ABSTRACT

This paper provides information on the distinctions between training and other forms of learning activities and on the role of explicit or implicit objectives in determining types of training; discusses the role of the population communicator as a link between research and action programs; and reviews research findings which have policy implications for population communication.

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AN APPROACH TO TRAINING IN POPULATION COMMUNICATION

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Policy, research, and training components of population control programs have achieved a new sense of urgency in recent years. The communication specialist is playing an increasingly important role in this action program because of two crucial realities. First, the long lead time required for achieving effects in an area of personal value systems demands rapid application of existing research guidelines while additional guidelines are developed. Here, because of his broad interdisciplinary interests, the communication specialist can facilitate and "expedite" the potential contribution of the research literature to program planners and can serve as a link to feed back scientific findings to the administrator of action and training programs. Second, the manpower requirements are too vast to await the output of formal education systems. The situation demands effective training programs, and because of social restraints on population control these programs must be communication training programs of two orders. There is a need for training of trainers and there is a need for the effective diffusion and adoption of population control strategies through mass and interpersonal communication. Communication training specialists have the needed input, but more importantly they have the needed perspective to define and differentiate training from education, conferences, and seminars.
"Training" is a term freely used in our society to describe a bewildering array of human activities, including such diverse activities as developing mechanical skills in drill press operators and better management techniques in business executives. It is also a catch-all description of academic programs not leading to a degree and of meetings and conferences of all kinds. As a result, the statement that a person is undergoing training tells us very little about what he is likely to be doing. It would be pointless to discuss "correct" or "incorrect" uses of the term. Nevertheless, a more precise and restrained use would make possible a more meaningful conceptualization of training and a clearer understanding of training's goals, methods, possibilities, and limitations.

What are some potentially useful constraints which might enable us to separate training from education--on the one hand--and conferences, workshops, seminars, and colloquia--on the other? There are at least seven characteristics which set training apart from similar learning activities:¹

¹These constraints have been observed as meaningful by the authors over a decade of experience with training programs of the National Project in Agricultural Communication, the Agency for International Development Seminars conducted by Michigan State University, the training programs of the East-West Communication Institute, and other similar programs.
1. Pre-set Goals and Planned Procedures Combined With Built-in Flexibility. The cognitive, affective, or psychomotor objectives and means of achieving them are carefully specified in advance by those planning and conducting the program. But this does not mean an inflexible commitment to "cover the material" or keep on schedule, as might be the case with classes or conferences. Constant monitoring of participant and staff feedback is required, and may point to an alternate strategy or content modification. Thus training is paradoxically highly structured and very flexible.

2. An Appropriate Number of Trainees. This number is relative to training goals, facilities, equipment, and staff, but it is large enough to develop a dynamic of group interaction and small enough to make possible a high level of active participation. Three or four trainees may be too few; forty is somewhere near the upper limit, unless resources allow for the incorporation of dyadic and small-group activities, individual projects, and similar activity-generating strategies to break up the "speaker-audience" pattern.

3. High Interaction Level Among Trainees and Staff. The program is structured in such a way as to promote activity during much of the training period. The schedule calls for a very limited amount of passive behavior, such as listening to lectures, reading books, or viewing motion pictures. Where input of this type occurs, it is keyed to participative activities such as case study analysis.
4. **High Correspondence Between Trainee Needs and the Goals of the Program.** Ideally, the participants in a particular program would be highly motivated from the beginning because they perceive the training as beneficial to them. Those who did not would be identified early and given special attention. Unlike students, trainees are mid-career or immediate pre-career individuals who already have work identities and can relate to training designed to enhance their competence, but may be impatient with training which they perceive as irrelevant to their special needs.

5. **A Limited Time Period.** Depending on goals, the concept of training as visualized operates most effectively in time periods measured by days or weeks, rather than in hours or in months. The reason for this is the need for a group dynamic, which is hard to achieve in a few hours and also difficult to sustain and manage over an extended period of time. The high interaction and activity of an effective training program drain both participants and staff, and effectiveness and efficiency drop off if the training is extended for more than a few weeks. (If the goal involves extensive knowledge change in the participant, an educational format would be more advantageous.) Another limiting factor in length of the training period is that most trainees must clear themselves of on-going responsibilities in order to attend and can seldom be away for long. Expense is also a factor in lengthy programs.
6. A Controlled Environment. When training is conducted on an in-service basis or scheduled in the evenings after work, the quality of the training is likely to be less than ideal because of distractions, role conflicts, fatigue, and other uncontrollable outside demands. Ideally, training will take place in facilities designed and equipped for the purpose, where housing, food service, and recreation can be managed so as to promote training goals and group dynamics and reduce interference from environmental sources. Some aspects of this ideal environment are often compromised, but almost always at the expense of training effectiveness.

