

1975

Open Broadcast Radio: Three Strategies

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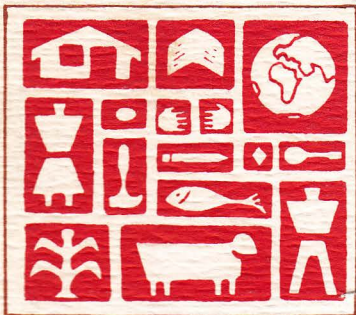
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OPEN-BROADCAST RADIO:

Three Strategies

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One week America's television viewers learn of Betty Ford's imminent mastectomy. The next week clinics around the country are flooded with requests for breast cancer examinations. Health workers say that previous educational campaigns to motivate American women to face up to this problem had all failed. So, how did such a small amount of communication have such a dramatic effect upon knowledge, attitudes and behavior?

Consider the battle against alcoholism. How is it being waged? Who is leading the charge? Is it high school teachers? Is it ministers in the pulpit? Is it community service organizations? According to one federal agency, it is the commercial TV series Maude, whose 1973-74 season began with episodes examining Maude's husband's alcoholism.

And what about pre-school education? We have all heard of the "baby-ed" boom. Where is it occurring? in church basements, in neighborhood cooperatives? Most pre-school education in America takes place right at home, as ten million children go to the family TV set, and tune in their favorite program, Sesame Street.

What are "Big Bird," Maude, and Betty Ford doing in a book about the role of radio in education and development? These TV personalities are part of an incredibly effective communications medium, which captivates 80 million people on the average evening. They have played an educational role in a medium which is not generally considered to have educational effects -- mass audience "open broadcast" television. Perhaps these experiences can suggest how open-broadcast radio might be used for education.

We do not propose that American commercial formats can be adapted wholesale for education in the U. S., much less exported to the third world. We are even less ready to defend the export of specific programs, whether Bonanza or Sesame Street. However, what does merit consideration are the communication methodologies employed by open-broadcasters. The specific programming which emerges from this process must grow out of the local cultural setting, and address needs articulated in that setting. An example is the Latin American telenovela and radionovela, which are indigenous reformulations of the American soap opera. Brazil's use of this format for adult education won the Japan Prize in 1973.

Such deliberate uses of mass media formats for educational ends are rare. Most broadcasters program for casual audiences seeking information, entertainment, or escape, rather than education. Audiences tune in when they need relaxation or stimulation, flick their dials until they find an offering which meets their need, and tune out when that need is sated. This "open-broadcast" strategy is the mode by which electronic media have become a major part of the lives of most of the world's population. They have been the prime force behind what McLuhan has termed the "global village." Nonetheless, educators have concentrated their efforts on

other strategies for using media.

Most articles and books about radio are devoted to media strategies conceived and developed by educators — strategies which reach an insignificant percentage of the world's media audiences.

These strategies involve tying radio messages to group learning activities within the context of learner commitment to a long-term, multi-faceted educational program. Such measures are considered necessary to obtain deep and lasting changes in the learners. While these "organized-audience" strategies have yielded impressive results in some settings, they have so dominated the field of media for third world education and development that the open-broadcast alternative has been virtually ignored.

Mass media specialists in industrialized countries recognize the educational potential of TV and radio, even if education-oriented media specialists do not. When Maude affects the knowledge, attitudes and behaviors of millions regarding the use of alcohol, she deserves recognition as a powerful educator. If radio advertisements induce millions to consume less milk and more soft drinks, they should be seen as powerful examples of nutrition education. Although educators may not always respect the motives or the objectives of mass media advertisers or entertainers, educators can derive great benefit from study of their communication techniques.

Let's consider Big Bird, Maude and Betty Ford in educational terms. Although only one of them came to home TV screens as part of a consciously planned educational undertaking, all three use mass media communication techniques. They have all had major impacts upon Americans' knowledge, attitudes and behavior. While Sesame Street has spawned a few

similar programs aimed at other target audiences (Electric Company, Carrascolendas, Villa Alegre, Feeling Good), open-broadcast programming has yet to be fully understood and accepted by educational media specialists.

The reluctance of educators to accept Big Bird, Maude, and Betty Ford into their ranks is understandable. Each represents a threat to the established notion of who is qualified to teach, and what constitutes effective educational practice. We all have heard the statistic that the average American teenager has spent more time (voluntarily) watching open-broadcast commercial television than he or she has spent (involuntarily) in the classroom. If open-broadcast TV proves (under some circumstances and with some types of educational objectives) to be more educational as well as more attractive than organized learning groups, the implications would be far-reaching.

Another reason behind the reluctance to accept open-broadcast may be the sheer difference in approach between those who program for the mass audience and those who program for organized group audiences. When viewers commune with our three sample TV personalities, they do not see themselves as "students," as recipients of teaching. Unlike the more or less "captive audience" of the organized group, open-broadcast media users can "drop out" the first moment they become bored, simply by switching channels. Their escape will be neither punished nor even noticed by the "teacher."

The "teacher" is in a distant studio or on videotape, serving as many as ten million "students" -- hardly an acceptable student/teacher ratio by today's standards. While a small number of students per classroom is the dream of every public school teacher, the goal of the open-broadcast

educator is just the opposite.

The purpose of this slightly overdrawn comparison is to illustrate that programming for open-broadcast is entirely unlike the media strategies that include a face-to-face component. The educator cannot approach open-broadcast media on his own terms. He must approach open-broadcast on the terms of mass media, and he must learn the principles by which mass media communicate.

Taking an open-broadcast approach to educational media is a largely new focus. To date, most educators have approached media on the educator's terms, and have remade the media to fit into classroom or classroom-like activities. When a medium is programmed to feed into a study group, a listening group, a decision group, or an action group, the medium merely supplements the central function of the group. The long-standing term "audio-visual aids" expresses very accurately the orientation of most educational media specialists (operating in both formal and nonformal education) toward the role of media in learning. The media are used to embellish educational programs, which are left largely intact.

The ground rules of organized-audience educational media are entirely different from those of open-broadcast mass media. Reviewing the research on educational television, Wilbur Schramm concluded that color had no educational effects, and that TV was best used in conjunction with face-to-face instruction and print materials. (Schramm and Chu, 1967.) Much effort in educational television has gone into black and white systems operated closed circuit within educational institutions. In the process, a mass medium is remade into a small group medium of high cost and low appeal.

When students escape from the classroom, they go home to view voluntarily an entirely different type of television. At home, having a color TV set is important enough to have motivated Americans of all income levels to spend approximately \$400 above the cost of a black and white receiver. At home, accompanying face-to-face instruction and print materials are so unimportant as to have become a feature of no mass-audience television program.

Although the organized-audience strategies undoubtedly produce more profound learning, they are more expensive and complex to orchestrate. The costs and benefits must be measured. Training of group leaders, production of printed materials, and distribution problems reduce the speed and audience potential of the electronic messages. On the other hand, the open-broadcast message stands on its own. It arrives on time, intact, at millions of destinations. Without reliance on supplementary printed materials or group learning activities, it teaches its audience. Why has it been so neglected by specialists in the field of third world education and development media?

When third world countries seek advice on how to develop, they often come to educational media specialists in the industrial countries who do not know mass media techniques. The export of the Canadian radio farm forums to the third world illustrates this tendency for avoiding the open-broadcast alternative.

