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ABSTRACT

Despite the present availability of curriculum materials of high quality for use with the inquiry approach of the new social studies, the pace of change is slow. This paper addresses itself to the unique problems of diffusion, adoption, and change in social studies, and with the principles and practices which can be applied to solve these problems. The first four chapters attempt: 1) to analyze some of the barriers to change in education in general and in social studies education particularly; 2) to summarize some of the relevant research concerning the problems and processes of change in education and in other areas; 3) to describe various change models and roles; and 4) to outline some strategies and techniques that might be used for bringing about diffusion and adoption of the new social studies. Chapter 5 presents an overview of some of the main types of change projects that have been carried out in the new social studies, and Chapter 6 describes one such project: the Social Studies Field Agent Training Program of Indiana University. The final chapter provides an annotated bibliography of some of the key sources on the process of change that might be of use to practitioners in the field of social studies education. (Author/KSM)

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BRINGING ABOUT CHANGE IN SOCIAL STUDIES EDUCATION

by

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INTRODUCTION

During the past ten years a national reform movement has been under way in the social studies curriculum. Referred to as "the new social studies," this reformation involves an "inquiry" approach that aims not to impart facts but to develop the use of critical thinking and problem-solving skills. Facts are not ends in themselves but are used to help students to understand concepts and to test principles. Instead of memorizing, students are required to identify and clarify problems, hypothesize possible explanations and solutions, gather data from available sources, test hypotheses logically and with evidence, and draw tentative conclusions. Also, analysis and clarification of the value issues of social life are often included as major components of study. With this inquiry approach, students and teachers are engaged in a cooperative search for the most valid knowledge possible.

Until recently, one of the most difficult problems facing teachers who wished to follow the approach of the new social studies was lack of appropriate materials, coupled with lack of time to prepare such materials. In the past decade, however, a number of curriculum development centers staffed by full-time educators, historians, and social scientists have been established. Instead of simply marketing the new materials they developed, these centers repeatedly tested them over the country and revised them on the basis of how well the students were able to achieve the stated objectives. As the result of such efforts, there is presently available to social studies teachers a number of curriculum materials of a quality far beyond that which was formerly available.

Unfortunately, however, there are many social studies teachers in

public schools who have yet to be reached by this reform movement in social studies education, since the "revolution" has been confined mainly to professionals working in research and development centers and a few "lighthouse" schools. Many teachers are still conducting social studies classes much as they did ten years ago; students continue to list social studies courses as least popular; and principals continue to behave on the assumption that "anyone can teach social studies." This is not to say, however, that change is not occurring; rather, the pace of change is slow.

The first four chapters herein attempt (1) to analyze some of the barriers to change in education in general and in social studies education particularly; (2) to summarize some of the relevant research concerning the problems and processes of change in education and in other areas; (3) to describe various change models and roles; and (4) to outline some strategies and techniques that might be used for bringing about diffusion and adoption of the new social studies. Chapter 5 presents an overview of some of the main types of change projects that have been carried out in the new social studies, and Chapter 6 describes one such project: the Social Studies Field Agent Training Program of Indiana University. The final chapter provides an annotated bibliography of some of the key sources on the process of change that might be of use to practitioners in the field of social studies education.

CHAPTER I

PROBLEMS OF CHANGE IN SOCIAL STUDIES EDUCATION

This opening chapter attempts to lay out in general terms the nature of the task facing educational innovators by describing the barriers to change that they must overcome. The first half of the chapter delineates ten barriers to change in education in general, while the second half narrows the focus to barriers to change in social studies education specifically.

General Barriers to Change in Education

Vulnerability

The vulnerability of an organization is the extent to which it is subject to pressures from its environment that are incompatible with the organization's goals and resources. (Sieber 1968, p. 122) The public school system in the United States is highly vulnerable; it is subject to control and criticism, as well as various demands from the larger social system. School personnel are public employees and their actions are subject to public scrutiny. The teacher or school administrator is constantly open to criticism from parents and other citizens.

Another major aspect of the school system's vulnerability is its dependence upon the community for financial support. To a large extent the local board of education and the community are the entities that decide how much money schools should have for hiring teachers and buying materials.

This vulnerability to the community tends to reduce sharply the autonomy of the school system. The schools cannot--or are strongly reluctant to--make

changes that the community might oppose. On the other hand, innovations promoted by local publics tend to be adopted. Thus, local political feasibility often becomes a more important criterion in selection of innovations than is educational value. Moreover, innovations that receive extensive nationwide publicity tend to be adopted, regardless of educational value.

The local community, however, is not the only source of pressure on school systems. A national system of agencies or ancillary structures concerned with education often influences decisions at the local level. This system includes teacher training institutions, accreditation agencies, examination systems, professional associations, textbook publishers, federal and state governmental agencies, and institutions of higher education with their entrance requirements. (Wayland 1964, pp. 587-613)

Goal Ambiguity

Ambiguity in terms of educational goals, stemming in part from the wide variety of constituencies that the educational system must serve, also acts as a barrier to change since there is no general agreement on what the major purpose(s) of our schools should be. A study conducted by the Bureau of Applied Social Research showed that most parents do not share the educational goals of their children's teachers. (Sieber 1968, p. 123) Even when there is some general agreement, it is difficult to specify the desired output of educational organizations very precisely. This lack of clarity and consensus concerning goals makes it difficult to carry out meaningful evaluations of educational programs and materials; this, in turn, makes it difficult to determine and to demonstrate that things should be changed or that new ways are better.

The lack of clear goals aggravates the vulnerability of school systems,

making it difficult for them to resist the sometimes misguided demands of laymen, to distinguish between the good and bad innovations promoted by educational hucksters, and to convince the public of the value of educationally sound innovations. The lack of clearly defined goals also has the effect of promoting ritualistic adherence to school regulations and present instructional procedures. Thus, one major problem in diffusion of educational innovations is that "most school districts do not have goals and objectives which unequivocally provide direction for change activities." (Maguire 1970, p. 1)

While lack of universally accepted goals is a basic problem for our entire educational system, the problem is perhaps even more acute in the area of social studies. Some individuals believe that the goal of social studies education is to pass on the cultural heritage; some believe the main purpose is to teach children how to think critically; others think the main objective is to prepare students to be good citizens. Even if everyone should agree on one overriding goal, such as citizenship education, there would still be disagreement about what constitutes a good citizen. Questions involving values and attitudes pose especially difficult problems when a school or school system attempts to specify objectives for social studies education.

Difficulty of Evaluation

Closely related to the problem of specifying goals and objectives is the problem of evaluation. Obviously, the results of using an educational innovation are much more difficult to measure than the results of a new drug in medicine or a new kind of fertilizer in agriculture. The only measurable result of an educational innovation may be its dollar cost, if its effects on learning cannot be easily measured. Potential adopters might justifiably

ask, "If it cannot be determined whether this innovation leads to more or better output, then why should I adopt it?" The decision to change methods and materials cannot be made readily on a rational basis when no real evidence exists as to the superiority of one system over another. Unfortunately, decisions regarding innovations are therefore made on the basis of other factors, such as "educational ideology, persuasive ability of book salesmen, sentiment, or exaggerated claims for specific methods," rather than on the relative merits of different methods and materials. (Barton and Wilder 1964, p. 396)

There are many reasons why evaluation is a difficult problem in education. First, if carried out well, evaluation is very expensive and time-consuming. Secondly, scientific evaluation of students' learning requires sophisticated skills in research design and quantitative techniques that most school personnel do not have. Thirdly, evaluation is often opposed by both administrators and teachers who feel insecure about having their performance judged by others and fearful that unfavorable evaluation might jeopardize their positions. Finally, the evaluation process requires certain restrictions that are incompatible with the day-to-day classroom situation. For example, systematic evaluation requires that procedures must not be changed in midstream and that the circumstances in which the procedures are used must be kept comparable. Brickell mentions that every evaluator he met in a local school seemed misplaced since "his desire to hold a new program steady in order to evaluate it ran headlong into the teachers' urge to change it as soon as they sensed something wrong." (Brickell 1964, p. 498) Brickell also states that most innovations are not evaluated in schools except by observing the reactions of students while they are receiving the new instruction.

Domestication of Schools

The "domestication" of public schools refers to the relationship between the school as an organization and its clients. The school, a service organization, does not have the power to select its clients (i.e., students); neither are clients free to accept or reject the service. School attendance is compulsory and is, for the most part, legally and geographically determined.

Public schools are domesticated in that society legislates to care for and protect them. Their existence is guaranteed; they do not have to struggle for survival or to compete with other organizations. The result of this "domestication" is to restrict the need for, and interest in, change. (Carlson 1965, pp. 6-7) It will be interesting to note what effect alternative public schools will have on this monopoly situation. In systems where two or more alternative schools compete with the regular school for the same students, students will inevitably put considerable pressure on schools to change.

National Examinations

The present system of nationally standardized examinations for admission to college constitutes one of the major barriers to change in education. This system has the effect of "freezing" the high school curriculum and inhibiting experimentation. In order to do well on such tests as the Scholastic Aptitude Test, the National Merit Scholarship Qualifying Test, and the Advanced Placement Examinations of the College Entrance Examination Board, students are compelled to take certain courses having a standardized content. Because of these examinations, for example, students must take American and world history rather than one of the social sciences in their junior and senior years.

Parents as well as school administrators tend to judge teachers'

effectiveness on the basis of their students' performance on these national examinations. As a result, teachers tend to emphasize the kinds of knowledge required by these examinations and to focus teaching on imparting facts that will enable students to do well on the tests. Since such examinations tend not to deal with attitudes, values, and inquiry skills, these important areas are neglected in favor of imparting knowledge of content. The net result of the nationally standardized examinations is to rigidify the present curriculum and to prevent innovation and reform.

Role of State Governments

State governments can play either a facilitating or inhibiting role with respect to educational innovation. The primary legal bodies responsible for the curriculum are the state legislatures, but these bodies often delegate much of their authority to state departments of education, state boards of education, and local boards. However, in many cases, the legislatures require certain course content and teaching methods, or specify how pupils must be classified and grouped.

State departments of education are often able to mandate certain kinds of curricular changes via state testing systems, financial support and grants, and the administration of state laws and regulations. In many states, the departments of education have caused obsolete course sequences to become institutionalized.

The amount of control that state departments of education exercise over the public school curriculum varies widely from state to state. In the late 1950s and early 1960s, for example, numerous states passed legislation requiring courses such as "democracy versus Communism." Some states went so far as to specify the outcomes of such inquiry, ensuring that the United States always won in such ideological contests.

In some cases, the state department appoints a curriculum committee to designate curriculum requirements and to decide what subjects must be taught at each grade level. Obviously, these state agencies exert an important influence on the general climate of educational systems, and in some cases can act as powerful barriers to reform.

Textbook Adoptions

In keeping with the discussion of the state's power to influence education, it should be noted that statewide adoption of conventional textbooks constitutes a major barrier to change in all areas of education. State adoption policies not only deprive local schools and individual teachers of the opportunity to experiment with new patterns but also inhibit publishers' production of better kinds of materials with innovative contents. Publishers, of course, are greatly influenced by state adoption practices and thus continue to produce the usual hardbound textbooks.

Fenton points out that "in twenty-three states, a committee adopts either one or several books for a course to be taught in the schools: in five, only for the elementary grades; in eighteen, for all twelve years." (Fenton 1967, p. 63) State committees and local school boards never adopt a group of pamphlets, experimental units, or other innovative materials that could be used by teachers in an innovative or flexible manner and rarely, if ever, incorporate units from projects to supplement requirements.

Traditional textbooks are primarily designed to help students learn facts and generalizations, such texts rarely attempt to develop inquiry skills or to encourage the questioning of values or the resolution of value conflicts. If, however, some of the newer materials were to be placed on state-adopted lists and used by several schools, it is quite likely that the more traditional materials would begin to reflect characteristics of the materials

developed by curriculum projects.

Organizations that produce and distribute instructional equipment and supplies, including textbooks, exert a very great influence on education--an influence that probably cannot be avoided in a free-enterprise economy. The textbook industry operates on a national basis and, to achieve large-scale production, the industry actively promotes extensive nationwide adoption of its products. An innovation that is actively marketed by a commercial company, through advertising and sales representatives, is likely to be widely adopted by school systems. To maximize profits, such companies aim not only for volume distribution but for repeated sales of the same product year after year. Thus, once commercial organizations begin to market a given product, they act as powerful opponents of further change that would make this product obsolete. In fairness, however, it must be noted that a few companies have invested substantially in publication of some of the new social studies project materials, including multi-media kits that are expensive to produce.

Moreover, for economic reasons, the school system itself is reluctant to change textbooks that have been adopted and tends to continue using them so long as the existing inventory is usable. Often materials are used for five years, and sometimes for much longer periods.

Thus, the whole system of textbook production, marketing, and adoption can act as a powerful barrier to educational change involving new teaching materials.

Role of School Boards

Many experts on educational change have said that the superintendent, as chief administrator in a school district, is the key person in the adoption or rejection of educational innovations. Thus, an innovative super-

intendent could be a major facilitator of change, while a non-innovative superintendent could greatly impede educational innovation and reform. While the importance of the superintendent is indisputable, it must be kept in mind that the superintendent serves in a contractual relationship to a lay board of education, and the board has the power to hire and fire superintendents. To a large extent, then, the school board--which consists of laymen who, in many cases, have not been inside a school for 20 years--actually has the final say in matters of educational policy and can have a direct influence on the general climate of education in its district.