7. A Training-Oriented Staff. Genuinely professional trainers are a rare commodity, perhaps a meld of heredity and environment. Though training is basically different from education, teachers may develop into effective trainers if they can free themselves of traditional authority-figure behaviors, if they are sufficiently flexible for high-participation situations, and if they can work comfortably in the presence of colleagues. Similarly, practitioners of the specialty being trained for can be effective trainers if they can reduce their ego-involvement with the "right" way of doing things or looking at problems. The best staff probably incorporates a mix of the "theoretical" and the "practical," but everyone will need a clear understanding of the training ethic, which requires their full-time energy and attention, both with the trainees and with each other. The
"special lecturer" who appears only for a particular presentation can be a useful contributor, providing the strategy is infrequently used. Ideally, he will develop some sensitivity to the group in advance and will stay to see how his presentation was received and assimilated.

It should be obvious that these seven constraints do not describe formal education. Instructional courses tend to be structured by the material to be covered and to stress passive reception of content. Length of instruction is usually determined by independent time measures, such as semester, terms, quarters, or years, rather than being tailored to learning objectives and trainee needs. Formality is often stressed, and little effort is put forth to facilitate interaction except during class periods. Perhaps most important, formal education is constructed of discrete units of instruction called classes. An effort is made to avoid redundancy and the task of integrating the classes falls largely to the student. These considerations operate for both degree and non-degree educational experiences, and differentiate both from training.

While training is not like education, it is also different from conferences, seminars, and the like. The goal of meetings is usually to bring persons of similar interests together and provide them with a planning or problem-solving task. Like trainees, conferees function best in a controlled environment, in suitable numbers to promote high interaction during a limited
time period. Unlike training, "conferencing" usually has no pre-set goals or structured procedures other than an agenda. It is measured by the quality of product and the satisfaction of the conferees, rather than success in bringing about desired changes in participants. Aside from skillful management, staff involvement is minimal.

In summary, training has been invented to meet needs which education and/or experience cannot adequately provide for. It resembles both education and experience but is different from either. The primary goal of training may be to produce changes in the cognitive psychomotor or affective domains. Institutions which engage in training could make it more effective by recognizing its unique requirements and opportunities.

A Model of Communication Training Objectives

The Nature and Kinds of Training

Training emerged in man-machine systems as a necessary alternative to education. Individual training, designed to provide the individual with the skills needed to operate his machine or to use his tools, is distinguishable from team or system training, designed to improve the human interaction within the system. Crawford (1962) defines training as "...that process by which individuals learn the knowledges, skills, and attitudes, not
previously in their repertoires, which will fit them to function as human components in a system."

The learning objectives that guide the development of knowledges, skills, and attitudes can be labeled, respectively, cognitive, psychomotor, and affective objectives. Communication training has its roots in the history of individual training. What the following model of communication training objectives attempts to do is to go beyond the separation of training from education to the separation of communication training from its parent effort—the training of individuals to operate within man-machine systems—and from other types of training. Communication training is employed in man-man systems and in man-man components of man-machine systems. That its objectives differ by placing the affective domain in the first order of priority has not, up to now, been made explicit.

Figure 1 is a simple linear model of the basic elements in the training process and indicates the behavioral domains whose modification is the general purpose of all training. In Figure 1, no priority area of objectives is indicated. It is the setting of priorities within these domains which determines the various types of training. If psychomotor objectives have priority, the result is skills training; if cognitive objectives have priority, the resulting activity will be knowledge training; and, as demonstrated later, affective objectives determine communication training.
It is asserted, then, that whether or not the priority area is explicitly recognized, it is this, and not the "intent," which determines the nature of the training undertaken.

Elements of All Training Processes

**Goals**

The first goal of any training program is to increase a trainee's set of alternatives. Through appropriate training he can add new strategies that he may never have thought of or strategies that are infrequently entertained because of skill or confidence deficiencies.

The second goal is to provide the trainee with the criteria necessary to select from an expanded set of alternatives. If the habit of selecting particular alternatives can be shifted to
a habit of examining alternative choices in light of appropriate criteria, proficiency (productivity) is increased.

The final goal of training is to make the trainee his own consultant when it comes to adapting existing alternatives to new situations. Training must focus on situations not wholly predictable from the training context, and it is the trainee who must adapt as conditions and/or situations change.