The radio forum originated in Canada in the early 1940's. Groups of farmers were assembled to receive radio broadcasts on agricultural practice. Under the direction of a group leader, they discussed the topics of the broadcast in relation to their problems. Ideally, the

outcome was a decision to take action in the area covered by the broadcast.

The radio farm forum concept was exported to India in the 1950's, where it became the object of much international interest and research. The Indian forums were subsequently replicated in several countries of Asia and Africa. This model influenced others to adopt the organized-audience radio strategies which are now so common.

However, the original Canadian forums had a surprisingly small impact, from a mass media perspective. Out of a rural population of millions, the forums had only 30,000 participants during their peak in the 1940's. By the time they were proposed for export to India, interest in the forums had declined sharply, due to the spread of television. In the late 1950's, a number of techniques were tried in order to rekindle interest in the forums. Edited tapes of discussion groups were broadcast. Telephone "hot lines" were added to provide immediate grass roots feedback to the radio programmers. No way could be found to reinvigorate the forums, which languished until their death in 1965. (Ohliger, 1967, p.41.)

The demise of the original forums in Canada seems to have been related to the growth of family ownership and home use of television. Summing up experience with the forum strategy in India, Tony Dodds notes that studies revealed "communal listening seems to be less popular in more developed areas where there are more individual radio owners who can listen by themselves ..." (Dodds, 1972, p. 36.)

Could this mean that both Canadian farmers and Indian villagers prefer open-broadcast media to organized-audience media, when they are given the choice? It is certainly sufficient justification for considering open-broadcast as a major alternative to organized audience

programming. Yet, this does not seem to have happened.

McAnany's review of development-oriented radio projects in the third world lists 65 projects, of which only five broadcast to a non-organized audience. McAnany devotes only two pages to open-broadcast, while spending 13 pages describing four strategies which supplement the broadcast radio message with various forms of group discussion, study or action.

McAnany's concluding remarks express dissatisfaction with current applications of all the strategies:

...A close look at the existing projects shows that (educational) radio is reaching only a minute fraction of its potential audience. Although there are a number of radio projects following one of the five strategies in many countries, the numbers being reached are discouragingly small. In Brazil, for example, the actual radio audience participating in non-formal instruction in both urban and rural areas is about 40,000 or less than 1% of the "potential" audience.

(McAnany, 1973, p. 22.)

Of the twenty projects for which McAnany (1973, 1975) has supplied audience data, none are open-broadcast. Of these organized-audience projects, only three reached truly massive audiences. These were the Brazilian Movimento de Educacao de Base of the early 'sixties (111,006), ACPO's Sutatenza radio schools in Colombia (167,451) and Tanzania's health campaign of 1973 (2,000,000.)

In each of these instances, unusual circumstances favored the participation of mass audiences. In Brazil in the early 'sixties, there was a strong commitment from the government to mobilize the population to initiate rapid social change. In the case of ACPO, the large audience is the result of 25 years of dedication and hard work on the part of a dynamic and well funded private organization. In Tanzania, the government's

strong commitment to grass roots rural development created conditions conducive to attracting audiences far larger than in Brazil and Colombia. One must ask oneself whether the organized-audience strategies are capable of generating mass audiences without the assistance of a large and established human infrastructure reaching the grass roots.

The Radio Club Association of Niger has been in operation for over a decade. Yet that project programs to an audience of only 1500. The other sixteen projects for which McAnany reports audience data all reach less than 15,000 people. Are these adequate audiences for cost-effective use of the world's major mass medium? Should these projects be contented with these figures, and continue business as usual with the organized-audience strategies? In settings which lack vigorous government commitment to grass-roots mobilization and organization, do the organized-audience strategies offer the potential of reaching a mass audience?

The issue turns on the word "potential" (which McAnany also chose to place in quotes in the paragraph cited above.) We suspect that the "potential" audience of the organized audience strategies only reaches a mass scale in settings which possess a strong and extensive organization at the grass roots. Only under such conditions can the radio educator build a widespread network of group leaders, motivators, supervisors, evaluators and print material distributors and still have some resources left for the creation of effective radio programming.

Even if such human networks are in operation, the motivation factor may place other limits on potential audience. Perhaps many hard-working adults simply cannot be interested in long-term educational

radio programs involving many ancillary demands on their time.

On the other hand, the potential audience for short, catchy open-broadcast messages is unconstrained by these considerations. Appealing messages, which deliver immediately useful and gratifying learning, can attract and maintain audiences without a need for face-to-face contact with "students." Such messages can stand on their own. Requiring no supplemental reading or discussion, they demand only the listener's initial momentary attention. If they are well produced, and attuned to the listener's culture and needs, they can captivate both the busiest and the least motivated of the casual open-broadcast mass audience.

Another factor which affects "potential" audience is the quality of the creative and evaluative work which goes into the radio programming itself. By diverting scarce resources from radio production and into training of monitors, production of printed materials and management of a full-blown educational enterprise, radio educators often end up underemphasizing the one factor whose quality they can really control -- the radio message. When the radio programming is boring or irrelevant, open-broadcast (voluntary) audiences spin their dial, and organized (captive) audiences lose dynamism.

In the 1970's we find ourselves confronted with a paradox. Development educators are drawn to radio upon realizing that radio is the mass medium of the third world, to which even the poorest of the poor can gain access. However, educators proceed to use the medium in ways which, in most settings, preclude their ever attracting the mass audiences which initially drew them to the medium.

Out of the "organized-audience paradox" grows the question which we hope to clarify during the rest of this chapter. How can radio educators in countries not undergoing political and social mobilization attain mass audiences? Our hypothesis is that the techniques of open-broadcast entertainment media can be used for educational and developmental objectives. We also feel that quality open-broadcast programming would offer a practical means for undersubscribed radio projects to build their audience and even motivate new listeners to form listening groups.

In order to stimulate inquiry into this prospect, we will touch upon three types of open-broadcast communication: the advertisement, the man-on-the-street interview, and the quiz show. In the first case, we will offer a whirlwind tour of a vast literature. In the second case, we will relate a specific project involving participatory radio communication. In the final case, we will deal with an educational quiz show, which is shortly to be produced. Our aim is to suggest approaches to radio, which may be of use to educators.

EDVERTISING¹

It is erroneous to think of the mass media as essentially commercial media and of the advertising technique as exclusively a commercial methodology. The advertising technique is an ingenious employment of the principles of "reach-and-frequency" in mass media communication: to reach the broadest possible audience with a desired message as frequently as possible. Its key element is the brief message — a minute, 30 seconds, or even less — carefully designed to register a single idea memorably and to initiate the desired action. It seeks out its target audience among those programs where available audience data inform us that it can be found. It interrupts those programs briefly and, because briefly, it can do so repetitively over time — accumulating greater audience awareness and, almost always, increasing acceptance for the practice of its central idea. Clearly such a technique is not a mystique of commerce. It can be used for nutrition ideas. Other uses of the mass media — one-time programs, speeches, and the like — have their value but do not have the reach to masses of people, the potential to emphasize key ideas, the opportunity for repetition, for frequency. (R. K. Manoff, 1971.)