According to Mackenzie, "Boards...have a major say in determining the pupils to be served, the facilities to be provided, and the staff provisions to be made. Financial controls by boards of education often drastically influence the situation in respect to availability of materials." (Mackenzie 1964, p. 412)

In most communities, the school board operates mainly through the professional personnel in the schools and does not directly select new content and methods. However, the school board is in a position to mandate many changes directly and, in many instances, changes have been ordered by boards over the objections of professional staff. As Miles points out, the board's influence is decisive when exerted: "If the board decides to oppose or to urge a particular innovation, it will have its way." (Miles 1964, p. 634)

Teachers and Their Status

Schools are essentially bureaucratic structures. As in other kinds of bureaucracies, the main role of the administration is not to promote change but to perform the maintenance function--that is, to administer the status quo. The teacher's role in the system is essentially that of a bureau-

cratic functionary, who has little power to initiate system-wide change. (Brickell 1964, p. 503) Highly rigid time and personnel allocations in most schools tend to result in rigidity and the perpetuation of existing procedures. Once decisions have been made, all teachers are expected to follow the basic patterns that have been established. (Wayland 1964, p. 611)

Another problem militating against improvement of education is the tenure system. Schools have a large number of "permanent" employees with tenure status, and they must be utilized. Because of logistical problems, the teacher with tenure may have to accept an assignment for which he is not qualified, or in which he has little interest or competence. Moreover, the tenure system makes it difficult to replace existing teaching staff with persons having specialized competencies that may be required for implementation of certain types of innovations.

Status insecurity of teachers can serve as a powerful barrier to educational change. Such insecurity stems largely from the discrepancy between a teacher's image of himself as a "professional" and the reality of his position as a staff member of a stable institution or bureaucracy. Although autonomy is one of the main characteristics of the professional, teachers are not autonomous; they cannot alter their working situation as they please and, for the most part, are not free to decide what they will teach, when they will teach it, to whom, or at what price.

This "quasi-professional" status of teachers constitutes an obstacle to change in several ways. It "induces apprehension toward actions that are designed to improve performance, because it is feared that such actions will increase the discrepancy between real status and level of aspiration." (Sieber 1968, pp. 128-129) Innovations proposed by the administration may be resisted because teachers view accepting these innovations as a further

restriction of "professional" autonomy. As a result of the insecurity about their professional status, teachers tend to cling to established ways in order to preserve their authority, expertise, and social standing. Similarly, teachers may assert their independence by rejecting outside consultants, who threaten the self-image of the teacher.

Status insecurity may also lead teachers to engage in ritualism (i.e., over-compliance with regulations) rather than exercising discretion and engaging in "irregular" behavior that might better serve their educational objectives.

Another factor inhibiting educational change centers on the fact that status insecurity causes teachers to avoid cooperation and informal communication with colleagues regarding questions of teaching and learning. Sieber and others point out that informal discussion of classroom practices among teachers is minimal. Thus, they rarely know what other teachers within the same school are doing. (Sieber 1968, p. 129) In a study of 1,500 teachers Barton and Wilder found that of nine factors influencing teachers' beliefs regarding reading instruction, "other teachers" were mentioned by the fewest respondents. (Barton and Wilder 1964, p. 379)

Furthermore, teachers tend to be especially reluctant to discuss classroom difficulties with other teachers. Thus, on those very problems that are most critical, teachers are least likely to seek advice from their colleagues.

The norm system of the teacher includes the idea that he should be free of interference in his teaching. The great value placed on independence tends to discourage the teacher from utilizing the good ideas of his colleagues--if indeed he ever learns about their good ideas. The value placed on independence also tends to prevent the teacher from sharing improvements he has discovered with his colleagues. Thus, whereas persons

in other fields often actively seek out the newest methods, teachers view the adoption of someone else's practices as "imitation," which teachers regard as bad. (Lippitt 1965, p. 13) This view is based on the notion that every classroom is different and that innovations developed for other students in other classrooms could not possibly be appropriate.

Another barrier to change in school systems is the high rate of staff turnover. In many school districts, the young teacher often reaches the salary ceiling and can go no further unless he leaves that district, goes into administration, or leaves the field of teaching entirely. This results in the loss of many young, energetic, and progressive teachers and tends to leave a preponderance of personnel who are more conservative, traditional, and in many cases, generally resistant to change. Turnover may also deter innovation because of the difficulty of initiating and installing an innovation without a "product champion" who will work continuously to further the cause. Although the influx of new personnel may help to start innovation, local change processes take time and are likely to falter if stimulating outsiders do not stay long enough to become "insiders." (Miles 1964, p. 633)

One major problem in trying to bring about changes in school systems is the fact that the reward system tends to perpetuate the status quo. Teachers are usually paid on the basis of their personal education and longevity rather than on the basis of performance. Their economic level is rarely influenced by what they accomplish in the classroom. At best, those who adopt innovative methods are paid the same as those who reject innovations. In fact, since the typical school administration tends to view its role mainly as one of maintaining stability, the administration may even tend to reward teachers who "lie low" and do not stir up disagreement or conflict by trying to introduce changes.

Closely related to the problem of the lack of a reward system supportive of change is the problem of the typical educator's reluctance to "stick his neck out" by trying something new that might not succeed. The risks of attempting to innovate are considerable--especially in the traditionally non-innovative environment characteristic of many schools, where failure may endanger the educator's chances for promotion and tenure. At best, an educator's attempt to use an approach regarded by others as "unconventional" may result in his being ostracized and ridiculed. As a consequence, relatively few educators are willing to risk introducing changes that involve any degree of controversy or uncertain success and instead go along with the system.

Lack of Change Agents

One of the most important problems in trying to bring about change in education is the lack of educational change agents or "linkers." Diffusion research in several areas has repeatedly shown that change agents help to speed the adoption of new ideas, and this has been shown to be equally applicable to the educational setting. In agriculture, for example, the county extension agent is well recognized as a change agent with respect to farming practices. However, there is no one who performs a similar role for educational practice. The county and state levels (state departments) of public education seem to take as their major function provision of regulations rather than improvement. (Carlson 1965, p. 4)

Since one of the primary goals of this publication is to foster the development of change agents in social studies, various aspects of these roles are discussed in greater detail in Chapter 2.

Other Problems Specific To The New Social Studies

In addition to the change barriers discussed above--which are inherent in our educational system and which apply to almost all kinds of instructional innovations--there are some problems that hinder the widespread diffusion of the new social studies particularly.

Many of the new social studies curriculum materials deal with values and encourage students to question established ways. As Robert M. Hanvey has pointed out, the social science emphasis of many of the new materials may be quite corrosive to widely held folk beliefs, and the questioning of basic values, traditional institutions, and accepted ways entails the risk of offending powerful groups in our society. (Hanvey 1967, pp. 80-81) Without understanding and support from the public, as well as from school administrators and school boards, many teachers are naturally reluctant to jeopardize their positions by using approaches or materials that might arouse controversy. Because they require students to deal with sensitive issues--such as war, racial relations, overpopulation--and to challenge tenets that their elders hold dear, the new social studies approaches are probably more subject to this kind of obstacle than any other educational innovations.

Another factor that may aggravate the problem of bringing about change in social studies education and that contributes to the difficulty of arriving at commonly accepted goals and objectives is the wide range of fields embraced by the social studies. Social studies is not a single discipline but a group of related disciplines--including history, geography, economics, anthropology, sociology, psychology, and political science. Ideally, effective teaching of the new social studies requires knowledge of all the social sciences, but most junior and senior high school teachers

specialize in one discipline, typically history. The situation is even worse in the case of elementary school teachers, most of whom have taken only three or four college courses in the social sciences (again, usually in history). Thus, it is difficult for such teachers to grasp a conceptual approach to the social studies and to communicate this approach to their pupils.

An equally difficult problem, arising from the proliferation of materials, is the task of keeping abreast of all of them so that the best materials for a particular purpose will not be overlooked when adoption decisions are made. There is a great need for further dissemination of the new social studies materials. Very few persons, if any, know what is being done by all of the curriculum projects which are widely dispersed throughout the country. Since most of the projects are underfinanced, they cannot afford to carry out the extensive dissemination activities that are needed. For example, a lack of funds makes it impossible for most projects to provide samples of their materials to teachers upon request. Extensive dissemination efforts are needed; otherwise much of the work done by the curriculum projects will be wasted or, at best, adopted after an excessive delay.

Closely related to this problem is the difficulty of selecting appropriate materials. More than 50 major projects have developed new materials for social studies education, and these differ greatly in terms of objectives, teaching strategies, content, media, and pupil deployment. There is a real need to provide teachers with criteria by which to evaluate these various projects, so that a wise choice can be made from the overwhelming array of materials that are becoming available. The Curriculum Materials Analysis System, developed by the Social Science Education Consortium (Knight, et al, 1971), and a growing number of reference works such as the SSEC's

Social Studies Curriculum Materials Data Book (Social Science Education Consortium, 1971-) are making it easier for schools to make the much needed careful selections of instructional materials.

One of the primary factors inhibiting adoption of the new social studies materials is cost. Although cost is not an inhibiting factor with all of the materials, or for all school systems, it is definitely a limitation in many instances. Most projects provide films and other audio-visual materials as part of their curriculum packages and these are often expensive. In some cases, a school system can afford only one or a few copies, which may have to be shared by many teachers; thus, on a day a teacher needs a particular item, it may not be available. This problem of acquiring the new materials is especially serious in small high schools, which can purchase copies of new materials only at a prohibitive per-student cost.

A major problem in diffusion of the new social studies is the fact that the new inquiry-oriented materials require the teacher to adopt a new, and in many ways a more demanding, role. Many teachers are unwilling or unable to do this. In most cases, teachers trained by the traditional methods probably find it unnatural not to teach in the same manner in which they were taught. Thus, these teachers continue to view their role as transmitters of information; they are accustomed to doing most of the talking instead of posing thoughtful questions and encouraging students to participate in systematic discussions.

Even when teachers are willing to change their roles and adopt a more inquiry-oriented approach to teaching, many difficulties stand in the way. Not the least of these is the lack of adequate time to master the new materials and to develop new kinds of courses. With a reasonable teaching load (fewer preparations), teachers would have time to locate or develop materials and improve or create new strategies of teaching. However, typical

social studies teachers face five classes of 30 to 40 students per day; prepare two or three courses each night; grade 150 papers each week; and supervise extracurricular activities. Without some kind of assistance, most classroom teachers lack the time and resources to keep on top of the new social studies approaches and materials or to develop their own.

One of the important administrative arrangements that contribute to a school's maintaining an up-to-date social studies program is provision of a department head who has this function as a major responsibility. Such a person--if he is well trained, imaginative, and energetic, and if he is provided with sufficient resources--can provide the dynamic leadership that is needed at the local school level in adopting the new social studies. The department head can take responsibility for keeping up-to-date on new curriculum developments, for providing key information to social studies teachers, for purchasing materials for the faculty and students, and for coordinating the sequencing of coursework at different grade levels. If such a role is to be viable, numerous forms of assistance must be made available to these persons, many of whom also carry substantial teaching loads. The Diffusion Project at Indiana University (Bloomington) is preparing a handbook for department chairmen who wish to perform an expanded role such as that just described. Unless such a person is available in a social studies department and is given this kind of responsibility and support, it is unlikely that the school will keep up with the times in social studies instruction.

Concluding Remarks on Barriers to Change

Lest the preceding discussion of barriers to change discourage the reader, he should recall that most changes in education have come about in the face of similar barriers. When one looks at all the obstacles, it is

easy to conclude that change is impossible--that the dice are loaded in favor of the status quo. Be that as it may, if one is to promote systematic change actively, he must understand why change has not already come about. The notion that one should know his competition holds true in educational change as well as in business. Identifying a barrier is the first step toward removing it.

CHAPTER 2

A REVIEW OF THE LITERATURE ON DIFFUSION

Background and Definitions

During the past ten years, there has been a great increase in the number of publications dealing with the diffusion of innovations and the factors affecting the adoption of these innovations. Pointing up the need for synthesis of the literature and for standardization of terminology, this proliferation of publications on diffusion has not been confined to education but has occurred in various fields, including agriculture, communications, medicine, industry, and marketing.

Everett M. Rogers, more than any other writer, has attempted to synthesize these diverse publications and to develop standardized terminology for dealing with the diffusion process. Thus, Diffusion of Innovations (Rogers 1962) and the second edition of that book, a synthesis of more than 1,500 publications in all fields dealing with the communication of innovations entitled Communication of Innovations: A Cross-Cultural Approach (Rogers and Shoemaker 1971), provide the framework for the definitions given in this section.

Diffusion is the process by which innovations spread to the members of a social system. In other words, diffusion is the spread of a new idea from its source to its ultimate users. The diffusion process involves four elements: (1) the innovation, (2) its communication through certain channels, (3) over time, (4) among the members of a social system.