Objectives

To define objectives we can turn to Bloom's Taxonomy of the Cognitive Domain and Krathwohl's Taxonomy of the Affective Domain (Williams, 1969). While a taxonomy of the psychomotor domain is not yet formalized, it might well point to a counterpart of "Evaluation and Internalizing" labeled "Manipulation": reliable behavior performed at or above criterion level.

Strategies

The trainer's task is to utilize available training techniques to implement the objectives established. Any strategies envisioned must be developed within the constraints which define training. Working within these limitations, the trainer evolves, adapts, and "lifts" training strategies. Although quite variable, his strategies can be classed as (a) raising questions, (b) providing models for analysis, (c) creating individual and group tasks, (d) developing case studies, (e) lecturing, and (f) manipulating the training environment.
Evaluation: Judgment by internal criteria
Judgment by external criteria

Synthesis: Derivation of abstract relations
Production of plan-pattern
Production of uniqueness

Analysis: Organizational principles
Relationships
Elements

Application: Particular and concrete situations

Comprehension: Extrapolation
Interpretation
Translation

Knowledge: Classifications-categories
Sequences-series
Specific facts
Terminology
Recall of information

FIGURE 2. COGNITIVE DOMAIN

Internalizing (automatically characterizes a way of life)
Conceptualizing (organizing a value system)
Valuing (appreciation and commitment)
Responding (willingness and satisfaction)
Receiving (sensitive and aware)

FIGURE 3. AFFECTIVE DOMAIN
Evaluation Activities

These activities ultimately determine the utility of the outcomes of training. Whether engaged in carefully or carelessly, deliberately or accidentally, four stages of evaluation are contained in on-going training programs.

First of all training criteria are set. To the extent that goals can be translated into specifiable behavioral objectives, the criteria can be tentatively established to fit available time and resources.

Second, training content is developed. Content is here defined to encompass training strategies as well as all contact with participants from the point of initial publicity through any and all follow-up efforts.

Third, trial or pilot efforts are undertaken. This does not imply that pilot efforts are budgeted, simply that all training is the culmination of past experience and any initial effort in a new program is a trial in an on-going process.

Finally, efforts are revised on the basis of experience. Revised efforts may reflect back on earlier criteria setting. Clearly, the revision of content implies effects of earlier stages of evaluation activities.

The Role of Objectives in Determining The Nature of Training

It is proposed that we need only rotate into a position of priority each of the behavioral domains to alert us to the
necessary objectives of a particular type of training.

While we will give short shrift to this element of the model it is clear that much training has as its objective the providing of a trainee with manipulative alternatives. Its priority is psychomotor skills. If possible, we teach the trainee how to evaluate criteria for the application of a particular skill; if not, we teach him a skill and supervise him closely. If he can also internalize an approach to appropriate modification, fine; if not, we teach him a skill and supervise the environment closely.

Knowledge training is easily confused with formal education, and some variant of education is often supplied under the rubric of training. As training, it is undertaken for one of two reasons: either the trainee missed obtaining necessary knowledge in his
formal schooling, or new knowledge has emerged since its completion. The objective of such training may encompass the cognitive domain or it may focus on one or more stages of it. Its priority is to increase a trainee's set of cognitions. He may be asked to learn certain skills in order to have a "better" knowledge of how others working with him or for him must meet their responsibilities, and he may be reinforced in his efforts to internalize his approach to knowledge. In training he may be exposed to the best information available on the need to know more about the importance of skill and affects, but the focus of training is on knowing more.

Communication training occurs under many guises. Human relations, sensitivity, T-group, counseling come easily to mind.
The key is in the focus on people relationships, and it is communication behavior that is at issue. The objective of such training is in the affective domain, and where one type of communication training will focus on one level a second will focus on another. To provide a trainee with a maximum set of communication alternatives, to provide him with the criteria to select from among alternatives, and to provide him with the strategies to be his own communication consultant, is to engage the entire affective domain, and communication training seems to be the appropriate choice of label. The role of knowledge and skill in communication training is often clouded because the objectives
of communication training are often obscure. The model makes it clear that they are means to an end, and if they become ends in themselves in actual practice it is because trainers do not have the strategies in hand to sustain a communication training effort.

In summary, a model of training objectives has been developed that defines the nature of a training program as a function of the objectives (cognitive, affective, and behavioral) implicitly or explicitly utilized. Within the constraints which define training in general, communication training is viewed as training that has raised to a level of first priority objectives within the affective domain.