The advertiser differs from the educator in the assumptions made about the motivations of the listener. The educator works with a more or less "captive audience," and generally does not concern him/herself with the matter of motivation. The educator knows the learner wants education, and simply defines and presents that commodity.

On the other hand, the advertiser assumes that the listener does not want to learn about his idea. The advertiser must motivate the listener by tying the idea to basic human needs in a compelling way. Ads may appeal to the listener's masculinity, maternal instinct, social aspirations, greed, sense of loyalty, or a number of other basic motivations.

¹The authors wish to thank Carol Martin of the UMass Nonformal Education Project for doing background research in advertising.

Since open broadcasting for education must compete for listeners with programming whose intent is commercial or political manipulation, the educator must learn how to use mass media techniques in ways that will attract an audience while maintaining an educational orientation. We call an educator who uses advertising techniques an "advertiser."

Perhaps it is useful to consider commercial and political manipulation as education, although education whose intent we may abhor. FAO notes that as incomes rise there are many claims on the additional money earned; money is likely to be diverted into things that are nutritionally wasteful. In a part of India, where significant economic gains had been made, people began to abandon their traditional diet for less nutritious but more prestigious fare, including commercially advertised tea and biscuits. In a village outside Brasilia, many construction workers had risen on the socio-economic scale because of the work opportunities in the nearby city. A Ford Foundation project monitored their nutritional status. While the average worker's housing and clothing improved, nutritional level dropped because of reduced milk consumption. Coca Cola had replaced milk to a large degree. Ecuadorean nutritionists have told us that many urban lower-class mothers in their country have abandoned nursing in favor of commercially advertised formula milk, which they must mix with the cities' contaminated water.

The point of these examples is that people are educated by commercial advertising. Their knowledge, attitudes and behaviors are modified in systematically planned ways. The problem is that the planners of commercial advertising don't always have the consumer's best interests at heart. "Advertisers" representing the public interest may have to

intervene in the mass media if the cases for traditional Indian diets, cow's milk and breast milk are to be made. If this does not occur, the mass media's power to influence attitudes, knowledge, and behavior will be left to the commercial interests.

Most advertisers ascribe to the "hierarchy of effects" theory, drawn from a classical psychological model which divides behavior into cognitive, affective, and conative (motivational) states. Movement within the hierarchy begins with a person's awareness of an object or a concept, and ends with a decision to adopt some behavior relative to it. Between awareness and behavior, attitudes or preferences are formed. Accordingly, advertisers strive to change behavior by conveying information and influencing attitudes. They confine themselves to small, concrete objectives and short messages.

Advertisers differ about the relative importance of conveying information and changing attitudes. Some stress information exchange and memory impression. Others stress changing attitudes. And still others question the existence of attitudes, and aim to strike a "responsive chord" at deep emotional levels. In the imperfect art of advertising, there are no definitive answers regarding which approach is correct, or applicable to which communications task.

This dilemma derives from the basic complexity and unpredictability of human behavior. In 1954, researchers from DuPont Corporation stopped 5,200 shoppers on their way into a supermarket and asked them to report which brands of various products they were going to purchase when they got in among the shelves. On the shoppers' way out, the researchers examined their shopping carts. Three out of ten had behaved largely as they said they would. Seven out of ten had changed their minds in

the store. (Pomerance, 1969.)

Although there are problems in adequately defining and measuring attitudes and in making hypotheses which connect beliefs and behavior, sometimes attitudes can point to specific factors in a concept's substance or image that are blocking a person's attraction to that concept. For example, manufacturers of a new cake mix which required only to be mixed with water found that housewives had guilt feelings about using a product which demanded so little of them, and which therefore insulted their capacity as homemakers. Discovery of this attitude led the manufacturers to take the dried egg out of the mix, so that the maker would have to crack and mix in her own raw egg. This slight change, which was discovered through attitude measurement, resulted in a product that sold rapidly.

From this seemingly irrelevant story about the American housewife, we can draw important implications for the conduct of educational advertising in the third world. Products, practices, and concepts which are being sold affect the users' attitudes and self-images. Third world advertisers would be well advised to probe peoples' attitudes toward the practices they are trying to promote. They should take this into account in the creation of their advertising. For example, if breast feeding is associated with low social status, then a campaign to encourage breast feeding should try to raise the prestige of breast feeding rather than present rational arguments in its favor.

Choosing a Strategy

Once an advertiser has clearly articulated his goals and has determined what attitudes toward his "product" already exist, how does he go about designing an overall strategy for his broadcast?

The first step is to study socio-psychological forces in the family and local community such as opinion leadership, traditions, and taboos. This will help prevent saying the things which will repel listeners. The next step is to identify reference groups by studying the class and ethnic structure of a region. Advertisers can increase the acceptability of their messages by directing them to reference groups. "You can make a difference. Join the Volunteer Corps today." is based upon the need to be identified with a group.

The advertiser must next determine the stage of popular acceptance which his ideas have reached. In the "pioneering stage" when there is little familiarity with his product, the advertiser will probably choose to mount a campaign which builds up product recognition and recall of product attributes. Tanzania, for example, needed an intensive information campaign when it introduced the "ujaama" concept. Most products go through a pioneering stage; breast feeding is an exception. After an idea or product is known, competitors usually arise. Today, mother's milk is competing with bottled milk and powdered milk. At the competitive stage, the advertiser must begin to highlight the ways in which his ideas can best meet the needs of the audience. The key to this is finding a Unique Selling Proposition (USP), a seminal idea which points to the unique value of the product. When a practice has been adopted by large numbers of people it has entered the retentive stage of advertising. Here the advertiser seeks to hold his patrons with the least effort and expense. Revolutionary slogans on billboards in China remind people of what they learn in classes on ideology.

Another key factor that will determine the choice of an advertising strategy is the type of attitude toward the product that the

receiver is likely to have. There are four attitude types, each of which implies a different strategy. (Howard, 1973.)

1. If a mother bottle-feeds her baby because she believes it is more nutritious, she is using a personal attitude. Rational persuasion and information usually are the strategies chosen to deal with personal attitudes. The use of "free samples" is another effective strategy for personal attitudes and is an example where behavior change precedes and causes attitude change rather than the other way around -- a phenomenon most succinctly expressed by the saying, "Try it, you'll like it."

2. If a mother bottle-feeds her baby because she feels that her friends will be impressed, she is using an interpersonal attitude. Creating a product image is the key to addressing interpersonal attitudes. Creating a product image usually means giving an "added value" to a product, which is often done by associating the product with some highly desirable, yet functionally unrelated, person or idea. If a national hero supports an idea, he adds prestige to the value of the idea.

3. If a woman's ideal self incorporates the concept of a good mother and she feels that bottle-feeding contributes to that concept, she is using an intrapersonal attitude. The key to influencing intrapersonal attitudes is to highlight the product attribute which can best meet the requirements of the listener's self-concept. No amount of information unrelated to this will be persuasive.

4. If mere convenience makes a woman decide to bottle-feed her baby, she is using an impersonal attitude. A strategy that might address impersonal attitudes usually is low key, and concerned more with how and where to get the product than with the product's attributes.

