those that hold the promise of a better quality of life, as literacy gives the individual greater access to resources. A better quality of life may result from a better job; from an increased ability to participate in modernizing activities through access to information in newspapers, instructional booklets, educational pamphlets, and posters; or merely from an increased capacity to survive in the marketplace among those who are literate and who use their skills to their own advantage.

Other programs and projects have previously addressed the question of how to use economic incentives systematically in literacy programs. For example, the relationship between literacy and economic productivity was a major focus of the UNESCO/UNDP Experimental World Literacy Programme (EWLP), conducted from 1967 to 1973. However, the EWLP did not provide a clear, proven set of recommendations that governments and donor agencies could use to plan future efforts. Energy was concentrated, not on testing established methods, but on letting them evolve through practice.

Following the Experimental World Literacy Programme, UNESCO, the community of private voluntary organizations (PVOS), and host national groups have continued to support smaller scale research studies and pilot programs in literacy. These efforts highlight the need to be sensitive and responsive to the motivation of learners. A question emerging from these efforts is to what extent economic improvement affects the acquisition of literacy, that is, will the promise of economic improvement serve as a strong incentive for adults and out-of-school youths in literacy training programs?

The research being conducted by Creative Associates will focus on identifying the strengths of economic incentives in terms of costs and benefits to individuals participating in skills training programs. It will consider differences in perceptions of the value and utility of becoming literate on the part of subsistence, self-employed, and salaried workers.

In order to obtain a sample of people who have already shown some economic motivation, the study will select its subjects from individuals registered voluntarily in skills training programs in two project sites, one in Latin America and one in either Africa or Asia. The study will exclude individuals participating in programs that reward attendance (with monetary payment or food, for example), that are part of a mass literacy campaign, that focus on religious content, or that achieve enrollment through coercion (by fining absences, for example).

A major premise of this study, in contrast to the EWLP, is that literacy accompanies or follows, rather than precedes, development. It proposes that motivation toward literacy is the key to potential learner perceptions of the benefits of literacy and the ability to use the instruction rather than a cause of it. The study will try to identify individuals registered voluntarily in skills training programs.

The researchers are invited to write to Dr. Mary C. Rainey, Literacy Oriented Functional Education Project, Creative Associates, Inc., 4419 39th Street, N.W., Washington, D.C. 20016, U.S.A. Project materials will be made available on an exchange basis.

Mary C. Rainey is project director of the Literacy Oriented Functional Education Project.

On Functional Literacy:
Rather than an end in itself, literacy should be regarded as a way of preparing man for a social, civic, and economic role that goes far beyond the limits of rudimentary literacy training consisting merely in the teaching of reading and writing. The very process of learning to read and write should be made an opportunity for acquiring information that can immediately be used to improve living standards; reading and writing should lead not only to elementary knowledge but to training for work, increased productivity, a greater participation in civil life and a better understanding of the surrounding world, and should ultimately open the way to basic human culture.

What Language for Literacy?
by Om Shrivastava

The choice of language for literacy teaching is of vital importance and involves an almost endless list of political, economic, educational, and social concerns. The subject is important because it appears to be psychologically and culturally sound to provide education in the language of the learner — the mother tongue. The language question has been a subject of discussion since the early part of the nineteenth century, when it revolved around the education of children. More recently, the spread of literacy work among adults the world over has brought the discussion to the field of adult education.

When countries in Africa, Asia, and Latin America became independent, the question of language choice for literacy became linked to issues of cultural identity and nationalism. Political concern revolved around the desire to absorb small groups into larger communities and to unify the diverse cultural and political groups within a nation. Financial and technical issues have included policy decisions related to budgets for education and the availability of trained staff and other resources. Social and cultural issues have centered on the division of population, division of labor, and social and religious taboos. Linguistic factors have included problems of translating new and technical vocabulary into traditional languages, and of giving traditional languages a written form.

UNESCO suggested as early as 1953 that in order to speed education for the masses, the language of instruction should initially be the mother tongue of the learner, using the script of the regional/national language. Then, by a transfer process, the learner should be given instruction in the regional/national language. It was reasoned that this approach would create more interest among the learners, make it easier for them to learn, and preserve their pride in their own culture. At the same time, learning the regional/national language would give them access to the dominant culture and to the economic system.

Although many international bodies have recognized the importance and discussed the implications of learning to read and write in the mother tongue, there has been little systematic research with adult learners on the use of the mother tongue in literacy education. There has been, however, a significant amount of research done with children as subjects in formal educational settings, and it has raised two controversial theories about the choice of language of instruction that have relevance for adult learners as well.

On one side of the controversy are researchers who support the direct method — that of bypassing the mother tongue and teaching only in the second language — who state the advantages of their position as follows:

- The learner becomes confused by first learning to read in the mother tongue and then having to transfer to another language.
- Teaching literacy in the dominant language will give the learner tools for admission to the dominant culture and will aid in his or her economic development.
- Some subjects, such as mathematics, are more easily handled with only one language.
- The learner will learn more quickly and will be competent sooner if all instruction is in the second language.
- Typically, the teacher is better trained in the national language than in the local language.