Research and Population Communication Training

A need which is beginning to assume a sense of urgency in population control programs is that of discovering the most feasible and rapid means of "feeding back" scientific findings to the administrator of action and training programs. There is also a growing awareness that this role of synthesizing, processing and interpreting empirical findings in order that they can be maximally useful to the decision-maker (often labelled "policy research") belongs to the communication specialist. He is often regarded as being a "jack of all trades, master of none," perhaps because of his broad interdisciplinary interests and because he has borrowed his theoretical underpinnings from such disciplines
as sociology, psychology and social-psychology. Yet this is precisely what enhances his ability to perform an important role: that of linking the other disciplines and facilitating the practical application of new knowledge to common problems. Training is one action program which has often operated on common-sense wisdom, not so much because it is suspicious of ivory-tower theorizing but because the results of the latter have not been made intelligible and relevant enough for the administrator or trainer, whose orientation inclines him to think in less abstract terms.

A review of population communication literature reveals that the following theories and models have been tested in various locales and that the following generalizations emerge from these studies.

In the "two-step flow of communication" model the family planning opinion leader (influential) is:

1. Often a satisfied user of birth control.
2. Married, average family size.
3. Open to relevant information on family planning and knowledgeable on subject.
4. Easily accessible to intimates; outgoing.
5. Not highly specialized as family planning leader; exercises leadership in several fields.

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See Palmore, 1967; Bogue, 1964; and Rosario, 1971 (b) for a review of the literature on the "two-step flow" as applied to family planning.
The reference group or "pluralistic ignorance" theory\(^3\) holds that:

1. The family planning adopter tends not to act individually; she seeks personal support from intimates in adopting. If she perceives them as rejecting, then she also rejects the idea.

2. A high ambivalence is present because of uncertainty of social support.

Studies on husband-wife communication\(^4\) indicate that:

1. In societies where husband and wife roles are rigidly defined, there is less agreement about family size and less adoption of birth control techniques.

2. Population communication materials which depict peer discussion between husband and wife making decisions about family planning may be unacceptable in some societies.

3. In target audiences where roles are not rigidly defined, messages depicting shared decision-making between husband and wife may promote family planning goals.

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\(^3\)See Rosario, 1971 (a) for a summary of studies done on "pluralistic ignorance" and the reference group theory as applied to family planning adoption; also Freedman and Takeshita, 1965; Freedman, 1962; Palmore and Freedman, 1969; Kindermann, 1969; Kim, 1967; and Stycos, 1968.

Adoption model\textsuperscript{5} studies indicate that:

1. Movement from one stage of adoption to the next may be slow because of limited communication, the technical nature of devices, and other psychological barriers.
2. Adoption may be less definite, more subject to intermittent use or discontinuance.
3. For semi-permanent and permanent devices, trial is skipped.
4. The "approver" stage seems relatively easy to create, and support comes from both mass and interpersonal sources.
5. The "snowball effect" is a covert process because of the low visibility of adoption.
6. Adoption may be seen as a threat to the ego because of perceived norms and religious taboos.
7. Motivation among early adopters is high; among later adopters, it is less intense and develops more slowly.

Findings from diffusion theory\textsuperscript{6} reveal that:

1. The "trickle-down" and "trickle-out" theory may not always apply because diffusion depends on motivations that may be independent of this type of leadership (urban or elite).

\textsuperscript{5,6}See Rosario, 1971 (a); also Bogue, 1967 (a) and (b); Rogers, 1971; and Schramm, 1971.
2. Diffusion usually starts from those higher on the social scale and proceeds down to those lower.

Studies of the importance of personal versus impersonal sources indicate that:

1. Personal sources are used at all stages of the adoption process.
2. Personal sources may tend to be the first source of information for many potential adopters who are not mass media users.
3. Most adopters are influenced by decisions of intimates after exposure from impersonal sources.
4. Mass media and impersonal sources are known to be effective in counteracting rumors.
5. People who are more literate and urbane tend to put more importance on impersonal sources of information.

Findings from persuasive communication studies done by Hovland and his associates (1953, 1957) may also have applicability in other cultural settings. However, some of the generalizations or strategies have yet to be tested in population campaigns. Some of these are:

1. Present only the positive, desirable, risk-free side

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of Population Control and Family Planning. (May work best with people who already accept the idea, and those who are less well-educated.)

2. Present the positive as well as negative side of utilizing a particular contraceptive technique. (May work best when audience is initially opposed to the idea or when it is better educated.)

3. Present the threatening, fear-arousing side of family planning. (May work best, if message comes from a highly prestigious, credible source. The receivers should also be a more rational, better-educated group.)

In summary, it is clear that the results of research in population communication have provided a viable basis for action programs. The research findings suggest useful areas into which planners may direct their effort, but the manpower required to sustain such effort is dependent on the development of effective training programs. In this paper we have attempted to specify what we believe to be a useful approach to training in population communication.
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