An innovation is an idea, practice, or object that is perceived as new

by an individual. An innovation may have two components: an idea component and an object component (the material or physical aspect of the idea). All innovations have an ideational component, but some do not have a physical referent. The term "innovation" does not always refer to new knowledge. An individual might be aware of an innovation for some time but may not have developed a favorable or unfavorable attitude toward it. By "new," it is meant that an innovation has not been functionally adopted or incorporated by the individual or social system. In some cases, an innovation may be an adaptation or improvement rather than something entirely new or unique.

Communication refers to the process by which messages are transferred from a source to a receiver, usually with the intention of modifying the receiver's behavior. It will be seen that the diffusion process corresponds closely to the well-known S-M-C-R-E communication model, consisting of source, message, channel, receivers, and effects. The source is the origin of the innovation (inventor, scientist, developer, opinion leader); the message is a new idea; the channel is the means by which the innovation spreads; the receivers are the members of the social system; and the effects are the changes in knowledge, attitudes, and overt behavior (adoption or rejection) regarding the innovation. It is obvious that the nature of the relationship between the source and the receiver--that is, between the diffuser and the potential adopter--is extremely important since this relationship influences the circumstances under which a message will be conveyed, the manner in which it will be transmitted, and the effects upon the receiver.

The communication channels, or means by which a message gets from a source to a receiver, are also important. If the source simply wishes to inform the receiver about an innovation, mass-media channels are often the

most rapid and efficient, especially if the audience is large. On the other hand, if the source's objective is to persuade the receiver--that is, to induce him to form a favorable attitude toward the innovation or to try it--then interpersonal channels are usually more effective.

The time dimension, a very important element in diffusion, is involved (1) in the decision-making process through which an individual or group determines whether to adopt or reject an innovation, (2) the rate of adoption of an innovation within a social system, and (3) in the relative innovativeness of an individual as compared with other members of his social system.

The innovation-decision process is the mental process through which an individual passes from first knowledge of an innovation to a decision to adopt or reject it. Although Rogers and Shoemaker (1971, p. 25) now conceptualize four main steps in this process (knowledge, persuasion or attitude formation, decision, and confirmation), the innovation-decision process discussed in Rogers' earlier work (1962, pp. 81-86) postulated five steps: (1) awareness, or first knowledge of an innovation; (2) interest, or gaining further knowledge about the innovation; (3) evaluation, or forming a favorable or unfavorable attitude; (4) trial of the innovation, on either a temporary or partial basis; and (5) adoption, which is a decision to make full use of an innovation as the best course of action available, or rejection, which is a decision not to adopt an innovation. A discontinuance is a decision to cease use of an innovation after previously having adopted it. (This can be due to dissatisfaction with the innovation, difficulties in implementing it, or replacement of the innovation with something else.)

The rate of adoption, the relative speed with which an innovation is adopted by members of a social system, is usually measured by the length of time required for a certain percentage of the members to adopt. Note that it is the system, not the individual, that is the unit of analysis.

(Characteristics of innovations that influence their rate of adoption are discussed in a later section.)

Innovativeness is the degree to which an individual is earlier in adopting an innovation than other members of his social system. Obviously, all individuals do not adopt an innovation at the same time. Diffusion research has found that, in most cases, frequency distributions based upon time of adoption of an innovation closely approximate a normal or bell-shaped curve, or, plotted cumulatively, an S-shaped curve. (Rogers and Shoemaker 1971, p. 177)

To facilitate comparisons, Rogers and Shoemaker have defined five adopter categories based upon normal distribution and formed by laying off standard deviations from the average time of adoption: (1) innovators, the first 2.5 percent to adopt; (2) early adopters, the next 13.5 percent to adopt; (3) early majority, the next 34 percent to adopt; (4) late majority, the next 34 percent to adopt; and (5) laggards, the last 16 percent to adopt. (Bogus and Shoemaker 1971, pp. 176-191)

The social system is a collectivity of units that are functionally differentiated and that cooperate toward the solution of a common problem or the achievement of a common goal. The units of a social system may be individuals, formal or informal groups of various sizes, or complex organizations such as schools. The characteristics of the social system within which diffusion occurs may affect the rate and pattern of diffusion in a number of ways.

A system's social structure--including its norms, social statuses, and hierarchy--has certain effects on the behavior of individual members. These "system effects" can exert a powerful influence on the individual and can impede or facilitate the rate at which new ideas are diffused and adopted.

Some studies suggest that the nature of the social system often has a more important influence on an individual's behavior than do personal characteristics such as personality, attitudes, education, and communication patterns.

Also, innovations can have the effect of changing or restructuring the social system. However, it should be kept in mind that individuals of highest status and power in a system, the elite, can serve as "gatekeepers" in controlling the flow of innovations into the system from outside sources. The gatekeepers often prevent the introduction of restructuring innovations and prefer those that will not disturb the status quo of the system's structure.

Norms, the established patterns of behavior for members of a social system, define the range of permissible behavior and serve as a standard for the individual members. Sociologists have distinguished two types of norms that are closely related to a social system's tendency to be either receptive or resistant to change: traditional norms and modern norms. Persons in social systems with modern norms tend to adopt new ideas more rapidly and to view change more favorably than persons in systems with traditional norms.

Opinion leaders are persons who are able to influence informally the attitudes or overt behaviors of other members of a social system. These leaders often provide information and advice about innovations to many other members. Opinion leadership is a type of informal leadership that is not necessarily related to a person's formal status in the system, although formal leaders may in some cases function also as opinion leaders.

Opinion leaders may hold a leadership role on the basis of their expertise or technical competence, their social accessibility, and their conformity to the norms of their system. Because of these characteristics, they often serve as models for the behavior of their followers with regard

to innovations. The opinion leaders in a modern social system tend to be innovative, whereas the opinion leaders in a traditional social system are often noninnovative. (For a more detailed discussion of opinion leadership, see Chapter 4.)

Another important characteristic of social systems is the way in which innovation decisions are typically made. Within a given system, three major kinds of innovation decisions may be made. Rogers and Shoemaker call these three types of innovation decisions optional decisions, collective decisions, and authority decisions. (Rogers and Shoemaker 1971, pp. 36-38) Optional decisions are made by an individual independently of decisions made by other members of the social system. Collective decisions are made by members of the social system by consensus. Authority decisions are imposed upon the individual by someone in a superordinate power position. A contingent decision is one that can be made only after a prior innovation decision has been made by the system.

General Diffusion Research

Most of the diffusion research in the past decade has been done in the fields of anthropology, sociology (especially rural sociology), medicine, public health, education, communication, and marketing. Other disciplines that have paid some attention to diffusion are agricultural economics, general economics, psychology, geography, and linguistics.

Most research on diffusion of innovations has dealt with (1) the characteristics of adopted categories, particularly the correlates of innovativeness (sociology, education, medicine, and marketing); (2) the S-shaped distribution of adoption over time, or the diffusion curve (sociology, rural sociology, and education); (3) the perceived attributes of innova-

tions as related to their rate of adoption (rural sociology); (4) opinion leadership in the diffusion process (rural sociology, medical sociology, communication, and marketing); (5) communication channels in the adoption process (rural sociology, medical sociology, and communication); (6) the diffusion of ideas from one society to another, the social consequences of technological innovations, and the relative success of change agents (anthropology); (7) correlates of innovativeness among industrial firms (industrial economics); and (8) correlates of innovativeness among schools (education).

The chief limitation of diffusion research in general is that most studies have focused exclusively on the individual as the unit of adoption and have given too little attention to the role played by relationships among individuals and by organizational factors in the change process. Diffusion research, for the most part, has focused almost exclusively on "optional" (i.e., individual) innovation decisions and has generally neglected collective and authority decisions. Also, there has been much more research emphasis on the diffusion of innovations from the physical and biological sciences, and relatively little research on the diffusion of new ideas in the social sciences.

Characteristics of Innovations

Rogers and Shoemaker have identified five attributes of innovations that seem to be related to the speed with which they are adopted:

1. Relative advantage is the degree to which an innovation is perceived as better than the idea it supersedes. This may be measured in terms of economic gain, social prestige, convenience, satisfaction, or any other kind of benefit. Most important are not the "objective" advantages of the

innovation but the individual's perceptions of its advantages.

2. Compatibility is the degree to which an innovation is perceived as being consistent with the existing values, experiences, and needs of potential users. An innovation that is compatible with the social system's values and norms is likely to be adopted more rapidly than one that is not.

3. Complexity is the degree to which an innovation is perceived as difficult to understand or use. Usually, innovations requiring little additional learning on the part of the user will be adopted more rapidly than those requiring the development of new skills, values, and understandings.

4. Trialability is the degree to which an innovation may be experimented with on a limited basis. Usually, innovations that can be tried, either on a partial basis or for a limited time, will diffuse more rapidly than those that cannot, probably because of the greater degree of risk in the latter case.

5. Observability is the degree to which the results of an innovation are visible to others. An individual is more likely to adopt an innovation if he can see its results. (One of the main reasons for the difficulty of getting innovations adopted in the field of education is that results are often hard to observe or measure.) (Rogers and Shoemaker 1971, pp. 134-172)

Characteristics of Adopter Categories

A great deal of research has been done on variables related to individual innovativeness. The five adopter categories mentioned earlier have been compared in a number of research studies, and the following salient characteristics of each category have emerged: (1) innovators are characterized by willingness to take risks; (2) early adopters tend to be respected members of their social systems and often serve as role models for peers (opinion leaders are most often in this category); (3) early majority

tend to be deliberate and are willing to consider innovations only after their peers adopt; (4) late majority are skeptical and do not adopt until they are pressured to do so by their peers; and (5) laggards tend to be tradition-bound and oriented toward the past. (Rogers and Shoemaker 1971, pp. 183-185)

Research studies concerned with differences between persons who are relatively early or relatively late in adopting innovations have dealt mainly with three types of variables: socioeconomic characteristics, communication behavior, and, to a limited extent, cognitive characteristics and attitudes. Rogers and Shoemaker provide a comprehensive listing of specific studies supporting each of the following findings related to these three types of variables. (Rogers and Shoemaker 1971, pp. 352-376)

In terms of socioeconomic characteristics, earlier adopters are no different from later adopters age-wise, but earlier adopters generally have more years of education, higher social status, greater wealth, a higher level of aspiration and achievement motivation, and a greater degree of upward social mobility than later adopters.

With regard to communication behavior, earlier adopters are more "cosmopolite" (i.e., their reference groups are more likely to be outside rather than within their social system); travel more widely; have more contacts with change agents, and have greater exposure to both mass media and interpersonal communication channels than later adopters. Earlier adopters also have greater knowledge of innovations and are more inclined to seek information about them; have a higher degree of opinion leadership; and are more likely to belong to well-integrated social systems with modern norms. In contrast, later adopters tend to be more "localite" (i.e., their reference groups are more likely to be within their social system); travel less, have

fewer contacts with change agents; and have less exposure to communication channels--especially mass media.

In terms of cognitive and attitudinal variables, research indicates that earlier adopters have greater empathy than later adopters; have greater intelligence, rationality, and ability to deal with abstractions; and have more favorable attitudes toward change, risk, education, and science. They are less fatalistic than later adopters and have higher levels of achievement motivation.

The differences among these categories suggest that different strategies or change techniques might be more effective with each of these groups. Chapter 4 will offer a discussion of specific diffusion techniques.)

Psychological Variables

The findings and conclusions cited above have come directly from "diffusion research" conducted primarily in the applied fields of agriculture, marketing, and medicine. The researchers who conducted most of these studies set out with a specific purpose in mind: to study the actual process through which a concrete, tangible innovation spreads among a particular group of people in the "real world." Most of the data were collected through questionnaires and interviews asking respondents to recall their past behavior with regard to a particular innovation. The consistency in results of these numerous diffusion studies in various fields indicates that the conclusions, for the most part, are reliable in spite of the methodological problems that sometimes hamper this kind of research.

Most diffusion research, however, has not attempted to deal with basic psychological variables related to an individual's general predispositions with regard to change. It has dealt instead with variables that are somewhat

easier to measure--educational background, socioeconomic status, etc. Nonetheless, there is another body of research literature that is highly relevant to understanding the diffusion of innovations. This literature, dealing with basic personality characteristics related to acceptance or rejection of new ideas, has come mainly from the field of social psychology. This research was not conducted to answer practical questions concerning the diffusion of innovations, but was carried out mostly in laboratory settings as theoretical research.

The vast amount of psychological and social psychological research that is relevant to diffusion would be impossible to cover in a publication of this size. An attempt will be made, however, to review very briefly the chief findings in those areas of social psychology that have greatest relevance to diffusion. (For an excellent review of individual variables related to innovativeness, see Guskin's chapter on "The Individual" in Havelock 1969, Chapter 4.)

The advantages of understanding the personality variables that determine an individual's reaction to new ideas are perhaps obvious. One advantage to knowing what kinds of people are innovative, or favorable to change, is that when these individuals are identified, their cooperation can be sought in an attempt to introduce change. Similarly, knowing what kinds of people usually resist change can help the change agent to identify potential opponents and can provide him the opportunity to forestall their opposition to a proposed change.

Moreover, an understanding of some of the personality variables that might underlie individuals' reactions to an innovation can greatly help the change agent to design appropriate strategies and approaches for dealing most effectively with these reactions. Only when the change agent under-

stands the causes underlying resistance to change can he design effective strategies for overcoming such resistance.