On the other side are researchers who state the advantages of the mother tongue approach:

- Once a learner has learned to read, transferring this skill to another language is easy; the second language can be introduced systematically.
- The learner will learn to read more easily if the material makes sense to him or her, and will be more likely to develop a sense of success in learning.
- The teacher has a potentially stronger relationship to the community.

Although the studies so far are inconclusive on a number of significant questions, they do indicate a leaning toward the mother tongue-regional/national language approach. These conclusions, however, were based on research done on children. Very little research is yet available when the subjects are adult learners.

The author therefore undertook to study the effects of using the dialect of the adult learner in the initial stage of a program in which the final aim was for the learner to acquire functional literacy skills in the standard regional language. The study compares the gains in functional literacy skills when the initial exposure to written text material was in the dialect, to the gains when the initial exposure was in the standard regional language, which was not the learner's first language.

The subjects of the study were 369 learners chosen from those enrolled in an adult education program in Rajasthan, India. They were divided into two groups. One group of learners — the Dialect Group — was instructed in reading and writing skills at the basic literacy level, first in the mother tongue, and then in the standard regional language. The other group — the Regional Language Group — went through the program from beginning to end in the standard regional language. In this study, the dialect was Wagadi, and the standard regional language was Hindi; both used Devanagari script. The achievement of the two groups was measured through a functional literacy skills test designed for this study.

The data show that the overall functional literacy scores of the two groups were not significantly different. The overall functional literacy score was made up of scores on the component parts of literacy: reading, writing, comprehension, and numeracy. A further analysis showed that the Dialect Group had better scores than the Regional Language Group in writing and numeracy, but there was no significant difference in reading and comprehension scores.

Teachers' records and assessments of the groups showed that the Dialect Group of learners took fewer days to reach the basic literacy and numeracy level than did the Regional Language Group of learners. Teachers also rated the Dialect Group better than the Regional Language Group both in maintaining interest and in achievement, although the perceived superiority in achievement was not substantiated by the research results.

In addition to the insights gained about the language of instruction in literacy education, another set of findings came out of the daily diaries of the teachers, the supervisors' assessment schedules, observations in the field, and conversations with the teachers and supervisors. It was generally agreed that the involvement of the learners and the village community as a whole in starting and running the literacy center is an important factor in its success, and that

(Continued on page 11)
Somalia's Mass Literacy Campaign: The People Carried the Message

The Revolutionary Government that took control of Somalia in 1969 immediately began to look at ways to approach a problem they considered crucial to the country's development: education. The formal education system was not only outmoded and irrelevant to all but a small core of the country's elite, it was concentrated almost exclusively in the urban areas. Fifty to 60 percent of Somalia's three million-plus population are nomadic or semi-nomadic people, living in the rural areas, and they were getting no significant return for their labor in terms of services from the central government. The country's overall literacy rate was about 5 percent, and those who were literate were literate in English, Arabic, or Italian. At that time, a decade ago, the Somali language had no written form.

Officials debated for several years over the choice of an alphabet. Finally, in 1972, the Latin alphabet was chosen, the language was put in written form, and Somali became the country's official medium of communication. The government, under the direction of President Mohammed Siad Barre, decided to stage a two-year mass literacy campaign aimed at eradictating illiteracy entirely, using the newly written language. The first year of the campaign was to be directed at the urban areas, and the second at the rural areas.

The urban phase of the campaign, launched in March 1973, was a fairly easy assignment. The majority of those already literate in other languages lived in the urban areas and already spoke Somali. It was therefore easy to teach the new written language to government workers, teachers, and schoolchildren, who in turn taught other urban residents. This campaign reached about 400,000 people.

The rural campaign, however, was by any standards no easy task. There was little infrastructure to use in reaching the nomads, and one could never count on reaching the same nomad for very long in the same place. Somalia, with an area of 637,657 square kilometers (246,201 square miles), is mainly a semi-arid country, mountainous in the north and low and flat in the south. There are two main rivers, both in the southern region. Rainfall is scarce and unreliable; the wettest areas get about 20 inches of rainfall annually. Only 13 percent of the land can be cultivated.

In large areas of the country, therefore, the nomads depend almost entirely on their animals — goats, sheep, camels, cattle — for subsistence. Animals are a source of meat, milk, and butter, and animals or hides are sold or traded for other goods. The nomads are always on the move, looking for pasture and water for their herds, and their movements are not very predictable. In less dry areas, particularly in the south, the people combine animal husbandry with agriculture and lead a somewhat more settled existence. With an economy based on small herds of livestock and limited cultivation, Somalia is among the poorest countries in Africa; its estimated per capita GNP is US$110.

Not only is the population scattered over large land areas, the transportation system in rural areas is very undeveloped. Most villages, where there are villages, have no roads — or at least, they had none before the literacy campaign. Camels are a major means of transportation. Somalia's communication system includes short-wave radio broadcasting capability; there were about 67,000 radios in use nationwide in 1974.