Thus, in one way or another, the acceptability of an idea/product depends on the extent to which people view it as being related to their needs and desires. An appeal to basic needs can be made sensually, emotionally or rationally. One or all of these approaches should be embodied in the Unique Selling Proposition (USP.) The psychological thrust of a USP lies in its claim. Once a USP has been found, the writing of a message by a good copywriter "is just wordsmithing," according to Rosser Reeves (1961.) "Five top copywriters might turn out five entirely different messages, all good, from a single USP, while all the wordsmithing in the world won't move people if the claim isn't right." (Meyer, 1958.)

The Unique Selling Proposition grows out of analysis of what the product/idea can do for its users; the result of the analysis is a single specific claim which can be repeated many times. Advertising agency copywriters usually know far less about the product and its uses than the client company. However, "what the copywriter usually contributes to the client is not so much his understanding of the product itself as his intuitive knowledge of the public attitudes." (Meyer, 1958.) Research is sometimes needed to determine the way an idea should be presented. For example, some cultures might value literacy for the prestige it confers; others for the economic benefits; still others for the opportunity it affords to read religious texts.

Appeals connected to the desires and drives of man take a variety of forms. The desire for mastery is promoted in ads for men to apply for more information about the "rapid advancement" in a skill training course. The sympathy of adults is elicited in requesting them to insure their children's future by providing the best possible nutrition.

"Before and after" messages appeal to a person's desire to solve problems; a message about the need to boil drinking water could describe the health of a family before and after adopting this practice.

Communicating Effectively

Once the appeal or unique selling proposition is decided upon, the task remains of developing an effective message. Educators can learn much from the simple and clear delivery style of advertising copy. The headline of an advertising message must be an "ear-catcher" which appeals to the listener's self-interest, and which hints at the body of the message. Headlines may give direct promise ("You get a bigger harvest ... with crop rotation."), or provide information ("The mothers who love their babies most are going back to breast feeding!")

The next part of the copy should amplify or give details which support the idea in the headline and which help the listener make a decision. "Our literacy program uses materials of interest to the mature learner. Anyone can come to see them before enrolling; our group leaders are trained to respond to your needs."

Proof and reassurance of the product/idea's effectiveness play a role in convincing the listener of the product's worth. Reporting a demonstration or test of the product may be appropriate: "Forty farmers tried crop rotation and got bigger yields last year." A message is more convincing if testimonials are given by people who are competent in the field in which they are passing judgment. A nurse might be an appropriate person to recommend breast feeding.

The closing of the copy often rationalizes or justifies making a change in behavior: "Go ahead. You've been thinking about literacy classes. Why not visit the center today?" Closing remarks may try to

dispel doubts people may have about the product/idea. Anticipating that some adults may have had an unpleasant experience with formal education, trainers may close their message by saying: "O.K. It's not hard to read. Many people just like you have learned to do it," hoping to allay the listener's fears. Final suggestions to take a specific step, such as visiting one's local center, sending for further information or taking some other specific action helps listeners make up their minds.

Research and Pre-testing

Advertisers do not develop effective messages purely on the basis of creative intuition. Quite the contrary. Psychographic research on the audience, and the measurement of audience reaction to the advertisement takes place at each stage in the development of the message. Research and testing guides creativity and ensures the desired results. There are many ways to do such research. Below are detailed a few of the many possible approaches.

In many environments, an open-ended and free-wheeling approach to research is called for. The researcher will visit homes of the target population and present them with a draft of the message on a cassette tape recorder. Before playing the tape, the researcher will try to obtain basic information about the respondents' lifestyle, and about their basic attitudes toward subjects dealt with in the message.

In the case of a message stressing the importance of boiling drinking water, the researcher may begin by asking, "How's the water here?" "Do your kids have parasites?" The research confirms the verbal responses with observation of the home's furnishings and the behavior of the respondents.

Next, the researcher plays the message for everyone to hear, and observes when the family is attending to the message, when the mother tells the kids to keep quiet, and so on. After playing the message, the researcher asks open-ended questions about it. "What did the message say?" "What did it mean?" "Did you like it?" Throughout the entire process, the observer strives to discern non-verbal as well as verbal responses.

This eclectic approach is well suited to situations where funds are limited, or where respondents are not comfortable in laboratory testing situations. Data of various kinds can be generated: lifestyle of the audience, attitudes of the audience, appeal and effectiveness of the message.

Sometimes, more structured testing is used to collect such data. Researchers may request members of the target audience to read scripts (before they have been produced) and answer a list of pre-determined questions. Responses are recorded verbatim and analyzed in terms of three objectives: narrative comprehension, message communication, and attractiveness.

a. Narrative comprehension is an assessment of how well the listeners understand the storyline of the message. The researchers try to find out which elements of the message are noticed and which are not noticed; how well the listeners link the various parts of the story; and whether those who do not correctly give back the narrative misunderstand it or simply cannot remember it.

b. Message communication is an examination of what ideas viewers derive from the message. The researchers determine the level of abstraction and understanding at which the message is comprehended and what incorrect ideas, if any, are inferred from the message.

c. Attractiveness gauges how well the message is liked.

The researcher asks the subjects to identify elements of the message which they liked and which they do not like, and whether or not they felt they were confused by the message.

Dr. Ernest Dichter (1965) developed the controversial "mousetrap" research technique, which subjects volunteers to a series of unstructured interviews, round-table discussions or role-playing sessions built around the product/idea. These activities are all taped and/or photographed. From these records, intuition and Freudian analysis are used to develop hypotheses about people's "real reactions" to the product/idea.

This method is said to get below the observed preferences to sub-conscious motivations. In education, such an approach may have relevance for sensitive issues such as birth control, about which people do not always express their true feelings.

Another type of pre-testing is the Paired Comparison Method. The storylines of two proposed messages dealing with the same subject but having a different presentation style are given to a number of people to evaluate in terms of the attractiveness of the presentation style. Message A is given to one group of people; message B to a different, but equivalent group. Both groups are asked the same set of questions. The responses are compared.

The above material is intended to offer a brief introduction to the creative and evaluative techniques of advertising. Readers may complain that advertising is manipulative, didactic, and limited to small concrete objectives. There is a great deal of truth in such criticisms.

Advertising is not a comprehensive solution for educational radio. However, we contend that it can be effective in achieving certain types of objectives.

First, advertising could teach simple facts and stimulate behavior changes in related areas. For example, people should be informed of the nutritional value of milk and the harmfulness of soft drinks. Mothers should be informed of the value of breast milk and the dangers of mixing formula milk with contaminated water. People should be made aware of the dangers of contaminated water, and motivated to filter or boil drinking water.

Advertising would be completely appropriate to these tasks. Each of the above examples refers to scientific facts, which cannot be practically demonstrated or proven to large masses of people. Participatory learning and dialogue are simply incapable of generating the discovery that contaminated water contains microbes, which are dangerous to human life.

Another point which should be made is that advertising theory and practice are not limited to 60-second spots conveying a single concept. The techniques of advertising are reflected in the longer programs which are played between advertisements. The TV character Maude is like many of the women in American TV advertising. She is the suburban, upper-middle-class housewife, with whom many viewers identify, whether she is selling soap or using humorous drama to teach about alcoholism. Betty Ford's "testimonials" about the importance of checking for breast cancer parallel advertising testimonials from respected sports figures. Sesame Street has used advertising animation techniques to punctuate and enliven long program segments.