It must be kept in mind, of course, that an individual's reactions to any given change proposal will be determined by a number of interacting forces. These include not only his own personality characteristics but also numerous aspects of the situation in which he finds himself (e.g., the types of social systems or organizations to which he belongs; his relationships with persons in positions of authority and with other members of those social systems; the reactions of his peers to the particular innovation; the characteristics of, and his relationship with, the course of the change, or the change agent; and the nature of the innovation and its relationship to his needs, values, attitudes, and fears.

Sense of Competence and Self-esteem

Research studies have found that self-confidence and self-esteem are important variables in determining how individuals react to their environment. An individual who has confidence in himself will tend to take risks and thus will be more receptive to innovations. He will be less likely to reject what is new or strange because of feeling threatened. On the other hand, feelings of self-distrust and incompetence lead an individual to resist change. Persons who fear failure or who are reluctant to admit weakness tend to resist new practices. Thus, it is important for the innovative administrator or change agent to create conditions in which the fear of failure will be minimized.

Such findings apply when the individual is left to himself. On the other hand, it should be kept in mind that individuals who feel impotent or incompetent and who have low opinions of themselves also tend to be

more dependent on others and tend to seek the approval of others. This desire for approval leads such an individual to conform more closely to the norms of his group. Thus, a person with low self-esteem who is a member of a group that decides to accept an innovation will tend to accept it also; however, if the group decides to reject the innovation, he will tend to reject it also. Persons with self-confidence are likely to react more independently.

Authoritarianism and Dogmatism

One of the aspects of personality that has been most widely researched is authoritarianism. Although sometimes criticized on methodological grounds, the large body of research in this area suggests some important relationships between an individual's personality and the manner in which he interprets information. An "authoritarian" person is one who is strongly prejudiced and aggressive toward minority groups and outsiders in general, has a strong tendency to accept orders from authoritarian leaders, and rigidly rejects changes proposed by outside sources. Such a person tends to hold tenaciously to his beliefs and interpretations, and tends not to see anything that conflicts with his viewpoint. A similar concept is that of closed-mindedness or dogmatism.

It has been found that persons who tend to be lower in authoritarianism or in dogmatism tend to be more receptive to innovations. It has also been suggested that persons who are high in authoritarianism or dogmatism tend to accept innovations proposed by persons in positions of authority or power.

Values

Values (i.e., highly integrated sets of beliefs and attitudes about

particular objects in one's environment) are important determinants of an individual's reaction to an innovation if he perceives the innovation as being related to his values. Researchers have found that innovations which run counter to important values will be rejected. Guskin suggests that, while the change agent will probably be unable to change people's values, he may be able to avoid initial resistance by associating the values with the proposed change. (Guskin 1969, p. 6)

In cases where a proposed change is in direct conflict with a person's values, Havelock has suggested the following possible approaches:

1. Put emphasis on those values which are shared by the source and the receiver....
2. By-pass value issues. The problem here is that if you are unsuccessful you may increase suspiciousness and distrust.
3. Negotiate....
4. Expose value issues. It might be that the mere recognition by the receiver that his values are considered and respected will help create an atmosphere of trust and acceptance.
5. Find key values and appeal to them....
6. Respect value barriers....

Needs

When an individual has an important need that is not being satisfied and is causing him frustration and tension, he will tend to change in a direction that reduces such tension. Thus, if an innovation is directly relevant and effective in fulfilling important and salient needs, it will tend to be readily accepted. If an innovation does not fit one's needs, it will tend to be rejected.

It should be kept in mind that the "fit" between needs or values and an innovation is important when needs or values are activated. If they are not activated, an innovation that seems to conflict with them may be

adopted. If the individual later perceives the conflict between the innovation and his values or needs, he may cease to accept the innovation.

Maslow has suggested that an individual's needs are ordered in a hierarchy on the basis of relative prepotency. Those higher in the hierarchy are not activated and cannot be satisfied until those lower in the hierarchy have been met. At the lowest level are physiological needs, followed by "safety" needs; when these are regularly satisfied, higher needs emerge--namely, love or social needs, esteem (ego) needs, self-actualization or self-fulfillment needs, cognitive needs, aesthetic needs, and consistency needs. Since understanding of an audience's motivations or needs is of very great importance for change efforts, the different levels of needs are summarized briefly as follows:

Physiological needs: need for food, shelter, rest, sex; maintenance of health, self-preservation.

Safety needs: need for security against danger, deprivation, and threat, job security, financial security, emotional security.

Love or social needs: need for belonging, acceptance; love needs; identification with peer group, family, friends, clubs, church.

Esteem or ego needs: need for favorable self-concept, confidence, self-respect; based on achievement, adequacy, strength, independence, freedom, esteem of others, good reputation, prestige, recognition, attention, importance, appreciation.

Self-actualization or self-fulfillment needs: need for reaching one's fullest potential by being creative, making a real contribution, doing what one is best suited for and what one wants to do and enjoys.

Cognitive needs: need for knowing, thinking, understanding, learning,

discovering, and exploring.

Aesthetic needs: need for order, symmetry, cleanliness; love of nature and beauty, abhorrence of ugliness.

Consistency needs: need for consistency of feeling, knowing, and acting.

According to Maslow, an individual is dominated only by unsatisfied or unfulfilled needs that have been aroused or activated. (Maslow 1954)

Need for Achievement--McClelland has done a great deal of research on the need for achievement and has found that high achievement need results in reasonable risk-taking, individual responsibility, and a willingness to delay immediate gratifications in order to obtain greater future rewards. Thus, persons with high need for achievement are more inclined to accept innovations than those with lower levels of achievement motivation. Put differently, earlier adopters of innovations usually have a higher degree of achievement motivation than later adopters or laggards. (McClelland et al. 1953; McClelland 1961)

Need for Affiliation--Persons who are high in the need for affiliation tend to over-emphasize getting along with others and being successful in social relations. Such persons usually do not tend to engage in experiments, take risks, or work hard toward accomplishment of goals and thus are less likely to adopt innovations.

Need for Dependence--Persons who are high in the need for dependence tend to avoid taking the initiative, avoid arguing or disagreeing with others, and depend on others for leadership and guidance. Such persons might not be very useful to the change agent who is trying to persuade members of a social system to adopt an innovation.

Active Versus Passive Copers

Another type of personality orientation that has been conceptualized by psychologists is based upon two approaches toward coping with stress. The active coper who is dissatisfied with some aspect of his situation adjusts to it by trying to change it himself. The passive coper, on the other hand, changes his needs to conform to his environment. This latter approach contains a dimension of fatalism. Fatalists, or passive copers, are unlikely to be good targets for the change agent. He would be better advised to concentrate his efforts on the active coper.

Feelings of Fear and Threat

An important obstacle to change in some situations is fear of the unknown or, in some cases, a specific fear that one's position or safety will be threatened by an innovation. Such a reaction is most likely to be evoked if the proposed change is seen as threatening the individual's self-image or status, or if new behaviors required contain unfamiliar elements. There is a close relationship between such feelings of fear and self-confidence and self-esteem; the confident individual is less likely to feel fearful and threatened, while the person who lacks self-confidence is likely to feel worried about change. The change agent should keep in mind that innovations that arouse feelings of insecurity and fear are unlikely to be adopted unless he takes some action or prepares carefully designed messages aimed specifically at reducing such fears. In some cases, he can also offset fear through emphasizing the benefits of the innovation.

It should be noted that, under conditions of uncertainty or anxiety, a "social comparison" process operates wherein an individual may tend to seek out others similar to himself with whom to compare opinions and reactions.

This makes the individual susceptible to being influenced by these other persons, which may or may not assist the efforts of the change agent.

Another course of action for the change agent is to deliberately evoke fear of some undesired outcome that could be avoided through adoption of the given innovation. Research findings concerning the effectiveness of using "high fear appeals" to change attitudes have been somewhat contradictory. It appears, however, that if initial anxiety is high, strong fear appeals may raise anxiety to an intolerable level, thus promoting a defensive reaction to reject the message entirely. For persons whose initial level of anxiety is low, however, high fear arousal may be very effective in changing attitudes.

Past Experience with Innovations

Persons who have been exposed to innovations that have failed or have produced very little success may develop a general resistance to acceptance of all innovations. However, individuals who have adopted successful innovations in the past will tend to be favorable to innovations that are similar to those already adopted. It is questionable whether successful experience produces a general tendency to adopt all kinds of innovations. In some situations, then, it may be effective for the change agent to point out similarities between the present innovation and those that have been adopted successfully in the past. In the case of past experiences of failure, the change agent might point out ways in which the innovation is different from innovations that have failed.

Attitudes

Triandis points out that, on the basis of their past experiences, individuals learn to respond to groups of similar stimuli in similar ways--that is, the stimuli are categorized.

> learn what events are grouped together, how much differentiation is made among events, how salient are some events as opposed to other events, what is the temporal frame of reference in which the categories are placed, and how much information supports a particular category....
>
> When a category is frequently associated with rewards, or pleasant experiences, it acquires the property of eliciting positive affect or pleasurable emotions from the people who have made this association. The more frequently the association has occurred the more reliably does the category elicit positive affect. Conversely, when a category is frequently associated with punishments or unpleasant experiences it elicits negative affect (unpleasant emotions), or anxiety. (Triandis 1971, pp. 333-334)

Attitudes are sometimes viewed as consisting of these categories and the link among them (i.e., cognition) and the degree of positive or negative affect associated with them. Many writers, however, include in the definition of attitude a third component, namely, behavioral intention.

Attitudes can serve various functions for the individual and are closely tied in with an individual's motivations--his desires, needs, aspirations, etc. Many writers have pointed out the importance of understanding <u>why</u> people have certain attitudes (i.e., the functional bases of attitudes) if one wishes to change them. Katz suggests that attitudes can (1) help people understand the world around them by organizing and simplifying the complex inputs from their environment (knowledge function); (2) protect people's self-esteem by enabling them to avoid internal conflicts and unpleasant truths about themselves as well as protecting them against external dangers (ego-defensive function); (3) lead people to react to their environment in such a way as to maximize their rewards and minimize their punishments (adjustment-utilitarian function); and (4) allow people to express their fundamental values (value-expressive function). (Katz 1960, pp. 163-177) Different motivational bases of attitudes require different strategies for changing them.

Cognitive Dissonance

Generally, the three components of attitudes (cognitive, affective, and behavioral) are closely interrelated and consistent. However, under some circumstances, there may be a discrepancy between a person's cognitions or feelings and his behavior. This gives rise to what is called "cognitive dissonance" or cognitive inconsistency, which produces pressures to reduce dissonance and to avoid increases in it. Such pressures give rise to behavioral change or changes in attitudes. The individual will either change his attitudes to conform to his behavior or will change his behavior to conform to his attitudes. (Festinger 1957)

The foregoing has important implications for the change agent. If he is trying to introduce an innovation having elements that are dissonant with well established cognitive elements of a potential adopter, the introduction of such elements may make the potential adopter so uncomfortable that he will try to avoid dissonance-producing elements in every possible way. He may avoid being exposed to the messages of the change agent or may convince himself that the change agent is a troublemaker or an unreliable person.

Disagreement with people who are important to an individual produces dissonance in him; agreement with others reduces dissonance. The amount of dissonance produced by disagreement depends upon many factors--including the degree to which the disagreement can be resolved through empirical observation, the number of persons who agree or disagree, the importance of the controversial issue, the amount of disagreement, the attractiveness of the disagreeing persons, and the credibility of the disagreeing persons. Similarly, if a person publicly commits himself to a certin position, he will change his attitudes to be consistent with his commitment. The

degree of choice he has, however, is a critical aspect of this relationship between attitudes and behavior. If a person chooses to make a commitment, he must justify his decision, and this leads to attitude change. If he has no choice, he will feel no need to justify his decision so there will be no attitude change.

It should be remembered that while dissonance is uncomfortable and unpleasant, it is often necessary to produce such a state in a person that will lead him to change. If he experiences no dissonance and is entirely satisfied with things as they are, he will be very unlikely to change or adopt new practices.

Interpersonal Factors

The previous section dealt with the characteristics of individuals that are relevant to the adoption or rejection of innovations. Diffusion of innovations, however, does not depend solely upon characteristics of individuals; interactions among individuals and their characteristics must also be considered. Below we examine the interpersonal factors operating between innovators and adopters that contribute to the success or failure of change efforts.

Similarity Between Change Agent and Potential Adopter

The degree of similarity between the agent of change and members of the target system is an important variable in diffusion. Although there may be differences in terms of such factors as age, education, social status, values, attitudes, and goals, a considerable amount of research shows that the degree of liking or attraction between two persons is directly proportional to the degree of similarity between them. And it follows that the

more the potential adopter likes the change agent, the more likely the adopter will accept the agent's ideas.

Credibility of the Change Agent

One of the main variables determining the effectiveness of a change agent is the degree to which his audience perceives him as credible (i.e., as a reliable source of information). The credibility of the communicator depends upon his prestige, his perceived knowledge and expertise, and his trustworthiness. A great deal of research has shown that the greater the prestige the change agent has in the eyes of his audience, the more likely it is that his message will be accepted. Expertise influences credibility only in areas where the communicators (change agent) has demonstrated his competence. Trustworthiness depends upon the receiver's perception of the communicator's intentions. If the communicator is regarded as biased or as having ulterior motives, he is not likely to be effective in changing people's attitudes.