One advantage to the government's campaign was the homogeneity of the population: about 85 percent of the people are Hamitic, and almost all are Muslim. The nomad's value system is clearly defined, derived from tradition and the Islamic faith. Tradition is transmitted orally, from father to son, often in the form of poetry, which is considered the most important art form. Dancing and singing are also favorite pastimes. Religious men, or wadaad, play a vital role among the nomads, in treating the sick, initiating rituals, and teaching. Many Somalis have had their only formal education in Koranic schools, and students of Islam often travel among the nomad camps.

Male dominance is deeply woven into the Somali nomad's lifestyle. Although the formal education system has emphasized education for both men and women, the nomad population — and particularly nomad women — have had little access to it. It is a particularly difficult challenge to give the nomad woman access to education because her days are so completely taken up with the chores and duties imposed on her by the nomadic lifestyle, and because the men must be persuaded that education for women is a good thing.

The Rural Development Campaign

Launched in August 1974, the Rural Development Campaign was the first phase of the government's strategy for taking basic services to the rural population. Conceived first as a literacy campaign, it was expanded to include four dimensions: 1) eradication of illiteracy among the rural populations; 2) public health improvement; 3) animal health improvement; and 4) a census of both people and livestock.

Literacy was not seen as an end in itself, but rather as a means to expose the people to new systems, methods, and ideas; expand their awareness of their own community and of life beyond their community; stimulate their awareness of the central government and its services; urge the people to become involved in national development; and improve communication and self-reliance. The campaign had strong political goals. The Director-General of the Ministry of Education at that time, Mohamed H. Adan, projected that "through the teaching of our revolutionary principles, i.e. the teaching of socialism, and through self-help...., the rural masses will be brought to the same level of political consciousness as the population in urban centers."

The government anticipated that an added benefit of the campaign would be a strengthened national unity that would result from the increased contact between urban and rural people. The rural campaign, to be properly carried out, required 20,000 teachers, nearly all of whom would have to come from urban areas. The only major source of people for the task was the school system — intermediate and secondary school students and their teachers. The only way to complete the campaign within the scheduled time was to close the schools for a year and send all teachers and students aged 16 or older to the rural areas to teach literacy classes. This was done.

Teaching Literacy

The teachers lived with rural families and conducted literacy classes anywhere that made sense. In the more settled areas the people sometimes built special huts for the classes, but, because of the heat, they generally preferred to hold classes outside under the trees. For, the nomadic population, the logical place to conduct classes was near their water sources. One way of encouraging nomads to attend literacy classes was to give water privileges only to those who attended the daily class. The nomads, however, did not come to the wells every day. To overcome this problem, the teachers had to move with the nomads, and the mobile school was born — an idea that was later to serve as a model for nomad education centers.

The main teaching material used in the campaign was a primer, produced by the National Adult Education Center (NAEC), with lessons on themes relevant to the nomad — cattle-breeding, overgrazing, hygiene. Few literacy students had copies of the primer, and even the more settled agricultural rural people used the primer written for the nomads. The teachers were for the most part untrained and were free to
develop their own teaching methods. The most common method was modeled on the Koranic school: the teacher wrote the letters on a blackboard, then pointed at each letter and read it aloud. Students repeated in chorus what the teacher had read; many students memorized the lessons without learning to read or write.

The NAEC also began publishing a newspaper for teachers and advanced literacy students, with guidance for teachers and articles that could be used as additional reading material in class. Although 7,000 copies of the first several issues were printed, about one-third were not distributed because there were few distribution channels. The newspaper later evolved into a post-literacy newspaper, so that those who had attended the classes could continue to practice their literacy skills in self-learning groups, using the newspaper.

The teachers also served an important role in integrating the literacy aspects of the campaign with the health and census aspects. They urged the nomads to take advantage of the health services being offered them and to have their animals vaccinated. Often the teachers served double duty as nurses and animal health assistants.

Results and Follow-up

Some of the most important activities of the campaign were not in the original plan, but were improvised to achieve the goals. The roads that were built to facilitate the implementation of the campaign had a lasting effect on many villages, joining them for the first time to the district market and enabling them to initiate new trade activities. Another significant improvised activity was the staging of plays that helped publicize the objectives of the campaign.

Teachers were also influential in establishing youth centers, introducing sports, and changing attitudes about such things as food taboos.

By the end of February 1974, the rural campaign had come to a premature end, largely because of the drought that had begun to take hold of the area. Of the 1,257,797 students who had registered at the beginning of the campaign, 912,797 took the final test, and 795,099 passed it. The dropout rate was 27 percent, and the failure rate 14 percent. In many areas, extremely high dropout rates were attributed to migration caused by the drought.

In other aspects of the campaign, 1,614,241 people were given health treatment, and 1,418,798 were vaccinated. More than 11 million animals were treated, and more than 2 million were vaccinated. The whole campaign cost So.Sh.21,620,000 (about US$3.4 million), of which about So.Sh.5,500,000 (US$870 thousand) was directed to the literacy activities.

The organizational framework that was devised to coordinate campaign efforts was a major contribution to Somalia's future development activities. Prior to the campaign, planners and organizers had conducted a three-week symposium in Mogadishu for 700 representatives of regional and district authorities to discuss the campaign. The fact that the symposium participants had a chance to make concrete proposals for the campaign helped them to identify with it, and it was made clear to them that the implementation of the campaign was their responsibility. The organizational framework that grew out of this meeting provided for the cooperation and coordination of all of the institutions involved, and for participation in the development process by people at all levels, from the regional committee member to the individual villager.