However, before educators embrace and implement advertising techniques, it is important to consider the limitations of their shared interest with advertisers. For many educational objectives, discussion, dialogue and learner participation are crucial. Advertising techniques do not allow this type of activity. Many educational objectives are large, long-term, and not susceptible to quick and easy measurement.

An example can begin to bring these concerns into focus. Many times, advertisers exploit an audience's insecurity and low self-esteem in order to sell an idea or product. In order to do this, they may show an image of a person who demonstrates a sense of security and self-confidence, and associate their product or idea with this image. They will measure their success only in terms of the degree to which their product or idea is adopted by the audience.

Educators, on the other hand, might see this situation in quite different terms. They might consider the reduction of insecurity and the building of self-esteem as primary or at least secondary educational objectives. They would realize that these affective objectives could not be dealt with except by learner participation and dialogue in a long-term educational process. If they had as secondary objectives the same concrete products/ ideas as the advertiser mentioned above, they might be reluctant to treat them in the manner of the advertiser. It could well be that in this case the advertiser's strategy would mean short-term gains, and long-term losses, for an educational product.

Thus, the educator must see advertising theory and practice as one of several tools which can be used for open-broadcast education. It is suited to concrete educational objectives, which are susceptible to

manipulative and didactic treatment. However, it is important that an educator come to know the limitations of the advertising technique. A perspective on edvertising can be obtained by consideration of a completely different type of open-broadcast radio. Let us now consider a strategy whereby the radio medium is controlled by the learner population rather than the other way around. Instead of manipulation by professional communicators, the emphasis is on total participation by non-professionals.

RADIO MENSAJE²

This project is an outgrowth of a local radio school headquartered in the small Andean town of Tabacundo, Ecuador (Hoxeng, 1975.) Since the autumn of 1972, with a small initial grant from the University of Massachusetts Nonformal Education Project, Padre Isaias Barriga has built his organized-audience base into a broader open-broadcast following for his unique brand of programming. His case is interesting, for it shows how an organized-audience project can use open-broadcast techniques.

Radio Mensaje has used simple cassette tape recorders (supplied by UMass) to make the radio medium participative and to produce attractive programming which draws audiences beyond those of the radio school. The key people in this effort are the "auxiliares," unpaid non-professionals from the local communities around Tabacundo who act as teaching assistants in the radio school centers. Each auxiliar has taken possession of and responsibility for a cassette recorder, which s/he uses to prepare and deliver tapes which are edited and broadcast by Radio Mensaje in two half-hour programs each week.

²The authors are grateful to James Hoxeng of AID, Washington for his contribution to their description of the Tabacundo Radio Project.

Called Mensaje Campesino ("The Farmer's Message") they are unlike conventional rural radio programs. Instead of using professional communicators to reach a farm audience, Mensaje Campesino is a program made by farmers for farmers. The program is not aimed at the organized listening groups of the radio school, but at the general open-broadcast audience. The premise was that farmers would be so interested in hearing themselves and their kind on radio that Mensaje Campesino could attract its own broad audience. This has proven to be the case.

The cassette recorders became the tool of the auxiliares, to be used by them in or outside of the radio school classes, and to be kept in their possession and under their responsibility. Training was minimal (two hours), since the recorders are simple to operate. Everyone was interested in what the auxiliares would decide to do with the recorders, so the staff wanted them to feel free to use the recorders in any way that seemed worthwhile.

The Project set out to create a new kind of radio communications that differed from the highly polished and artificial style of entertainment broadcasts transmitted from the capital. The major hypothesis was that popular expression could help define communications objectives and elaborate those objectives. In this way the traditional mass media concepts of "communicator" and "audience" would blur. The Project staff conjectured that programs which give voice to peasants might produce (1) heightened feelings of self-worth; and (2) increased community development knowledge.

An earlier report by AID (Astle, 1969) describing a radio school program in Honduras credited much of its success to the feeling participants had of "being part of an awakening group." This "groupness"

is as important as the sense of individual accomplishment and the harnessing of unused capability that comes with learning to read. Awareness of the similar experiences of other people and centers in Honduras was supported by training sessions and monthly meetings of the monitors or auxiliares. The report linked those factors closely with a growth in "confidence, concern and group awareness."

The UMass-Tabacundo team surmised that heightened "groupness" is important to a growing sense of individual confidence. By increasing cross-fertilization and reinforcement through inter-village communication, the Project felt that possibly confidence and a sense of efficacy would grow.

That community development-related knowledge would increase was a relatively safe prediction. It seemed likely that if Mensaje Campesino reported on a development project in one community, other communities would listen -- and possibly with more interest than they had previously shown to programs on community development (CD.)

A study done in 1971 (Vega) for Catholic Relief Services of Ecuador, OXFAM, and AID had concluded that although CD was given considerable emphasis by the station, the programs had an insignificant impact on radio listeners. It was hoped that cassette tape recorders would increase the impact of broadcasts by adding the dimension of grass roots expression from the many small communities served by Radio Mensaje.

Project planners were determined to preserve a non-directive stance regarding use of the recorders. Some early sentiment for using them as a vehicle for programmed instruction, distributing recorded cassettes as a supplement to the radio school curriculum, was discarded in favor of making the recorders a tool of the people themselves, used

exclusively for their self-expression. Thus the Project could test whether campesinos are capable of using such a tool with imagination and effectiveness. If the auxiliares proved unable to figure out how to use the recorders to good advantage, there would be time later to introduce programmed materials and the like. Encouraging maximum flexibility would explore one end of the spectrum of possibilities. Later, experiments could be planned which would limit to some extent the auxiliares' latitude of operations, if that seemed desirable.

Padre Barriga's initial idea was to broadcast the material exactly as he received it in order to prevent his bias from influencing the programs. However, he changed his mind before the project began. It was clear that if all the auxiliares sent in one cassette every week, or even every two weeks, there could be from 19 to 38 hours of material per week for broadcasting, which would be impossible. The necessity of editing was evident.

During training, the auxiliares brainstormed possible ways in which the recorders could be used. The UMass staff did not recommend or require any particular use, and Padre Barriga promised that the station would be interested in whatever was produced.

Results did not come in immediately as the pickup and exchange of the cassettes proved to be slightly more difficult than had been imagined. Padre Barriga waited until the initial meeting of the auxiliares in early November to pick up the first recordings, and the first program was broadcast on the weekend of November 11, 1972. In a meeting with Padre Barriga, the auxiliares decided that half-hour programs aired on Saturdays at 5:00 p.m., with a repeat on Sundays at the same hour, would have the greatest potential audience of farmers.

The first program consisted of comments about the radio schools, together with a little music produced by a group from one of the communities. The commentaries were collected from a number of centers, as well as from a group of 18 seminary students who were working in some of the radio school communities. The general tone was predictably solemn and self-conscious. A seminarian:

I want to work with campesinos on both a cultural and religious plane, to help them advance. I plan to acquire a greater experience in order to be more effective as a country priest when I return to my province.

The auxiliar in the center at Chaveznamba:

We want to send our best greetings to Padre Isaias Barriga, to our dear teachers in the radio school, and to our fellow students in the province of Pichincha, as we begin this new course. Everyone is interested in the recorders, although they're a little afraid of talking. However, we hope that little by little we'll be able to adapt to this new idea. As yet, its a little strange.