Role Legitimacy

Closely related to credibility, prestige, and trustworthiness is "role legitimacy." If the change agent's role is accepted as legitimate, those who interact with the incumbent of this role attribute to him a certain level of training and are, therefore, predisposed to accept information related to his skills as accurate and reliable.

The perceived legitimacy of a role, along with its concomitant influence on others, depends upon the perceived credibility of the institution in which the role exists. If the change agent represents an organization or agency that is perceived as being biased or having vested interests in advancing a particular viewpoint, he will have less influence on potential adopters

than if the organization he represents is seen as unbiased.

Past Experience with a Change Agent

Past experience with a change agent, just like past experience with an innovation, may influence reactions toward him in a given situation. For example, the way he has treated the potential adopter in the past and the extent to which the change agent's suggestions have benefited the adopter are important determinants of the acceptance of the change agent's proposals.

Numerous studies indicate that the early contacts in a relationship are of particular importance since they tend to have relatively lasting effects and lead one to develop certain expectations about another person and the relationship with him. These expectations, if negative, may lead to what has been called "autistic hostility." Guskin describes this as follows:

> Individuals, especially when their early encounters are experienced as unpleasant, tend to withdraw from interactions with the other. As a result of this withdrawal, early impressions are not checked against future interactions. Further, the individual tends to distrust the behavior of the other to fit these first impressions. This results in a continuing building up of negative impressions of the other which go unchecked. In time, both partners in the interaction have built up, on an autistic basis, hostile reactions to each other which predisposes each not to interact with the other. Thus early expectations are maintained and future interactions are interpreted so as to reinforce these expectations. (Guskin 1969, pp. 15-16)

Thus, first impressions and early experiences in interpersonal relationships greatly affect future relationships since persons who have trouble relating to each other develop withdrawal tendencies. This problem is aggravated when the change agent is dissimilar in background and attitudes from the target system. According to Guskin,

> This vicious cycle can be broken by interventions which encourage or force continued interactions, thereby preventing the autistic processes and creating confrontations between the participants. Under such conditions continuous feedback may create new impresssions which might tend to be more veridical. The continuous feedback probably has the effect of creating a common ground for understanding; it also might create greater attraction through the continuous interaction. (Guskin 1969, p. 16)

Other Factors Related to a Change Agent's Effectiveness

Rogers and Shoemaker have discussed seven factors that seem directly related to the success of a change agent and have cited research studies to support each finding. A change-agent's success is positively related to (1) the extent of his efforts--that is, the amount of activity in which he engages and the number of contacts he makes with potential adopters; (2) the degree to which he is client-oriented rather than change-agency oriented; (3) the degree to which his program is compatible with clients' needs; (4) his homophily (perceived similarity) with clients; (5) the extent to which he works through opinion leaders; (6) his credibility in the clients' eyes; and (7) his efforts to increase the clients' ability to evaluate innovations. (Rogers and Shoemaker 1971, pp. 227-248 and 380-382) An eighth factor, which has not yet been supported by research but which is offered as a hypothesis, is that the change agent's success is positively related to his degree of empathy with clients.

Implications

A number of implications can be drawn from the findings discussed in terms of interpersonal factors. First, it is highly desirable to select as a change agent a person who is similar to the audience in background and viewpoints, or at least one who is sensitive and empathetic to the audience. Also, the change agent should have a high degree of technical know-

ledge or expertise, as well as an ability to analyze the individual variables that have been mentioned (including the potential adopter's attitudes, values, and needs). Further, the change agent should have highly developed social skills and an ability to develop and maintain effective interpersonal relationships with members of the client system.

Another implication of some of the foregoing findings is that it may be necessary or desirable to change the way in which potential adopters perceive the change agent and/or the organization that he represents. For example, it might help greatly to increase the prestige, credibility, and attractiveness of the agent or his organization through some suitable means.

Group Factors

We have examined some of the individual and interpersonal variables that influence a person's willingnes to accept change. However, innovative behavior does not occur in a social vacuum and must be considered within the broader context of the groups, organizations, and larger social systems to which an individual belongs. These social contexts contain elements that can facilitate or impede innovation.

Two aspects of both groups and organizations that are relevant to the adoption of innovations are norms and communication patterns. These two topics will be covered in the next section, "Characteristics of Social Systems and Organizations." This section deals with some aspects of the individual's relationship to his group and the resultant effects on the change process.

A collection of people may be called a "group" when it possesses the

following qualities: a definable membership, group consciousness, a sense of shared purpose, interdependence in the satisfaction of needs, interaction or communication among group members, and ability to act in a unitary manner. (Knowles 1969, pp. 34-40) An individual's relationship to his group influences his decision-making in at least three ways: (1) it is a source of pressure for prompting conformance to the group's ways of thinking and acting; (2) it is a source of social support and may give the individual the confidence needed to follow a certain course of action; and (3) it determines to some extent what information reaches the individual.

Some of the major group variables that influence the behavior of the individual are participation, group cohesiveness, conformity and social support, social integration, and status.

Participation. Research has found that participation with others in decision-making usually leads to commitment to the group's actions. Much of this research has been done in studies of participation in industrial organizations, but studies in group dynamics and community decision-making also support this principle.

Cohesiveness. The greater the closeness of ties among members of a group, the greater will be the agreement between them in terms of attitudes toward innovations.

Conformity and social support. The closer a group is to unanimity on an issue, the greater the resistance will be to an action contrary to the norm. Individuals who are highly accepted by the group are more likely to deviate from group norms; individuals who are insecure about their positions in the group will tend to follow the group's norms.

Social integration. Persons who are socially integrated are more likely

to adopt innovations than social isolates. People are most likely to adopt an innovation through social interaction with persons who use or know about the innovation.

Status. Personal social influence seems to operate mainly with persons of the same status under most circum tances. An exception is that persons tend to look to people of higher status for information and advice if such is needed and if status differences do not produce anxiety or tension. However, persons of lower status tend to resist influence if they perceive that the person of higher status is attempting to influence them.

These and other group variables of importance to a change agent are further dealt with in the section entitled "Group Techniques" in Chapter 4 of this publication.

Characteristics of Social Systems and Organizations

Modern Versus Traditional Social Systems

Considerable research has been conducted to determine how social systems that are receptive to change differ from those that are resistant to change. Much of this research has focused on the differences between social systems having so-called "traditional" norms and those having "modern" norms.

Traditional social systems are characterized by (1) lack of favorable orientation to change; (2) a less developed or simpler technology; (3) relatively low levels of literacy, education, and understanding of the scientific method; (4) social enforcement of the status quo, facilitated by affective personal relationships (e.g., hospitality, friendship) that are highly valued as ends in themselves; (5) little communication with persons outside a given system; and (6) inability to "empathize." (Rogers and Shoemaker 1971, p. 32)

Modern social systems are characterized by (1) a generally positive attitude toward change; (2) well-developed technology with a complex division of labor; (3) a high value on education and science; (4) social relationships that are rational and business-like rather than emotional and affective; (5) frequent contact with persons outside the system, facilitating the entrance of new ideas into the system; and (6) empathy on the part of the members. (Rogers and Shoemaker 1971, pp. 32-33)

It should be kept in mind that these two clusters of norms represent end-points on a continuum and that most social systems fall somewhere between these two extremes. Also, an individual may belong to two or more social systems having greatly different norms, and this may produce conflict in the individual. For example, an innovative teacher who has just completed training at a university where innovations were constantly discussed is likely to experience conflict if he wants to introduce these innovations into a traditional school system.

Characteristics of Innovative Organizations

A basic element in organizational theory is that of organizational health. A "healthy" organization is an open system that is relatively susceptible to change and that takes care of innovations as an adaptive response. Further, the healthy organization is continually growing in its ability not only to function effectively but to develop and extend its capacity for coping creatively with its environment.

Miles maintains that the state of health of an organization, including an educational organization, can tell us more than anything else about the probable success of any particular change effort. He suggests that organizational health consists of ten dimensions, which are based partly upon behavioral research findings and partly upon his extensive experience with

school systems.

Goal focus. The goals of the organization are clear, accepted by the members, achievable with existing or available resources, and appropriate to demands of the environment.

Communication adequacy. There is relatively distortion-free communication vertically, horizontally, and across the boundary of the system to and from the surrounding environment. People have the information they need or can get it without exerting efforts.

Optimal power equalization. The distribution of influence is relatively equitable, and subordinates at all levels can influence upward. Relationships are collaborative rather than coercive, and units are interdependent. Influence in a given situation depends upon competence and knowledge rather than organizational position.

Resource utilization. The system's inputs, particularly its personnel, are used effectively and are neither overloaded nor idle. There is a minimal sense of strain along with a good fit between people's dispositions and the role demands of the system, so that people feel reasonably "self-actualized"--that is, they have a genuine sense of growing and developing as persons while making their contribution to the organization.

Cohesiveness. Members of the organization feel attracted to the organization and have a sense of identity with it.

Morale. There is a sense of well being, satisfaction, and pleasure among members of the system as opposed to feelings of discomfort, strain, and dissatisfaction.

Innovativeness. A healthy organization grows, develops, and changes; it tends to invent new procedures, move toward new goals, and become more diversified over time.

Autonomy. A healthy organization does not respond passively to demands from the outside but maintains some degree of independence.

Adaptation. A healthy organization has realistic, effective contact with its surroundings. It has the ability to bring about corrective change through a problem-solving, restructuring approach.

Problem-solving adequacy. A healthy organization has well-developed structures and procedures for sensing the existence of problems, inventing possible solutions, deciding upon solutions, implementing them, and evaluating their effectiveness. (Miles 1965, pp. 11-34. See also Argyris 1964, on which Miles' discussion is based.)

Characteristics of Leaders

Extremely important in terms of innovativeness within organizations are the characteristics of individuals in top leadership positions. The personality attributes, interests, training, and attitudes toward new techniques that characterize such persons have been found to be closely related to the degree of innovativeness of industrial firms. Research in education also indicates that the characteristics of school superintendents are important determinants of the innovativeness of school districts.

Communication Within Organizations

Frohman and Havelock who reviewed the factors that facilitate or inhibit the flow of new knowledge through organizations divide information flow into three categories: input, internal processing or throughput, and output. These authors point out that the effects of organizational characteristics on information flow depend upon resolution of two competing demands: (1) the drive to maintain order and certainty, which tends to create structures, hierarchies, requirements, and screening procedures that act as barriers

to information flow, and (2) the drive to innovate and improve, which tends to remove such barriers. (Frohman and Havelock 1969)

CHAPTER 3

DIFFUSION MODELS AND CHANGE-AGENT ROLES

While there are many ways of going about teaching, most teachers develop a particular style: some lecture most of the time; others are known for their use of small groups; and still others become proficient at individualizing instruction. The basis for individual selections varies, but the result is that teachers come to depend upon only a few of the many instructional alternatives available to them. The same can be said of those who see change as their primary responsibility; few change agents utilize all of the techniques for promoting change. The purpose of this chapter, then, is to assist the reader in making more rational selections from among the many possibilities as he develops his change-agent role. (Chapter 4 describes techniques for promoting change.)

How one behaves as a change agent probably reflects his notions of how change occurs, or is caused. For example, it may be assumed that the only worthwhile change in the classroom begins when the teacher develops a set of instructional materials. A change agent who holds such a view of change would no doubt promote change by working for reduced teaching loads that would permit more preparation time; secretarial assistance for teachers; a well-stocked, easily accessible library; and a system of rewards to encourage individual development.

By way of contrast, consider the change agent who believes that local development is generally inefficient and produces low-quality products. Instead, this change agent believes that the way to bring about change is to

install fully developed and tested innovations. He spends time on activities such as defining the problem, searching for possible solutions, selecting an appropriate innovation, visiting places where it is in use, and training people in his local system to install and use the innovation.

In these two examples, change agents are acting in ways consistent with quite different beliefs about how change occurs. The important point, in terms of his chapter, is that both change agents have some model of change to guide their activities.

Diffusion Models

While there are numerous models of change, only four will be described here: the Research, Development, Diffusion, and Adoption (RDDA) Model, the Problem-Solver (PS) Model, the Social-Interaction (SI) Model, and the Linkage Model. These models will provide the reader with a quick introduction to the range of beliefs as to how change does or should occur.