Following the campaign, two national committees—one a policy-making committee and one a technical committee—were established to deal with all matters concerning continuation and follow-up of the campaign. Because all activities were meant to be integrated, there was a high level of interministerial collaboration. There were also permanent regional and district committees established, and the community and sub-community administrative units that had made it possible for local people to participate directly in the organization and administration of the campaign were retained.

In the years following the Rural Development Campaign, follow-up campaigns have been conducted, focusing mainly on literacy and using the better students from the literacy classes as teachers. Additional reading materials have been produced by the various ministries concerning aspects of rural development, but there is still a drastic shortage of such materials. In 1976, the year of the first follow-up, 568,546 people attended literacy classes, and 432,710 passed the final test. (Statistics do not differentiate those who had previously attended literacy classes.)

Statistical data that would allow the full evaluation of the Rural Development Campaign in more detailed quantitative terms are not yet available. Evaluation may also suffer a bias, as the campaign has never been exposed to outside scrutiny. There does seem to be enough evidence to conclude that, despite the constraints under which it was conducted, the 1974 campaign had several noteworthy effects: the rural population became aware that the central government was there and willing to help and deliver services; a valuable exchange of culture and ideas between urban and rural people began to take place; studies on nomad life were initiated; and the campaign served as a training ground for community leaders.

Some would suggest that we consider a broader concept of literacy and education for the nomads. These are a people who live very close to the limit of the natural system's capacity to support them. Their survival depends on their ability to read the often subtle and changing signs of the many variables in the natural system in which they live: climate, soils, plants, animals, limited and unpredictable amounts of water, and competing people. This demands a viable ecological literacy—and failure can mean extinction.

At the same time, as modernization, population pressures, and the marketplace (Continued on page 12)
In Jamaica, the Media Help to Carry the Literacy Message

by Inez M. Grant

Jamaica has been a pioneer in the use of communications media to supplement and multiply the efforts of the volunteer teachers in its national literacy program. Starting with a pilot project in 1966 to apply radio and closed-circuit television to literacy teaching, Jamaica has expanded its use of media for literacy to include a variety of combinations of broadcast radio and television, videocassettes, and audiocassettes for motivation, instruction, teacher training, and outreach.

The history of the literacy movement in Jamaica dates back to the 1940s. Literacy gains were marginal for many years, mainly due to lack of funds and lack of national commitment. A literacy census conducted in 1960 revealed that 42.9 percent of the population aged 15 and over were functionally illiterate. In 1970 the government, with the assistance of UNESCO, established a committee to evaluate the literacy program and to make plans that would move the country toward a goal of total literacy within eight years. The report of this committee estimated that from 400,000 to 500,000 persons, or approximately 25 percent of the population, were illiterate.

A new government in 1972 announced that literacy should be a priority in the nation's development, and declared that every effort was to be made to eradicate illiteracy completely within four years. The National Literacy Programme was created to lead that effort. In 1974, the National Literacy Programme was restructured, and JAMAL was born. "JAMAL" is an acronym for the Jamaican Movement for the Advancement of Literacy, but the words "literate" and "illiterate" provoke such negative responses in Jamaica that the longer organization title has been dropped altogether.

JAMAL is operated by the JAMAL Foundation, the main objectives of which are:

- to eradicate illiteracy in Jamaica within the shortest possible period;
- to improve the literacy skills of the adult population of Jamaica;
- to develop human resources and so enable each adult citizen to participate meaningfully in the social, economic, and cultural development of the country.

JAMAL oversees a program of literacy classes — called JAMAL classes — that students may attend either full-time or part-time daily from Monday to Thursday, or in the evenings. Since 1974 electronic media have been used to supplement JAMAL's program by providing direct instruction, motivating teachers and students to enroll in the program, aiding in teacher training, and publicizing the work of the JAMAL Foundation.

Media for Instruction

The use of media for instruction is the responsibility of JAMAL's Technical Services Department, through its Educational Media and Methodology Unit. This unit provides guidance in choosing the best teaching method for a particular subject area and in preparing programs for national radio and television broadcast through the Jamaica Broadcasting Corporation (JBC). Radio program production and television filming are done through facilities owned by the JAMAL Foundation.

The instructional programs, called the "Teaching Box," are broadcast simultaneously on radio and television and may be heard Sunday through Thursday. Because JAMAL competes with commercial broadcasting for transmission time, its programs are not always broadcast at the peak listening time for teachers and students. JAMAL has distributed audiocassettes and cassette players to the classes to give teachers the flexibility to record and replay the programs at convenient times.

Media for Motivation

The JAMAL Communications Department, organized to promote the activities of JAMAL, initiates and coordinates all of JAMAL's contacts and programs with media stations, the press, and other publicizing agencies. As part of its outreach function, the department produces 16mm black-and-white motivational films for use in JAMAL's 14 mobile units. These units, fully equipped with film projection equipment, have the job of intensifying public awareness of JAMAL's role in developing the nation's manpower resources. The intention is to influence and motivate those who need to upgrade their literacy skills to enroll in the program. The mobile unit is also used to encourage the participation of volunteers to teach or to serve the organization in administrative capacities.