All of the students interviewed professed their great happiness at being in the radio school, and their assurance that this would be the best year yet.

Content Analysis of Selected Programs

November 25: by the third program, there was more content of a community development nature. The community of Ucshaloma, high on the mountain behind the town of Tabacundo, recorded a meeting in which they decided to get together the following Saturday for a minga, or community work project. They were in the process of upgrading their living conditions, having formed a co-op and jointly built a new house for each of the members. Having recorded this meeting, they proceeded to record the sounds

of work when the minga took place. One heard hammers behind the voices of the workers as they discussed their progress and needs.

December 30: This program consisted entirely of a Christmas Special, put together by the auxiliar and students of the center at Cananvalle. The auxiliar, a campesino farmer, preached; the students read from scripture, and gave greetings to their fellow students in the other radio schools.

January 20: This program began with a recording of the January general meeting of auxiliares. They did not discuss the recorders specifically, but there was a unanimous request for more programming time, possibly just before the beginning of classes. This was acted on in February, with a Monday repeat of the regular Sunday program presented at 4:30 p.m., just before the 5:00 class.

Another effect of the recorders was obvious in the January 20 program. Musical groups presented songs in Quechua, with participation of women; members of the Simon Bolivar school read original poems, and yet another school, Cochas, presented music especially prepared for the Mensaje Campesino program. The songs in Quechua may be said to reflect some elements of the "Indian is Beautiful" philosophy, although it is too early at this writing to make a conclusive statement.

February 24: Indian power was mentioned in this program, as it opened, with an auxiliar interviewing the president of the new National Indigenous Movement (NIM), Jose Antonio Quinde. Quinde described the organization's aims and progress to date, and mentioned a series of meetings to learn whether NIM was seen as useful by the indigenous population. More Quechua music preceded a new element: new readers practiced reading pages from the text, Cultivemos Hortalizas, providing a possibly

comforting standard of comparison for the other students for whom reading aloud is still a painful experience.

To summarize the programs: music will apparently continue to be an important part of the content, and community development emphasis will be substantial. The students seemed to have a strong sense of participation, and fear of the recorders was not mentioned after the first program. Auxiliares showed considerable capacity for innovation in the use of the recorders. Padre Barriga tells the story of a group who convinced an engineer from the Hydraulic Resources Ministry to be interviewed for the Mensaje Campesino program. His answers to their questions about the possibilities and difficulties in obtaining running water provided valuable information to members of other centers.

Community Uses of Recorders

Some communities have begun to produce and record dramas with moral and/or social messages. Taking different roles, community members act out and discuss problems which are then shared with other communities by means of the radio.

One community used the recorder as a way to guarantee that what they were being told by an official from another development program would not be forgotten. The recorder was kept hidden under a poncho until the meeting (which was apparently filled with promises of imminent action) was over; they then brought it out and played back the tape, demonstrating to the official that his words had fallen on sensitive plastic as well as on eager ears. His reactions to the taping were not recorded.

Production Method

Blank tapes are provided to the auxiliares, who assume responsibility for getting them back to the station in Tabacundo as soon as they have some material they wish to be used on Mensaje Campesino. Once a tape is received in the station, it is reviewed by Padre Barriga or his assistant. They use two cassette recorders to edit the material and compile a half-hour program each week. The program cassette is saved, and the other cassettes are sent back to the communities.

The programming has been expanded since the Project began. At first a single half-hour program was aired both Saturday and Sunday. After the first couple of months Padre Barriga decided to produce different programs for the two days. Then following the meeting of auxiliares mentioned above, the station began to re-broadcast the Sunday program on Monday afternoons just before the first cycle class of the radio school.

Replicability

Most students in the third world's radio schools would never be able to buy recorders and cassettes on their own. It does seem possible, however, that the typical radio school would be able to take care of maintenance and operation costs. Padre Barriga actually paid all of those costs during the year, although with a view to recovering at least part of them from the UMass Project.

From the standpoint of USAID, the international organization which financed the purchase of the recorders and tapes, the cost (\$1500) is miniscule. The attractiveness of such a project to international funding sources in other settings would depend upon several factors. Recorders will have to be demonstrated to be reliable under prolonged field conditions. The interest of rural people in grass roots radio will have to

be maintained when the effects of novelty diminish. And finally, projects will only be feasible in political climates where governments will allow the major mass communication medium to be used for free public expression.

In many countries of the third world, such an open and positive use of radio as an open-broadcast mass medium cannot be contemplated. As the mirror image of manipulative advertising communication (which is embraced by every country), the Tabacundo model is an intensely honest and participatory type of communication. It represents a potential component of a type of social change which could build on indigenous culture. It is perfectly suited to the larger educational objectives which more manipulative forms cannot address. It is suited to dialogue, to consciousness-raising, to affective, emotional changes.

Padre Barriga saw the value of this method in two ways. First, it gave the farmers the "power of the word." It enabled them to communicate with each other and with him, the head of the radio station and of the radio school. Previously, their only alternative had been to scrawl letters to him, which he read over the air. They were not at ease with writing and could not express themselves fully; what they managed to say was then transmitted back to them through the cultured tones of the Padre's voice.

An even greater change cited by Padre Barriga was the transformation of radio -- a medium which had previously transmitted only urban music, urban voices, and urban values -- into a rural medium which spread what he termed the "mystique of the countryside." He saw the new type of radio communications as a reinforcer of the goals and satisfactions of country life.

Perhaps this final point highlights the potential of the Tabacundo model for development education. Realizing that radio reaches the world's rural masses is not enough to make it into a rural medium, which can build rural culture, and contribute to healthy rural development. If radio reaches farmers from the cities with urban messages, it may speed the migration to the cities rather than promote rural development. The Tabacundo model offers a starting point for making radio a rural mass medium in the true sense. Such participatory communications can tailor the style and content of rural radio to the needs and desires of the audience.

However, one should not view the Tabacundo approach of totally participatory, localized communication as an absolute. Participatory techniques do not have to be incompatible with the professional communication techniques described in the previous section. In the next section, we will examine a radio format which includes both participation and professionalism. Grass roots participation is used within a structure designed by professionals for maximum appeal and impact.

THE REAL WORLD QUIZ

The quiz show format seems especially suited for open-broadcasting. In its commercial form it has already proven its ability to attract a mass audience, and we see no reason why the trivial or esoteric content typically found in commercial versions could not be replaced by questions and answers dealing with more substantial and useful information.

The educational quiz show, although it has shown itself to be an effective educational tool in a laboratory setting (Theroux, 1975) has yet to be used on a radio station. We will give some general principles for designing educational quiz shows and then describe in detail one

format that could be used to convey information on any topic.

To be pedagogically sound, a quiz show must meet certain criteria in format, rules, and production techniques. Some of the criteria differ from those of commercial shows currently being aired. Repetition, for example, is not a common feature of commercial shows. But a program that is used as a teaching tool must repeat the information being "taught." Facts given more than once must be presented in different contexts. Quiz programs, which often have several phases where the rules change or the stakes go up, are amenable to such repetition.

Another criterion is varied auditory stimulation. In addition to the voices of the contestants and moderator, buzzers, bells, music and applause serve to maintain a high level of listener attention. There must be both predictable and unpredictable sound patterns. Predictable patterns serve as cues that help the listener organize information. For example, a certain buzzer should consistently indicate the right answer was given. Unpredictable sounds can add elements of surprise and excitement without causing confusion.