The Research, Development, Diffusion, and Adoption (RDDA) Model

The RDDA Model is essentially an engineering model, although it is being applied increasingly to educational change problems. Among the various versions of this model, the one proposed by Guba and Clark has been the focus of many recent discussions. (Clark and Guba 1965) The RDDA Model is based upon a rational sequence that takes into account all phases of the change process from basic research to local adoption. As will be seen later, this is not the case with the (SI) Model or the (PS) Model. The first stage in the RDDA Model is research, where the primary objective is to advance knowledge (see Figure on the next page). Note that the objective is simply to produce valid knowledge--not necessarily practical knowledge--related to

	RESEARCH	DEVELOPMENT		DIFFUSION		TRIAL	ADOPTION	INSTITUTIONALIZATION
		INVENTION	DESIGN	DISSEMINATION	DEMONSTRATION		INSTALLATION	
OBJECTIVE	To advance knowledge	To formulate a new solution to an operating problem or to a class of operating problems (i.e., to innovate)	To order and to systematize the components of the invented solution; to construct an innovation package for institutional use (i.e., to engineer)	To create widespread awareness of the invention among practitioners (i.e., to inform)	To afford an opportunity to examine and assess operating qualities of the invention (i.e., to build conviction)	To build familiarity with the invention and provide a basis for assessing the quality, value, fit, and utility of the invention in a particular institution (i.e., to test)	To fit the characteristics of the invention to the characteristics of the adopting institution (i.e., to operationalize)	To assimilate the invention as an integral and accepted component of the system (i.e., to establish)
CRITERIA	Validity (internal and external)	Face validity (appropriateness) -- Estimated viability -- Impact (relative contribution)	Institutional feasibility -- Generalizability -- Performance	Intelligibility -- Fidelity -- Pervasiveness -- Impact (extent to which it affects key targets)	Credibility -- Convenience -- Evidential assessment	Adaptability -- Feasibility -- Action	Effectiveness -- Efficiency	Continuity -- Valuation -- Support
RELATION TO CHANGE	Provides basis for invention	Produces the invention	Engineers and packages the invention	Informs about the invention	Builds conviction about the invention	Tries out the invention in the context of a particular situation	Operationalizes the invention for use in a specific institution	Establishes the invention as a part of an ongoing program; converts it to a "non-innovation"

FIGURE 1

A Classification Schema of Processes Related to and Necessary for Change in Education

(From Egon G. Guba. "Methodological Strategies for Educational Change." Paper presented to Conference on Strategies for Educational Change. Washington, D.C. November 8-10, 1965, p. 10. Mimeo).

specific problems, since the function of research is to provide the "basis" for invention while the actual production of the invention rests with the developers.

Development, according to Clark and Guba, includes both invention and design. The object of invention is to create a solution to an operational problem, such as teaching political science concepts to teenagers. In the design phase, the invention is packaged for institutional use (i.e., it is engineered). (Clark and Guba 1965) To continue with the political science example, this could mean the production of courses like Comparative Political Systems or American Political Behavior.

The diffusion stage of the model also includes two phases: dissemination and demonstration. The objectives of dissemination are to inform potential adopters of the innovation and to create a widespread awareness that the innovation exists. The objective of demonstration is to build conviction about the innovation by providing potential adopters with an opportunity to observe it in operation.

The Civics Dissemination Institutes, described in Chapter 5, show how one group chose to create awareness of American Political Behavior, which at that time was an experimental ninth-grade civics course. Numerous pilot teachers and summer institutes served to demonstrate this social studies innovation.

The final stage in the RDDA Model is adoption. According to the Clark-Guba design, adoption begins with the trial phase. The objective at this stage is to try the innovation in a particular setting. If the test is successful, the innovation undergoes installation (i.e., the process of being adapted to fit the specific needs of the adopting institution). The final phase in the adoption process is institutionalization, where the innovation

is established as part of the ongoing program and thus ceases to be an innovation for the adopting system.

Again using the civics materials example, many schools have tried Comparative Political Systems or American Political Behavior in a few classes to see how the new curriculum worked with the students and teachers. In the process of adapting it to local needs, some schools have changed the sequence of units, have chosen not to use the games designed for the course, or have rewritten portions of the materials for use with poor readers. In a few schools one or the other of these courses is now "the" civics program and thus is no longer an innovation.

The RDDA Model lends itself to large-scale planning. Solutions can be invented for problems faced by a majority of the nation's schools and, once tested, can be diffused on a massive scale via the many available media. The large-scale adoption that is possible with such an arrangement can justify high initial development costs by reducing the cost-per-adoption unit. By dividing the labor of change into specialized roles, the model takes advantage of the differing talents and training of a wide range of persons. It accommodates researchers who have little interest in day-to-day school problems, developers who have no interest in diffusion, and others. Persons working at each stage of change are judged by separate criteria; for example, the major criterion for judging the success of dissemination efforts is whether they create awareness.

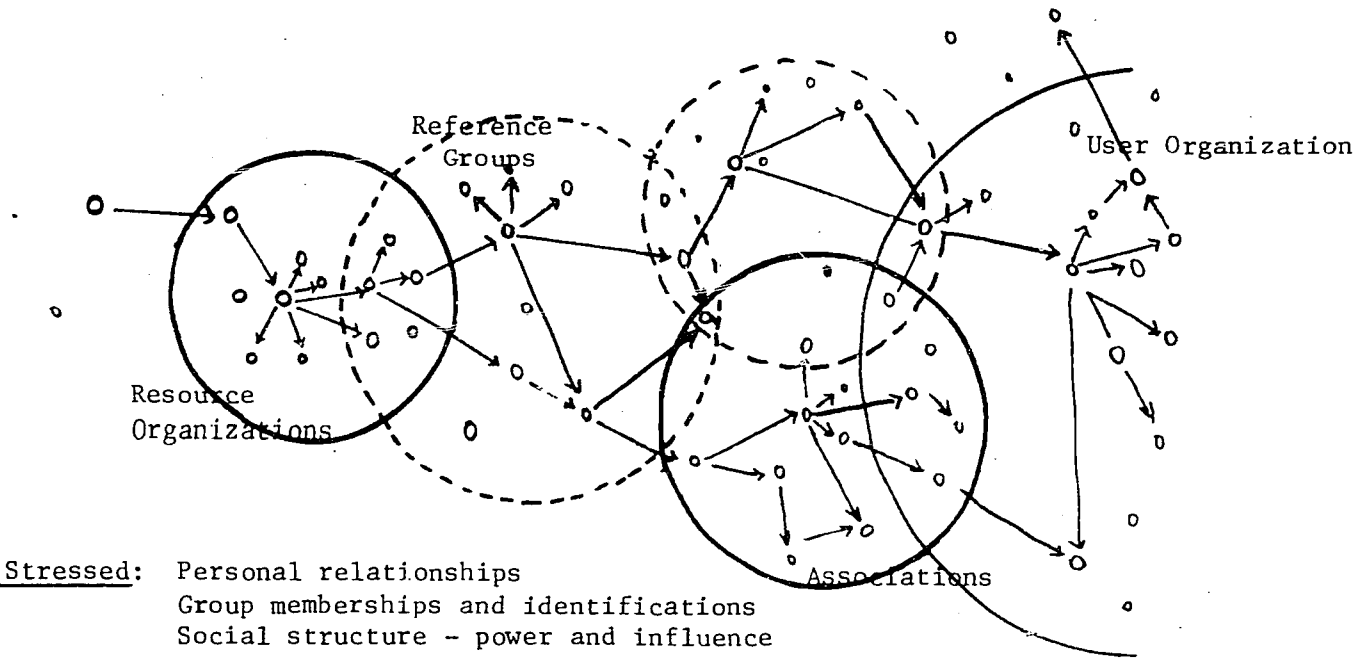
The RDDA Model has been taken to task for its assumption of a relatively passive adopter. The major thrust of the model is from research to adoption; initiative rests with the developers rather than with the wishes of the adopters. Depending upon the specific application of the model, the feedback loop from consumer to developer may or may not be highly developed. One

major U.S. company currently contends that "we listen better," and most educational publishers regularly ask their sales representatives what the customers want or what seems to be selling well. Still, the RDDA Model does not necessarily begin with the "felt needs" of a particular teacher or school system, and some see this as a major deficiency of the model.

The Social-Interaction (SI) Model

The Social Interaction Model of change views things from a quite different perspective, that of the individual adopter. Growing out of research on agricultural change, the SI Model assumes that research and development have already been accomplished and concerns itself with how an innovation spreads through or between groups. To begin the process, the innovation is usually brought to the attention of the adopter, and the chain reaction then commences. For example, the state social studies supervisor may introduce a particular set of curriculum materials at a school during a meeting of the social studies department. The following week, the chairman of that department plays cards with a friend who teaches social studies at a neighboring school; during the course of the evening the chairman mentions the materials favorably. He later lends the materials to his friend, who mentions them in a school newsletter that he edits.

One can carry this example to its logical conclusion, but the point is that diffusion and change are occurring through a series of transactions between individual and groups. When one studies change from the SI perspective (Figure 2 on the next page), he is interested in where individuals fit in terms of their social network. Group membership and identification are important variables in predicting the point at which one will become aware of and adopt an innovation. Thus, teachers who belong to an organization led by a highly respected and innovative colleague will probably become



Major Points Stressed: Personal relationships
Group memberships and identifications
Social structure - power and influence structures
Proximity - cosmopoliteness
Opinion leadership structure

Spokesmen: Everett Rogers, James Coleman, Elihu Katz, Herbert Menzel, Richard Carlson, Paul Mort

Prototypes: Diffusion of innovations in farm practices, spread of new drugs among physicians.

KEY

- Individuals in the social system
- → Flow of new knowledge
- Formal organizational structures
- Informal structures

FIGURE 2

The Social Interaction Perspective

(From Havelock 1971, Chapter 11, p. 8)

aware of an innovation sooner than those who belong to no professional group. Everett Rogers, a leading proponent of the SI Model, has described a five-stage model that often is used when studying change from this perspective. (Rogers 1962, pp. 81-86) According to Rogers, an individual begins the change process when he becomes aware of a particular innovation. At this stage, the individual lacks complete information about the innovation. (Those familiar with developments in social studies will realize that if one uses Rogers' five-stage model, much change in the field never reaches the awareness stage. One need only do a random sample interview of his colleagues to realize the extent to which many of them have never heard of the innovations currently available in social studies. Obviously, one cannot adopt what he is not aware of.)

The second of Rogers' five stages is interest, that point at which the potential adopter actively seeks additional information about the innovation. Such information-gathering can range from talking with another who has tried or knows about the innovation to consulting sources such as the Social Studies Curriculum Materials Data Book or The American Government Information Unit. (These resources are discussed later in the present chapter.)

Having learned more about the innovation, the individual may go on to the evaluation stage, Rogers' third stage, wherein the innovation is given a "mental trial." At this point, the individual considers the innovation for his own situation. If the innovation seems worth a trial, he moves to the fourth stage.

The trial stage consists of the user employing the innovation on either a small or a temporary scale. Depending upon the innovation, this stage may occupy a few minutes or many months. From the user's point of view, the important test is whether the innovation meets his needs.

The final stage in Rogers' model is adoption. At this point, the user weighs the results of the trial and adopts or rejects the innovation.

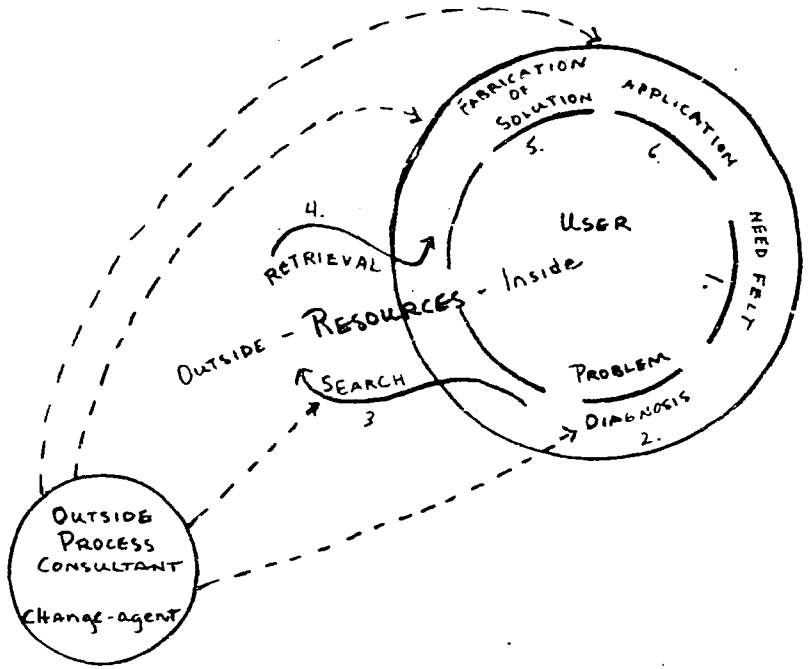
A change strategy based upon the SI Model of change would focus upon the identification of opinion leaders in the change agent's target populations. Efforts would be made to have the opinion leaders adopt the innovation, and a ripple effect would then spread the innovation to others in the groups involved.

The SI Model is perhaps useful in explaining the effects of "lighthouse" schools. Most social studies teachers can identify a local school or schools that are always the first to try new things--such as team teaching, language laboratories, individually guided instruction, or phase electives. Once these lighthouse schools have adopted an innovation, other schools that look to them for leadership feel some pressure at least to consider adopting the innovation, if for no other reason than to simply "keep up." There are certainly other motives for following the lead of such innovative schools, but it has been our experience that the desire not to be left behind is often a major factor in the decision by the followers also to adopt. One wonders if this could be why some companies are willing to install carpeting, removable walls, or swimming pools at or below cost in certain lighthouse schools.

The Problem-Solver (PS) Model

The PS Model, unlike the previous two, places emphasis upon user needs (see Figure 3). Like the SI Model, it presumes research and development, though in some cases additional development may be required to devise solutions to specific problems.