The annual JAMAL/JBC Quiz Competition is one of JAMAL's most popular events. Students who enter compete individually, in classes, and in teams, and, through a series of elimination contests, the successful competitors enter the final competition for trophies and prizes. Thousands of television viewers witness the final competition, held annually on September 8 — World Literacy Day. The quiz competition is an incentive to those who are enrolled as students and motivates others to join the JAMAL program.

A weekly television program entitled "Into the Light" uses films of events relating to all aspects of JAMAL's work, for motivation and publicity: graduations, launching of new classes, award ceremonies, motivational drives, student activities, the achievements of graduates. A similar weekly program is broadcast by radio.

Media for Teacher Training

The electronic media also assist in training the large numbers of volunteers — about 12,000 — who comprise JAMAL's teaching force. Most of these volunteers have had no training as teachers, and those who are trained teachers have usually not been trained to teach adults. Radio and television broadcasts for teacher training are available in a series of 12 programs entitled "TOTAL" — Training of Teachers of Adult Learners. The "TOTAL" series is specially prepared to provide training and to enhance the effectiveness of teaching techniques at various levels of student achievement. They are intended to supplement face-to-face teacher training programs and to provide some training for teachers who find it difficult to attend scheduled training seminars.

The radio and television teacher training programs take into account the level of competence of the classroom teacher of adult learners, the psychology of learning and teaching as applied to adults, the limitations of each medium, the limitations of studio time available both for recording and for transmission, and the requirements imposed by the Jamaica Broadcasting Corporation (a commercial station) on instructional programs. In television production the "usual visual — film clips, graphics, photographs — are included with a view to more effective communication." Radio pro-
The Language of Literacy
(Continued from page 7)

when the teacher explains fully the objectives of the program to the participants and
the community prior to starting the program, the learners’ results are better:

Learners’ scores are also better when the teaching methodology emphasizes the
involvement of learners, stresses both meaning and word recognition in teaching read-
ing, and uses other principles of adult learning. Learners’ scores are negatively affected,
often strongly so, by irregular attendance, particularly when the reasons for the ir-
regularity are economic.

Another finding was that the use of the adult education center as a forum for pub-
lishing, using resources from both inside and outside the village — including folk
media and cultural programs such as pup-pets, story-telling, drama, and games —
helps in making a better learning environment, and results in better literacy and
numeracy scores. The importance of this finding should not be underestimated.

Conclusion

While not replacing face-to-face teaching, the use of instructional programs on radio
and television and the use of taped lessons on audiocassettes are a valuable supple-
ment to the work of JAMAL’s volunteer teachers. So far, JAMAL has accomplished the task
of having made 200,000 persons literate, and there are approximately 197,000 students
currently enrolled in 8,000 classes all over the island. JAMAL’s example shows that the
communications media can be used for training students and teachers, motivating
students and teachers to become involved in the program, obtaining varied forms of
volunteer assistance, and bringing literacy programs more forcibly to the attention
of the public.

For further information contact JAMAL,
47b Sixth Camp Road, P.O. Box 60,
Kingston 4, Jamaica, W.I.

Inez M. Graniriss, instant director of JAMAL’s
special projects department, is a communications specialist who, after setting up the edu-
cational broadcasting service of Jamaica’s Minis-
try of Education, established the educational media and methodology unit of the
JAMAL Foundation.

Learning by Radio
(Continued from page 5)
educational programs, in general, need to
become more “formal.” They have to date
never developed the institutional clout to
assure their future or become part of the
total educational mosaic. Nonformal edu-
cation has seemed destined to live in a state of
financial precariousness at the margin of the
educational dossier, often dying in periods of
budgetary retrenchment.

In the past, nonformal projects have suc-
cessfully dealt with specific needs in such
areas as agriculture, health, nutrition, fam-
ily planning and welfare, and community
development. But usually they have been
conventionally limited in scope. The rec-
ording of nonformal education with a vital
component of basic education by radio is
necessary if the system is to assume a broa der function for a significantly broader
general population. The radio education
component would give the nonformal sys-
tem a loose institutional framework and an
integrating thrust; it would help reduce duplication and reinforce the learning re-
quired for other nonformal activities. As au-
diences grow, it would become increasingly

cost-effective and, with experience, edu-
cationally productive.

Radio education thus conceived would
come to be the backbone of the nonformal
system. The overall combinations of func-
tional literacy projects, community develop-
ment schemes, vocational training efforts,
cultural enrichment and preservation ac-
tivities, and possible restructured and ex-
panded primary education making up such a
system will vary from country to country.

But a common feature of these nonformal
On File at ERIC

The use of print, radio, and, less frequently, television in adult literacy programs is reflected in the reports reviewed in this column. All are available in microfiche from the ERIC Document Reproduction Service (EDRS), P.O. Box 190, Arlington, Virginia 22210. Some of them are also available in paper copy.