As a general rule, an educational program should use contestants with whom the audience can identify, although celebrities also make attractive contestants.

An educational quiz program probably need not be explicit about its goal (namely, education.) The excitement created by competition, prizes, fast pacing, and music should be sufficient to attract an audience. Entertainment can facilitate education by insuring a high level of audience attention.

A number of factors account for the long-standing popularity of commercial quiz programs in America. In addition to the excitement generated by competition and prizes, most shows are laced with humor, time pressures, challenging questions, music, glamor, and pizzazz.

Viewed from a production standpoint, commercial game shows are awesome. Their gadgetry, timing, sound effects and sound mixing, suspense and surprise could hardly be reproduced by amateurs even if they had all the proper equipment. But educators should not be frightened away, because the essential elements can be created with little difficulty. Game rules, for example, are often ingenious but simple. Also, there is no reason to believe that a quiz would cost any more to produce than straightforward presentation such as a lecture or a panel discussion.

A Usable Format

The key to any successful game show, whether for educational or entertainment purposes, is to find an appealing format. There are infinitely many possibilities. For the sake of those who do not have the time or inclination to design an original game format, we will here describe all the ingredients (e.g., rules, script, equipment) for producing a game show that can convey information on any subject. We will call it the "Real World Quiz Show." You should feel free to give it any name you choose.

The Real World Quiz Show is a synthesis of several commercial formats and some original ideas. It is comprised of two rounds, each followed by a "Memory Minute" in which one contestant has the

opportunity to win bonus points by recalling facts given in the round just completed. In round 2, both the "opening" questions (multiple-choice type) and the "bonus" questions (true-false) double their value. The format is quite simple and was chosen for its efficient use of time. We have found that in a twenty-minute show, sixty questions can be asked and answered.

Equipment and Personnel Requirements

The game can be played with three or four contestants. They should be selected for their eagerness to participate and their lack of shyness. The most important person in the show is the moderator, who should have a high energy voice and manner, and a quick mind which can capitalize on rough spots in the production by making jokes about the problems. Behind the scenes two more persons are needed. One of these can serve as the assistant announcer, scorekeeper, and live sound effects man. The other works in a control room as the sound director. Besides monitoring sound levels, he dubs in any pre-recorded sound effects.

Each of the contestants and the moderator should have a Lavalier microphone if at all possible. It is best to have two reel-to-reel tape recorders, one for the live voices, the other for recorded music to introduce the show and to mark transitions in the game proceedings. Each contestant should have a sound device of some sort which he activates when he thinks he knows the answer to the moderator's question. Buzzers are good. It is preferable to have the contestants' devices of the same type but of different tones, three bells of different tones, for example. A metronome is desirable for the "Memory Minute", but any method of making a regular tapping noise will suffice. Another

sound device, different from all the others, is needed to mark the end of the rounds. Two more are required to signify wrong and right answers, respectively.

Content

As mentioned earlier, the Real World Quiz Show can transmit objective facts on any subject. Half the questions should be true-false type, half multiple-choice. Of course, the level of difficulty should be commensurate with the knowledge that the producer estimates already exists in the target audience. It is ideal to choose an assortment of questions of which a typical listener could correctly answer fifty percent. This gives the listener enough encouragement to feel good about himself and enough novelty and challenge to prevent boredom.

Approximately sixty questions can be asked and answered in a twenty-minute period. For a program of this length the game producer should write about 80 questions on the chosen topic. These should be pre-tested with a small group, none of whose members will later be contestants. Through pre-testing, questions that are ambiguous, esoteric, too simple or too difficult can be revised or eliminated.

The final list of questions should be typed, leaving about four spaces between each and indicating the correct answers for the sake of the moderator. In two-thirds of these spaces the producer should insert comments that the moderator will read to reinforce the answers given by the contestants. So, rather than simply saying "yes" or "that's right" when a contestant gives a correct answer, the moderator will say, "Yes. Vitamin D is good for bone development." Or, "Yes, now you know why Vitamin A is added to milk."

The other answers that are not reinforced in this way should appear in the Memory Minute. This is insured by making a list of key words or phrases, each of which refers to one question-answer that would already have been given on the show. The list is given to the Memory Minute contestant just before the Minute begins and aids him in recalling information that will earn him points. The Memory Minute, like the moderator's reinforcing comments, is a vehicle by which facts can be repeated, a requirement for audience retention of information.

Producing the Show

The key to a smooth, natural, spontaneous production is the program script. It includes directions for the sound director and the moderator. The contestants do not need a copy of the script. The contestants' performance is unrehearsed. Before taping or airing begins, the moderator should explain the game rules to the contestants. The show can be broadcast live if the production team is experienced. Otherwise it should probably be taped for later broadcast. If blunders occur while taping, the moderator and contestants should stop, re-orient themselves and begin again. The tape can be edited later. Not all awkward moments should be edited out; the producer should judge which rough spots add humor to the show and which simply detract from its effectiveness.

Since the script is so essential to a smooth-running show, we include a production-ready sample here. It only lacks the names of the people who will be participating in your own production. With this script and a list of questions, you have all you need to produce an effective game show.

Script for the "Real World Quiz Show"

(Sound Director's Cues in CAPS)

THEME MUSIC BEGINS

MUSIC VOLUME DECREASES when assistant announcer says:

"Today contestants match their knowledge of (topic) for big prizes. The star of our show has the answers, and here he is, (name)!"

APPLAUSE BEGINS

"Hi everybody." (MUSIC STOPS here and APPLAUSE FADES.)

"Thank you and welcome to the Real World Quiz Show, where real world knowledge brings some unreal prizes. We'll tell you about those a little later.

"Let's get started by meeting our contestants.

"First we have a (job) from (town), (name).
(APPLAUSE and some response from the contestant.)

"Next we have a (job) from (town), (name).
(APPLAUSE)

"Finally, we have a () from (town), (name).
(APPLAUSE)

"Now, players, the rules are simple. In Round 1, when I ask a question, the person who responds first and answers correctly gets 25 points. That person is then eligible for a bonus question worth 50 points. When Round 1 is over, you'll hear this sound -- (MC rings sound device.) Whoever has the fewest points then has a chance to catch up by recalling as many of our quiz answers as they can in 60 seconds. So, while we're playing, try to remember our questions and answers, because you may need to recall them later in the show during our Memory Minute.

MC explains that the source of our answers is the Encyclopedia Brittanica (or some other appropriate book or person.)

"Players, are you ready? (Players respond.) "First, let's see if our answer buzzers (or bells or whatever) are working properly.

MC asks each contestant in turn to sound his buzzer.

"OK, let's begin!"

MC proceeds with Round 1 questions and answers.

MC disqualifies a respondent if he takes too long in answering the question. He then gives one of the other contestants a crack at it if one of them buzzes.

When a person gives a wrong answer to an introduction question (i.e., not a follow-up or "bonus" question,) the moderator says "Wrong" and then gives the other contestants a chance to answer it.

MC should read the Supplementary remarks which are found on his question sheet after most of the questions. These remarks should be hand-written on the question sheet.