With the PS Model, the change agent becomes involved at the request of the user who seeks help in solving a problem. The outside change agent may



Major Points Stressed: The user's need is the paramount consideration.
Diagnosis is part of the process.
The outsider is a catalyst consultant or collaborator but the user must find the solution himself or see it as his own.
Internal Resources should be fully utilized.
Self-initiated change has the firmest motivational basis and the best prospects for long-term maintenance.

Spokesmen: Goodwin Watson, Ronald Lippitt, Herbert Thelen, Matthew Miles, Charles Jung

Prototypes: Organizational self-renewal, mental health consultation.

FIGURE 3

The Problem-Solver Perspective
(From Havelock 1971, Chapter 11, p. 12)

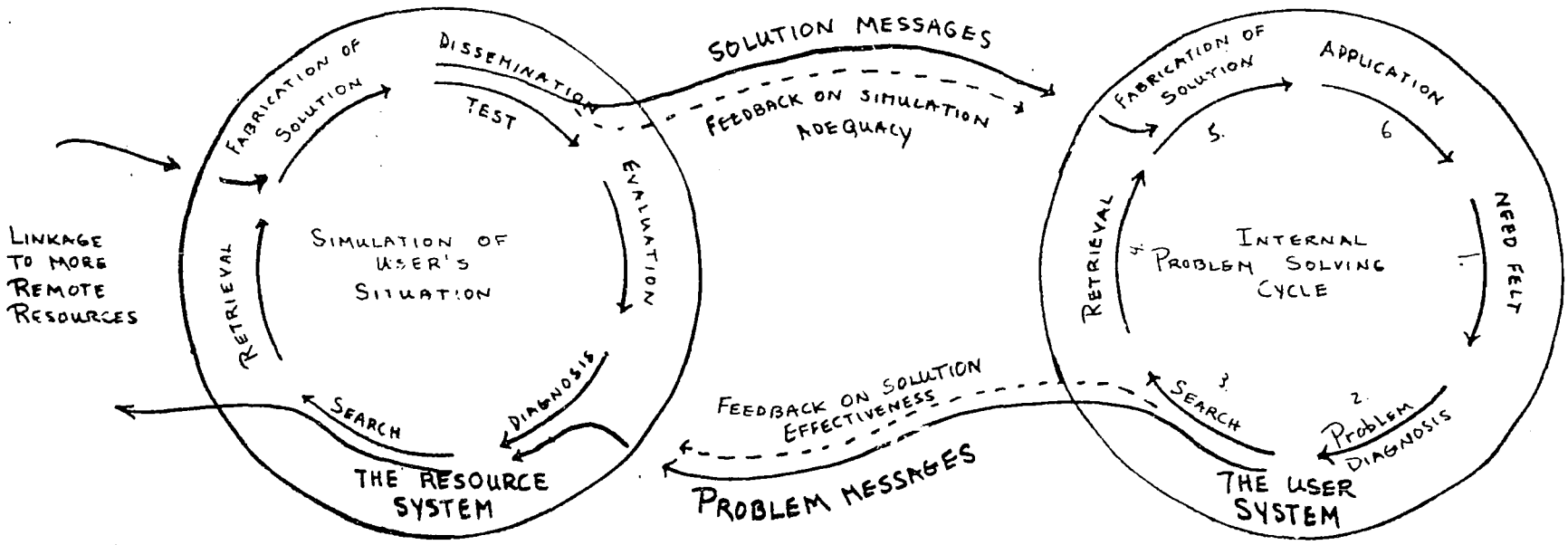
assist the user in diagnosing the problem, establishing goals and priorities, locating and evaluating possible solutions, selecting the best alternative, and planning for implementation. It is important to note that at all stages in the process the user is actively involved and that all activity is directed at helping him solve his problem. Such an individual focus all but precludes mass diffusion activities such as those in the RDDA Model.

A college professor called in by a social studies department to help solve the problem of students uninterested in social studies or teachers unprepared to teach a newly required course on the non-Western world would probably function in a manner consistent with the PS Model. The consultant might not even be aware of the various change models, but the way in which he relates to his clients and to the change process in general would place him in line with one of them.

The Linkage Model

Ronald Havelock has written extensively about what he has called the Linkage Model of change (see Figure 4). (Havelock 1970) In many ways, this model is closely related to the PS Model. Both focus upon user needs; initiative comes from the user system; and neither lends itself to massive diffusion efforts. The primary difference lies in the role played by the change, or linking, agent. As implied by the title, in the Linkage Model the outside change agent serves a middleman function between the needs of the user and the potential solutions provided by various resource systems. The primary function of the linking agent is to see that basic or applied knowledge is retrieved, interpreted, and applied to the user's needs. The linking agent must be able to talk both the language of the researcher and that of the user.

County agricultural agents seem to fit Havelock's linkage role. Most



From the Linkage Perspective:

1. Resource system must recapitulate or adequately simulate the user's problem-solving process.
2. The user must be able to understand (and simulate) the research, development, and evaluation processes employed by the resource system in the fabrication of solutions.
3. Resource and user must provide reciprocal feedback.
4. Successful linkage experiences build channels for efficient dissemination.

FIGURE 4

The Linkage Process

(From Havelock 1971, Chapter 11, p. 16)

have close ties with the research function at an agricultural college and know how to read and interpret the reports generated by such research. These agents also spend time traveling in the field where they meet farmers in their typical work settings, talk with them about their problems, and suggest possible solutions. The county agents are also a source of information for researchers since they know what day-to-day problems are of most concern to farmers.

The extension agent role currently being developed by the U.S. Office of Education's Pilot State Dissemination Program is also that of a linking agent. Extension agents in the USOE pilot group work out of state departments of education. Louis and Sieber have compared the roles of the agricultural agent and the USOE educational extension agent: (1) agricultural field agents tend to work primarily with individual farmers, while educational field agents deal with individuals located in complex formal organizations; (2) the agricultural field agent often pushes specific innovations, while the educational field agent's foremost objective is to solicit the needs of his clients and then try to locate material that will help meet these needs; (3) the agricultural field agent is usually in direct contact with his research source, while the educational field agent must depend upon other sources when he encounters difficulty in interpreting research; (4) the agricultural field agent can depend upon his clients having an economic motive to change, while the educational field agent deals with innovations that often offer little economic advantage; and (5) the agricultural field agent often finds it easy to see the results of his work, while the educational field agent finds that the diffuseness of educational goals often makes it difficult to see or document the results of his labors. (Louis and Sieber 1972, pp. 1-2)

These distinctions between agricultural and educational field agents make it obvious that all linking agents need not play the same narrowly defined role. Rogers has even suggested that education needs to incorporate another role that has developed in connection with the agricultural extension agent: the "liaison expert." (Rogers 1967) He is the county agent's county agent--that is, one who interprets scientific results to the county agent. With the addition of this new role, knowledge flows from researcher to liaison expert to county agent to farmer. As will be seen in Chapter 6, social studies field agents trained at Indiana University have some of the characteristics of the liaison expert's function.

Social Studies and Diffusion Models

Persons concerned primarily with the day-to-day operation of social studies programs may question the utility of these models of change. Thus, it is perhaps useful to recall that models are employed not because they necessarily represent reality but because they enable us to relate variables and plan courses of action. Few change agents are complete representations of any of the models just discussed, but this does not invalidate the models or detract from their usefulness. By using models to analyze the change process, social studies teachers, department chairmen, supervisors, and state department personnel who wish to promote change should be better able to select from the bewildering array of change techniques. A model can give a person seeking change some notion of what he is doing, why, and where it might lead.

Becoming a Change Agent

A few persons are employed as full time change agents and thus "put on"

a change agent role on the first day they report for work. It is assumed, however, that most readers will not have the luxury of a fresh start in a new role but instead will add change agent responsibilities to existing roles. In either case, there are some general considerations to be taken into account as one begins to develop a role which fits his own personal style, what he believes needs to be changed, and how he believes change can be promoted best.

Defining the Problem

One of the first questions to be answered is, "What is the general problem in social studies?" There are many answers. One could believe, for example, that the lack of appropriate materials is the primary problem in social studies. This problem could stem from the fact that, until very recently, most materials failed to represent current scholarship in the social sciences and related fields; were written in an unexciting, bland style; and were considered almost totally irrelevant by most students. For those who see this as one of the major problems in social studies, a growing number of new materials offers obvious solutions. The trick is to decide how one gets such materials tried locally with an eye toward adoption.

Other individuals maintain that teachers are the crux of the social studies problem. Teachers, some claim, are poorly trained; do not have a philosophy to guide their selection of materials and teaching techniques; and are essentially uninterested in experimenting with new materials or new methods. If this is the problem, or at least one of the major ones, it also yields clues about where and how to begin.

There are still other individuals who argue that the main problem rests in the structure of the school as an institution--that the system is most interested in perpetuating itself; that teachers have no time to read and

think, and get no rewards for intellectual pursuits; and that school boards make curriculum decisions that should be made by professionals. Perhaps the troubles stem from vaguely stated goals that defy measurement, or vulnerability to unreasoned public demands, or a lack of accountability. Finally, there are individuals who point out that, in most school systems, no one has "the" responsibility for systematic and planned change. There, it is asserted, lies the heart of the problem, both in social studies and in other fields.

We are not prepared to argue here that any one of these issues, or for that matter all of them, can be labeled "the " problem, since changes in social studies are complex. Such is a matter for thought by the person about to undertake a change agent role. Until one understands what he (or those to whom he is responsible) feels needs to be changed, it is wise to remember that what appears to be the initial problem may only be a symptom of a more basic problem that can be identified only as the work proceeds.

Determining Why Change Has Not Occurred

Once one has some notion of what needs changing, he must ask himself the second question, "Why hasn't this problem already been solved?" It may be difficult to answer this before becoming actively engaged in trying to bring about change, but even an educated guess is useful. While the possible answers are almost without number, here are some samples: (1) the problem has not been solved because it was never carefully defined and brought to the attention of most people--that is, people are not even aware that there is a problem; (2) since a solution to the problem does not exist, one must be invented; (3) what the problem is is known, but the range of possible solutions are not; (4) no one seems to be interested in searching for and examining possible solutions to the problem; (5) a solution has been iden-

tified, but the right people haven't been moved to carry it out; or (6) all possible solutions run counter to local norms, cost too much, or cannot be tried on a limited basis. No doubt, one could supply a host of other answers, but what is important is that deciding why change has not already occurred is a part of developing one's role as a change agent.

Defining the Role

A final set of considerations relates to how one sees himself fitting into all of this: what roles can he play?--the role options open to a full-time teacher who must answer to a very traditional principal are far fewer than those available to the social studies supervisor who has just been given a mandate to "get things going again in social studies." how much time can he devote to the role? who does he "work for"? how much is he like those people he wants to change? where does he fit in the local opinion leadership picture? does he have credibility locally? is he prepared to work himself out of a job?

Keeping Informed

Most change agent roles require that one be well informed about what is happening in the field of social studies. For many, this means establishing an information network. In an age when reading may be becoming passé, it still is one of the best methods for staying in touch with the field. The following checklist is offered as a starter set of journals and newsletters that regularly contain information about new developments in the social studies.

Keeping Up, a newsletter published by the ERIC Clearinghouse for Social Studies/Social Science Education, 855 Broadway, Boulder, Colorado 80302. (Free)

Social Education and The Social Studies Professional, journal and newsletter, respectively, of the National Council for the Social Studies, 1201 Sixteenth Street, N.W., Washington, D.C. 20036. (Subscription and membership, $12 per year)

The Journal of Geography, published by the National Council for Geographic Education, Room 1532, 111 W. Washington Street, Chicago, Illinois 60602. (Subscription and membership, $10 per year)

Center for Teaching International Relations Newsletter, Graduate School of International Studies, University of Denver, Denver, Colorado 80210. (Free)

Focus on Asian Studies, Asian Studies Project, College of Education, Ohio State University, 1945 North High Street, Columbus, Ohio 43210. (Free, but contributions of $1.00 per year are appreciated)

Intercom, published by the Center for War-Peace Studies, 218 East 18th Street, New York, New York 10003. (Five issues for $6.00)

News & Notes of the Social Sciences, 101 Lindley Hall, Indiana University, Bloomington, Indiana 47401. (Free)

Progress in Economic Education, Joint Council on Economic Education, 1212 Avenue of the Americas, New York, New York 10036. (Free)

Social Science Education Consortium Newsletter, 855 Broadway, Boulder, Colorado 80302. (Free)

For general information about happenings and trends in the field of education, it is difficult to beat Phi Delta Kappan and The Saturday Review. The NASSP Bulletin also carries social studies information from time to time, as do the journals and newsletters of professional associations, such as the American Historical Association and the American Political Science Association. There are still other publications that could be listed, but the typical change agent does well to even keep up with those already mentioned. Some change agent department chairmen have found it useful to ask one person in the department to be responsible for keeping up with developments in the teaching of history, another in economics, etc., and then to devote one departmental meeting to each subject area. But no matter how the task of being aware of developments is shared, the change agent must work out a system for continually updating himself. This is not to say that everything new is automatically better than current practice, but awareness of a wide range of alternatives is a primary requirement for most change agents. This

is especially true for change agents who play the consultant role as called for in the PS Model or the middleman in the Linkage Model.