The role proposed for Educational Radio and Television (ERTI) in Iran’s national literacy campaign includes joint planning activities with the National World’ Literacy Campaign (NWLC) to develop long-range media support of the campaign. The Stanford report gives background on the national literacy campaign in Iran and on the potential role of media in motivational and reinforcement programs, basic instructional programs, and advanced instructional programs. Discussion of literacy programs in other developing countries includes a description of the Lahore (Pakistan) literacy television pilot project. Available from EDRS in microfiche for $3.32 or in paper copy for $3.32 plus postage.

- McSwain, Martha I.B. Opportunities to Use Family Resources for Reading in the Developing Countries of Africa. Paper presented at the annual International Reading Association World Congress on Reading, Hamburg, West Germany, August 1-3, 1978. 23 pp. (ED 263 416)

As the strongest, most cohesive, and most viable social unit in Africa, the African family has a great impact on literacy. The attitude of parents toward reading and education are, quite generally, positive. The language of literacy is frequently brought into the home by fathers, other adults, siblings, and the radio. In cases where a family can afford to send only some school children to school, those who attend school can bring limited functional literacy to other children and adults in the extended family. The various age groups thus contribute greatly to educational development, although inequities exist among ethnic groups due to the rejection by some groups of the language of literacy. This paper includes two stories, one showing how a school girl has carried medical aid to her village, and another written by a school boy about his first day of school. Available from EDRS in microfiche for 83¢ or in paper copy for 1.82 plus postage.


An opportunity for dialogue within a regular radio school broadcast program was afforded campesinos working toward a primary school equivalency certificate through a rural radio school in Ecuador. With the assistance of their local facilitator or “auxiliar,” who had been given minimal training in technical and interviewing skills, each group used a tape recorder to prepare cassettes that were sent to the radio station to be broadcast. Programs included such topics as a planning meeting for a community work project, local music, a discussion of “Indian Power,” and new readers practicing their skills. Questionnaires were administered to assess literacy skills and self-esteem, both before the recorders were distributed and after they had been in use for six months. Analysis of the responses, plus tangible evidence of progress, indicated that the recorders had been effective in raising self-esteem and increasing knowledge. Available in English or Spanish from the Center for International Education, School of Education, University of Massachusetts, Amherst, Massachusetts 01001. U.S.A., for $1.00. English version available from EDRS in microfiche for 83¢ plus postage.


The Farmers Training and Functional Literacy Programme, initiated by the government of India in 1968, is an effort to translate into practice the concept of linking education to development, particularly for increasing production. The project, a joint enterprise of three government ministries, provides participating farmers with training and field demonstration facilities, functional literacy programs, and special farm broadcasts through All India Radio. A chart contrasting 14 aspects of traditional and functional literacy programs, and a graphic representation of program evaluation results are also included. Evaluation indicates that the overall impact on learners has been satisfactory. Available from EDRS in microfiche for 83¢ or in paper copy for 1.82 plus postage.

Barbara B. Minor, Publications Coordinator, ERIC Clearinghouse on Information Resources, School of Education, Syracuse University, Syracuse, New York 13210, U.S.A.

Somalia

(Continued from page 9)

jumping on the nomads' survival behavior, it becomes necessary for them to acquire a sensitivity to a larger sphere of signs and symbols. The drought that cut short the lives of many of Somalia's nomads. It was clear that overgrazing, desertification, and population growth had strained the carrying capacity of the natural system to such an extent that neither the system nor the nomads would recover as easily as in the past. Some 50 percent of the nomads therefore chose to accept the government's offer to help them settle in villages and modify their way of life to accommodate this new reality. For them, especially, an expanded literacy will play a significant role.

This article has been adapted by the Editor of DCR from several papers in Basic Education for Nomads, the report of a seminar held in Mogadishu, Somalia, April 1-9, 1978. The authors of those papers included Abdi Arte, Amina Adam, and Omar Osman. Copies of the report are available from UNICEF, Eastern Africa Regional Office, O. Box 44145, Nairobi, Kenya.
A Communicator's Checklist


Interest in the educational uses of radio, television, and other electronic media has been evident for as long as these technologies have existed. Over the years, projects using one or more of these media have been conducted in a variety of environments by a variety of sponsors in pursuit of a wide range of educational objectives. While the results and lessons of such projects have found their way into the reports of government and international agencies and into scholarly journals and books (notably The New Media: Memo to Educational Planners, by Wilbur Schramm, et al., UNESCO/IIEP, 1967), few such studies have fully addressed the practical concerns of people who are actually responsible for the design and administration of new educational media systems.

Alan Hancock has written this book with the needs and questions of such people in mind. Relying on his broad experience and unique vantage point as Director of UNESCO's Division of Development of Communication Systems, Hancock identifies not only the major decision points that planners confront in their efforts to assess the educational potential of the media, but also the complex range of technical, economic, and political constraints under which they usually operate. The cost-benefit and cost-effectiveness criteria that Hancock suggests planners consider in weighing alternative media investments are drawn from a comprehensive review of the literature and from a personal association with numerous planning projects.

Acknowledging that many media projects have been launched without a clear set of educational objectives, Hancock offers in Part 1 of the book an overview of the planning process, beginning with the identification of the intended audience and its educational needs, and proceeding through the setting of objectives to the controlled evaluation of the system's performance and effectiveness. In Part 2 he concentrates on the specific questions and problems that are likely to arise in organizing media production, utilization, and evaluation units and the interactions among them.