After the last question in Round 1, a bell (or whatever) sounds. (MUSIC AND APPLAUSE BEGIN SIMULTANEOUSLY.)

(MUSIC CONTINUES -- APPLAUSE CONTINUES.)

"All right players, that marks the end of Round 1."

(MUSIC AND APPLAUSE FADE OUT near the end of the above sentence.)

"Now let's look at the scores."

" (name) has . (# of points, lowest person first.)

" (name) has . (# of points, middle person next.)

" (name) has . (# of points, highest person last.)

(APPLAUSE AND VERY BRIEF MUSIC)

" (name) has the fewest points, but s/he can catch up in our Memory Minute."

"Now, (name of low point person) , you will have 60 seconds to recall any or all of the answers that were given in Round 1." (MC hands the contestant the key word list. The recalls must be in sentence form.)

"For each correct fact that you recall, you'll receive 25 points. You'll hear this sound (triangle or bell) every time our judges accept your response. Are you ready?" (Contestant responds.)

"All right, begin." (Tick tock in background.)

At the end of 60 seconds the triangle (or whatever) rings, the tick tock stops and the MC announces the number of points the person has won. (APPLAUSE)

MC reviews scores. (APPLAUSE at end of review.)

MC announces Round 2 where:

- a. opening questions are worth 50 points;
- b. bonus questions are worth 100 points;
- c. there will be another "Memory Minute."

"At the end of Round 2 we'll know who today's winner will be. That person will receive some very nice prizes. (Assistant Announcer's name), tell us about it."

MUSICAL BACKGROUND

(Assistant announcer lists and describes the prizes.)
APPLAUSE AT THE END of his speech.

"OK, contestants, that's what we're playing for. Good luck to you all in Round 2.

Round 2 questions and answers proceed in the same fashion as Round 1. At some point near the end, however, the MC may wish to quickly summarize the scores (especially if it's a close match.)

After the final Round 2 question, the triangle rings. (MUSIC AND APPLAUSE begin while it is ringing.)

MC reviews scores. He identifies the low-point person who then gets a chance to catch up in the Memory Minute where each recalled fact is worth 100 points.

(Tick tock during the Memory Minute. Bell sounds for every correct recall.)

MC announces the number of points that the Memory Minute player has won. (APPLAUSE)

MC reviews scores of all three players and announces winner. (APPLAUSE AND MUSIC)

MC says that the winner has earned the right to return and compete on next week's show.

MC says he hopes that everyone enjoyed the show and would tune in next week for the "Real World Quiz Show."

"Goodbye."

(APPLAUSE AND MUSIC BEGIN SIMULTANEOUSLY and continue in the background while the assistant announcer says:

"Today's contestants will receive (list of small prizes) .

"This has been a (radio station name) production."

MUSIC AND APPLAUSE FADE OUT.

(end)

A show was produced at the University of Massachusetts using the above script. It was laboratory-tested, with one hundred twenty (120) University students and compared with a taped lecture which contained the same information as did the taped quiz show. (Theroux, 1975.) We found that people learned significantly more from listening to the quiz show than they did from listening to the lecture. Apparently, the quiz show was better able to hold the attention of the listeners. Since at least one quiz show was proven to be an effective educational tool, what are the implications for educators interested in open-broadcasting?

First we should discuss what quiz shows can and cannot do. They are certainly best suited for transmitting hard, objective facts. There are few programs which deal in abstract concepts and principles. ("What's My Line?" may be an exception.) New facts will be readily received and probably applied if the listener has an adequate conceptual framework into which he can integrate new information. Hence, quiz shows might be good as summaries or reviews for certain courses of radio study. They might also effectively give up-to-date facts on changing phenomena such as farm prices. In general, quiz shows should be used as one prong in a multi-pronged approach to education.

Another potentially fruitful area for quiz shows is literacy and vocabulary development. A number of American game shows such as "Password," "Baffle," and "The \$10,000 Pyramid" demonstrate that words and letters can be made a source of excitement.

Although cost figures are unavailable, there is no reason to think that a quiz show would be more expensive to produce than a relatively straightforward presentation such as a panel discussion. Tradition and lack of imagination explain the preponderance of dull presentations on topics such as public health. If quiz shows can attract large audiences and impart information effectively, they merit further exploration. The quiz show is a feasible open-broadcasting strategy because it can be as entertaining as it is informative.

Nonetheless, there are substantial issues to be resolved about the limitations of the quiz show format for education. Followers of Paulo Freire would no doubt allege that the format is incompatible with liberating education, that it concentrates exclusively on facts, and that it portrays facts as absolute realities. They might also contend that it reinforces the "banking education" notion of the all-knowing teacher (quiz show moderator) and the lowly student (contestant).

Both of these criticisms can be taken as challenges by those who implement and develop the format for third world education. One can try the format in areas of affective learning. One can attempt to portray facts and "correct answers" not as absolutes, but as derivatives of specific value positions. A quiz show might entail reconstruction of the value set underlying a given presentation of facts.

The second criticism that quiz shows reinforce traditional dichotomies between teacher and learner might also be challenged by creative design and production. Gunter executed an agricultural quiz show in Ecuador wherein there was no correct answer to the questions.

Rather, the contestants had to come to a consensus regarding the preferred answer. By choosing young village leaders as contestants, the producer was assured of getting creative and dynamic answers to the questions posed. The format could be stretched even further, if problems were posed rather than questions asked. It might even be possible to structure into a quiz show dialogue on a problem leading to a group solution to the problem. This type of quiz show might meet the concerns which Freireans would voice regarding standard quiz shows.

Conclusion

What is the difference between the above ideas and the usual approach to educational radio for the third world? We are thinking primarily in terms of the radio programming itself, rather than the face-to-face activities, the print materials, or the organizational and administrative concerns that often surround radio education. We contend that the organized audience strategies have caused non-radio concerns to predominate in the literature on educational radio. It seems clear to us that the most efficient way to expand educational radio's reach is to begin to produce radio programming that will attract its own audience -- quality open-broadcast programming.

We have merely touched upon three signposts which indicate how this might be done. The advertising approach is suited to motivation for accomplishing concrete bite-sized behavioral objectives. The Tabacundo model presents a mirror image of total decentralization and participation in open-broadcast radio. Finally, the quiz format allows for audience participation in a structure which is determined by professional communicators. The quiz show combines the manipulative

motivation of polished production technique with spontaneous participation by people the audience can identify with. The exact role of each of the three approaches, the objectives to which they are best suited, the situations and populations to which they are best applied, will be determined by field application and development of the above notions.

Conclusion

What is the difference between the above ideas and the usual approach to educational radio for the third world? We are thinking expressly in terms of the radio programming itself, rather than the face-to-face activities, the extra materials, or the organizational and administrative devices that often surround radio education. We contend that the organized methods strategies have caused new radio programming to predominate in the literature on educational radio. It seems clear to us that the most efficacious way to expand educational radio's reach is to begin to produce radio programming that will attract its own audience -- quality open-broadcast programming.

We have merely touched upon three aspects which indicate how this might be done. The advertising approach is well suited to motivating and for accomplishing concrete disseminated behavioral objectives. The feedback model presents a mirror image of total decentralization and participation in open-broadcast radio. Finally, the quiz format allows for audience participation in a structure which is determined by professional communicators. The quiz show complex (or manipulative

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