Given the wealth of case study material now available on such topics, Hancock does a commendable job of synthesizing past experiences and interpreting them in terms the layman can understand. By the same token, while the professional producer may not feel satisfied with the level of detail or sophistication with which the book treats equipping and managing a modern studio facility, nor the social scientist with the discussion of the different evaluation strategies, the levels of detail and analysis seem appropriate for the planner seeking general background information and policy guidance. This reviewer found the sections on staff recruitment and training (which includes outlines of sample training courses) and on organizing multidisciplinary teams to assess a country's media investment priorities particularly valuable.

Hancock is clearly taken with diagrams, charts, models, and checklists; the text is punctuated with more than a hundred of them. In most instances these contain useful information. They also help to clarify important concepts and preserve the handbook character of the volume. Occasionally, however, the information is presented in a more complicated form than necessary, and this may only serve to confuse some readers, particularly those who are approaching the subject for the first time. A more serious shortcoming is the lack of adequate footnotes and specific bibliographic citations. As noted above, Hancock makes excellent use of published materials, including long quotations from important studies in the field, yet such references are often not accompanied by specific titles or page numbers. This is likely to frustrate some readers and limit the value of the book as a reference guide.

In spite of these stylistic flaws, this is a book well worth the attention of anyone concerned with the past, present, or future role of the mass media in education. It is an excellent account of how this field has evolved in the last decade and provides valuable insights and clear directions for anyone concerned with improving the media's effectiveness.

Reviewed by John K. Mayo, Florida State University.


This slide-tape presentation, developed by World Education, describes the efforts of Indonesia's Directorate for Community Education to meet the needs of Indonesians between the ages of 10 and 45 who neither work nor go to school. The presentation depicts one project in West Java, for example, that trains villagers as group leaders and creates and disseminates learning materials for community education. Mutual assistance and group consensus are key concepts of the project, and emphasis is placed on the discussion of needs rather than the incorporation of a ready-made development message. Learning groups were developed for such subjects as literacy and woodcarving, based on the members' interests; discussion in the groups is stimulated by stories, filmstrips, posters, and drawings. The learning groups make decisions for group action, such as the one featured in this presentation: to develop a clean community water supply.

"The Learning Group" would enhance any effort to introduce a participatory nonformal education process.

126 color slides, audiocassette, and script are available for purchase (US$75) or for rental (US$15) from World Education, 1414 Sixth Avenue, New York, N.Y. 10019, U.S.A.

Reviewed by Judy Brace.

Observations on Fugelsang's "Beans in a Bowl"

For many years I have admired Andreas Fugelsang's writings on applied communication, and I am delighted that he was able to share with us his many years of practical field experience. (See DCR 27 and 28.) I completely agree with him that "there is no such thing as a primitive mind" and that "we must understand that there are different learning styles, different — and culturally conditioned — modes of processing information." He is quite right, too, that the term "illiterate" carries a discriminatory notion: being illiterate is by implication something (Continued on page 14)
On Fugelsang

(Continued from page 13)

less desirable and less valuable than being literate.

It is truly unfortunate, then, that Mr. Fugelsang perpetuates a stereotype of nonliterate by characterizing them as having a) limited capacity to deal with the abstract, and b) extraordinary memory. In his anec
dote about the 80-year-old woman from Zambia, he asks, "Is the ability to abstract an unqualified advantage?" Space does not permit a full discussion of that question, but the implication seems to be that Mama Mukahamubwitu is limited by concrete ex
eriences, hence unable to deal with abstract thought. "Abstract" and "concrete," as Mr. Fugelsang would no doubt agree, are very imprecise terms, and we cannot speak of abstract and concrete thinking in general. Michael, Cole and Sylvia Scribner noted several years ago that "it is clear that experimental findings do not allow the conclusion that in general the thinking of any group of people is, or is not, abstract."

In describing Mama M.'s response to a logical syllogism, Mr. Fugelsang comes very close to suggesting that she is exercising what at one time was called "pre-logical mentality." The notion of pre-logical mentality may have been taken seriously at one time, but since the late 1950s the notion has been regarded as a barrier to investigation in the realm of cognitive processes.

With regard to the supposed extraordinary memory of nonliterate, Cole and Scribner again point out that we should seriously question reports of fabulous memory power among traditional nonliterate peoples: "When we turn to the experi
cmental evidence, we see no hint of a general superiority on the part of nonliterate peoples, nor do we encounter qualitatively different modes of remembering."

A review of the work of scholars of the cognitive process (e.g., Cole, Scribner, Gay, Clammer, Hudson, Deregowski; Price-Williams) leads one to conclude that we can assume nothing with regard to the learning characteristics of nonliterate people. Most of the things that we have tended to associ
te with nonliterate are described by Cole as "anthropological folklore." We are not sure what aspects of culture, education, experi
e, rural/urban living, and type of work cause differences among people in performance levels with regard to specific learning tasks, but we are reasonably certain that there are no fundamental cognitive differ
ces between literates and nonliterate, if literacy is taken as the operative factor.

Richard C. Burke, Professor of Telecommunica
tions, Indiana University, Bloomington, In
t., U.S.A.

Selected Bibliography and Resource List on Literacy

Media and Literacy

Burke, Richard C. The Use of Radio in Adult Literacy Education. 1976. Part of the series, Literacy in Development: A Series of Training Monographs for the middle-level field worker. (See review in DCR 20.) Available from IALM and from Hulton Educational Publications Ltd., Roans Road, Amersham, Bucks, U.K.

Cottereil, F. Perspectives on Printed and Media Supports for Non-Formal Adult Basic Education. 1977. (See review in DCR 20.) Available from IALM.


International Institute for Adult Literacy Methods. Mass Media Literacy Bibliography No. 4, 1977. Available from IALM.


Kahlan, John. Radio and Television in Literacy: A Survey of the Use of the Broadcast Media in Combating Ill-

---.afflez-Zaman. Utilizing Television for Adult Functional Literacy in Pakistan: A Case Study of the Planning and Pre-


cation.


Literacy General


---. Utilizing Television for Adult Functional Literacy in Pakistan. 1977. A case study of METAL's attempt to reduce the adult illiteracy rate from 33 percent in 1970 to less than 10 percent in 1980. Describes the use of radio to train adult literacy teachers, proposals to use radio for literacy training and integrated education, and proposals to use television for training literacy teachers. No. 15 in UNESCO's series of Educational Studies and Documents.


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Dilemmas

(Continued from page 16)

the contractor's misunderstanding of the project design. The contract team decided early on to have a pre-training workshop for the health personnel from one of the project sites. The volunteers were notified by cable to prepare for the arrival of 20 people from the capital. The MOH's regional and district medical directors had not been notified or consulted. The volunteers sent a message to the contractor suggesting a meeting to plan the workshop and to work out the proper protocol. The contractor did not receive the message in time, and the contingent from the capital (including the national director of the project and the donor agency's country director) arrived several days later to open the workshop. In deference to the guests, the people available gathered for the workshop, amid considerable confusion.

This was, to be sure, not an easy project to understand, but the design allowed no place for the myth of the infallible expert from the West. One wonders, too, if the initial enthusiastic commitment of the MOH, donor agency, and volunteers to rural-based activities was not more a result of the long waiting period than real comprehension of the organizational and planning needs of the project.

In any case, the decision of the MOH to replace the contract personnel indicates that a difficult lesson has been learned, as much by the contractors as by the host country. If assumptions could be made at all in the work of development, one would assume that future project activities would include an intensive orientation to the project for all project staff.
Dilemmas in Country X: Candid discussions about failures

Projects designed for developing countries nowadays tend to emphasize local participation in the planning and implementation processes. This Dilemma points up that even when participation is highlighted in a project’s design, it will not occur unless and until all of the project personnel are committed to the principle. The Dilemma was contributed by Patricia A. Mathews, a specialist in development communication.

The basic goal of this project was to promote the delivery of rural health care services by training village health workers. The project design emphasized the development of a six-level administrative infrastructure within the Ministry of Health (MOH) that would support the planning and implementation of project activities, from the village to the national level. This was felt to be a distinguishing factor in the design, as it encouraged project management by the host country.

The project was funded by a major international donor agency, and a prestigious university was hired by the MOH to direct the project. According to the project design, the contractor’s technical assistance team was to be responsible for directing the development of the administrative infrastructure within the MOH. The contract team included a project director for the national level, two physicians to work at the regional levels, and two short-term consultants to assess the training and community development aspects of the project. Technical assistance was also provided by a volunteer agency, with volunteers assigned to help coordinate the project at the rural level.

The volunteers were first to arrive in-country, and, as contract negotiations dragged on, it was some time before the contractor’s team arrived. Meanwhile, the volunteers were sent out to the two project sites, where they worked with local health personnel to collect baseline data and introduce the project to the communities. Through these activities at the rural level, ideas began to evolve about how to implement the project once the contract team arrived. The volunteers were a conduit for these ideas to flow from the communities to the regional and national levels.

Up to this point the project was an excellent example of decentralized, rural-based project development, using paraprofessionals in a participatory development process. Following the arrival of the contract team, the project became an equally excellent example of a disorganized, poorly managed project, fraught with interpersonal conflict and inappropriate development processes. Within 18 months the project was so muddled that the MOH asked the contractor to replace those members of its team who had not already left out of frustration.

What happened?

The volunteers and donor agency health officer, working with the project design for almost a year before the contract team arrived, and they had an understanding of its implications for the MOH. The volunteers’ initial orientation to the project, and their subsequent discussions with all project personnel, stressed the necessity of careful organization and planning to support the development of rural-based activities.

The contract team, however, had only a brief orientation to the design and to the MOH. Everyone, including the contract team themselves, assumed that the contract team understood the project and its role in its implementation. This was somewhat like assuming that any car mechanic can fix a Muggati. Although fundamental expertise was there, the contract team lacked the specific information that would have completed their qualifications. A careful reading of the project paper would have helped them avoid many serious mistakes.

One incident will serve as an example of (Continued on page 15)