Making Personal Contacts

Since a change agent cannot be an expert in all areas, he must from time to time involve others as consultants, trainers, researchers, and developers. Again, it is important for him to have a wide range of personal contacts--people who can be counted on to do what he wants in a way that meets the needs of his teachers and school system.

The development of such a network of contacts takes considerable effort and time. Perhaps one of the most efficient ways to meet a wide range of resource persons is by attending social studies meetings of all types: local, state, regional, and national. Even if the change agent only wants to use an RDDA diffusion specialist for a particular innovation, he is likely to see such a person in action at meetings. Nationally known advocates of a particular innovation can be important to a change agent operating essentially on the assumptions of the SI Model since such advocates tend to have high credibility, an important factor to local opinion leaders. Professional meetings also lend themselves naturally to the diffusion stage of the RDDA process. Likewise, if the change agent is in a position to serve as a consultant or linker himself, he can gain visibility by attending or participating in professional meetings.

Resource persons are key elements in the PS and Linkage Models and, with educational funds becoming tighter, it is important to locate such persons in one's own geographic area so that intensive use can be made of them without undue expense.

Using Reference Works

Salesmen who must be able to put their customers in touch with a wide range of products do not hesitate to carry reference works describing policies, drugs, car models, etc. There is certainly nothing unprofessional about not being able to carry all such details in one's memory. The same is true of the social studies change agent. The change agent diffusing information about only one innovation usually becomes so acquainted with it that he seldom needs reference works for the details; however, this is certainly not true of the linker who is likely to encounter a wide range of problems requiring many different solutions.

The Social Studies Curriculum Materials Data Book is one very useful example of such quick reference tools. (Social Science Education Consortium 1971) The Data Book is a loose-leaf binder that is periodically supplemented to keep it current. It contains one-page descriptions of project materials, games and simulations, and some of the newer textbooks.

Of a similar nature, but more limited in scope and devoting more pages to each project, is The American Government Information Unit developed by the Far West Laboratory for Educational Research and Development (Adelson and Crosby 1971) This unit contains data abstracted from nine curriculum packages and organized in terms of goals and objectives, content and materials, classroom strategy, student and teacher prerequisites, project development and evaluation, and project history.

Materials for Civics, Government, and Problems of Democracy: Political Science in the New Social Studies, by Mary Jane Turner, surveys civics materials from 46 projects. (Turner 1971) This publication is especially useful for change agents wanting to locate materials dealing with specific concepts from political science. It is co-published by the Social Science Education

Consortium and the ERIC Clearinghouse for Social Studies/Social Science Education.

The Guide to Simulation Games for Education and Training, by David W. Zuckerman and Robert E. Horn, is one of the best reference books on instructional games and simulations. (Zuckerman and Horn 1970)

The Educational Products Information Exchange (EPIE) is another source of comparative data on social studies materials. Nine times per year EPIE publishes Educational Products Report, which provides readers with unbiased evaluations of curriculum materials, much in the tradition of reports from The Consumers' Union. Reports cover all fields of education and deal with both hardware and software. Recent social studies reports have discussed programmed instructional materials, black history books, how textbooks treat minority groups, 16mm films on drug abuse, and recent revisions in textbooks and the industry that produces them.

A change agent can save hundreds of hours by making use of reference works. It is terribly inefficient for small local groups of social studies teachers and supervisors to spend hours collecting such information when it is packaged elsewhere, often with greater accuracy.

Developing Skills

Since change agents are relatively new in education, most persons assuming such roles, either formally or informally, lack many of the necessary skills. The day of self-teaching has still not passed, and one way to begin is to read those books listed in the annotated bibliography in Chapter 7. Havelock has a much more extensive bibliography in A Guide to Innovation In Education (1970) for those who have the time to do additional reading.

Many of the interpersonal skills required of change agents can be learned

only through practice. Increasingly, colleges and universities are offering courses in group processes, and the Social Science Education Consortium from time to time offers skill labs where one can get specific instruction in the skills required of consultants or linkers. Sometimes held in conjunction with the annual convention of the National Council for the Social Studies, these labs require registration fees varying from $25 - $100 per day and are run by highly qualified persons.

Commitment

A personal commitment to the change agent role seems a crucial variable. The commitment often means more work for the typical teacher or department chairman, but the work is not without rewards.

In the final analysis, assuming a change-agent role is a very individualized decision. This is especially true when the role is not formalized. If the experience of the Indiana University Social Studies Field Agent Training Program is any indicator, it is possible for teachers and department chairmen to play such a role effectively, though not without problems (see Chapter 6).

If the U.S. Office of Education commits itself to training educational extension agents somewhat like those in its pilot programs, such as that at Indiana University, there soon will be a group of people who can begin to offer one another the much needed peer support that seems to sustain change agents. The Council of State Social Studies Supervisors partly serves such a function for its members, as does the Social Studies Supervisors group of the National Council for the Social Studies.

Factors Related to Change Agent Success

Often even highly successful change agents report that they have learned

what works simply through trial and error and that, somehow, certain procedures simply "feel right." Some change agents seem almost to believe that diffusion is an art that cannot be taught. However, the authors of this paper instead view diffusion as a series of traits and skills that one either has or does not have. We do not believe that change is some mysterious process that simply happens when "one has it." Research does indicate certain patterns of characteristics and skills associated with successful, change efforts. A person beginning to prepare himself for a change agent role will do well to learn from the experience of others, as documented by this research.

The following generalizations have been selected from Communication of Innovations wherein each of the generalizations is reviewed in terms of the number of empirical diffusion studies supporting it:

1. Change agent success is positively related to the extent of change agent effort (16 studies support, 3 do not).

2. Change agent success is positively related to his client orientation rather than change agency orientation (6 studies support).

3. Change agent success is positively related to the degree to which his program is compatible with clients' needs (10 studies support).

4. Change agent success is positively related to his empathy with clients (no empirical support; thus, a hypothesis).

5. Change agent contact is positively related to higher social status among clients (37 studies support, 6 do not).

6. Change agent contact is positively related to greater social participation among clients (18 studies support, 2 do not).

7. Change agent contact is positively related to higher education and literacy among clients (32 studies support, 11 do not).

8. Change agent contact is positively related to cosmopoliteness

(5 studies support).

9. Change agent success is positively related to his homophily with clients--the degree to which the interacting individuals are similar in certain attributes (2 studies support).

10. Change agent success is positively related to the extent that he works through opinion leaders (3 studies support).

11. Change agent success is positively related to his credibility in the eyes of his clients (1 study supports).

12. Change agent success is positively related to his efforts in increasing his clients' ability to evaluate innovations (4 studies support). (Rogers and Shoemaker 1971, pp. 380-382)

It should be noted that many of the studies upon which the preceding generalizations are based were not done in the field of education. Their application in that field awaits future research.

CHAPTER 4

DIFFUSION TECHNIQUES

Kinds of Diffusion Activities

The main job of the diffuser or change agent is to link or bring together improved products, materials, and practices (i.e., the innovations) with potential adopters who might benefit from their use. Accomplishing this objective makes possible a wide variety of actions. All of these, however, can be subsumed under six basic kinds of diffusion activities representing the various ways in which the diffusers may operate. The categories, which were devised by Guba, re: telling, showing, helping, involving, training, and intervening. (Guba 1968, pp. 48-49) It should be noted that all of these six verbs apply in one way or another to the various change models described in Chapter ^.

Telling is communication that involves written or spoken words. This includes newsletters, monographs, books, articles, brochures, conferences, speeches, and conversations.

Showing is communication that involves direct confrontation with the innovation, as observation (either planned or casual) or actual participation. Examples include demonstrations; simulations; and displays of pictures, slides, or films.

Helping is direct involvement of the diffuser in the affairs of the adopter on the adopter's terms. Helping may take the form, for example, of consultation, service, or troubleshooting. In the process of rendering help, the diffuser may find ample opportunity to make a case for an innovation

appropriate to the problem for which he is providing help.

Involving includes or enlists the help of the adopter in the development, testing, or packaging of an innovation, or in helping to persuade others to adopt.

Training consists of familiarizing adopters with a proposed innovation, or assisting them to increase their skills or to alter their attitudes. Training may be accomplished through institutes, workshops, apprenticeships, extension courses, internships, local inservice training, or formal university credit courses and may involve telling, showing, helping, or involving. Training differs from the other techniques, however, in that the adopter makes a formal commitment to learn by allowing himself to become involved in training.

Intervening directly involves the change agent on his own terms, not those of the adopter, and may take the form of mandating certain actions (e.g., adopting a statewide textbook); inserting certain control mechanisms (e.g., implementing a statewide testing program); or intruding certain economic or political factors (e.g., arranging the purchase of language-laboratory equipment).

Thus, the diffuser has the task of building awareness and understanding of an innovation and causing potential adopters to consider its characteristics with a view to possible adoption. He has essentially six basic techniques at his disposal and he may use any combination of these to bring about favorable consideration of the innovation without resorting to hucksterism or unethical manipulation.

Roughly, the sections of the present chapter correspond with the first five of the general types of diffusion activities described above. "Dissemination," the subject of the first section, consists primarily of telling,

through the written or spoken word. "Demonstration," which is dealt with in the second section, consists essentially of showing. The third section deals with the role of the consultant, which is primarily a helping relationship. Working with groups, the topic of the fourth section, deals with ways of involving people in change. And the fifth section "Workshops and Inservice Programs," covers the important types of training.

Of the six general types of diffusion activities, the only one not covered separately in this chapter is "intervening." The single distinctive feature of this approach is that it involves mandating or ordering the adoption of an innovation through use of authority or power. Aside from this, intervening can actually include aspects of all the other types of diffusion activities. The administrator or change agent who is in a position to bring about the adoption of an innovation through intervention would usually be well advised to supplement the use of his authority with all of the other kinds of diffusion activities.

The types of diffusion activities, together with the section of this chapter that deals with each, are summarized in Figure 5.

Diffusion Activity	Chapter Section
Telling	"Dissemination"
Showing	"Demonstration"
Helping	"Serving as a Consultant or Facilitating
Involving	"Working with Groups"
Training	"Workshops and Inservice Programs"

Figure 5
Types of Diffusion Activities

Dissemination (Telling)

The dissemination aspect of diffusion involves spreading awareness among practitioners of the existence and general nature of an innovation. This aspect also involves arousing interest in the innovation. Going beyond merely imparting information, dissemination also involves the affective domain--that is, through his messages, the disseminator must create a desire for the change, provide encouragement, and, if possible, arouse genuine enthusiasm on the part of potential adopters.

Audience Analysis

Usually, the first step in planning a dissemination program is to decide upon the audience(s) to whom the message will be directed. In disseminating information about educational innovations, the audiences could be any one or more of the following groups: members of the local school board, school administrators, teachers, teachers' organizations, students, parents, and community groups. After identifying the audience(s), a careful analysis should be made of the characteristics of the members of the audience(s)--including their attitudes, values, and needs.

Determination of Strategies and Themes

In the diffusion literature, there is no consistent distinction among such terms as "strategies," "techniques," and "tactics." Horvat defines "strategy" as "an overall design for gaining acceptance," while using "technique" to refer to "particular means or methods by which strategies may be achieved." (Horvat 1968, p. 5) Accepting this definition of strategies, there is still the problem of classifying them for purposes of description. Numerous typologies have been suggested by various writers. Guba has

has developed the following classification of strategies, on the basis of assumptions made about the audience: (1) value strategy, which views the potential adopter as a professionally oriented person who can be obligated to adopt through an appeal to his values; (2) rational strategy, which views the potential adopter as a rational entity who can be convinced, on the basis of hard data and logical argument, of an innovation's utility (i.e., its feasibility, effectiveness, and efficiency); (3) didactic strategy, which views the potential adopter as willing to adopt but untrained to use the innovation (i.e., he has the appropriate values, motivations, and economic resources but does not know how to perform); (4) psychological strategy, which views the potential adopter as a psychological entity whose needs for acceptance, involvement, and inclusion can be employed to persuade him to adopt; (5) economic strategy, which views the potential adopter as an economically oriented entity who can be influenced to adopt; and (6) authority strategy, which views the potential adopter as a member of a bureaucratic system who can be compelled to adopt by virtue of his relationship to an authority hierarchy. (Guba 1967, pp. 4-5) Guba suggests that any of these six strategies can be used in conjunction with each of the six types of diffusion activities just discussed.

In planning dissemination activities, the change agent attempts to select the appropriate strategy for persuading each audience to consider, try, or adopt the innovation. He makes this selection not only on the basis of his assumptions about the nature of his audience but also on the basis of such considerations as particular diffusion objectives, the nature of the innovation, the resources available for carrying out the diffusion effort, and his personal style.

The determination of specific themes to use will be based on similar

considerations. General types of themes that have been used frequently in disseminating educational innovations include: (1) child-centered, emphasizing that the change will benefit students; (2) financial, emphasizing that the innovation will be economical in terms of benefits received; (3) teacher-centered, emphasizing that the innovation will benefit the community or society as a whole; (5) educational-currency-centered, emphasizing the desirability of keeping abreast of current educational practices; and (6) leadership-centered, emphasizing the school or district's reputation for leadership, or the prestige of being "first" to introduce the proposed change.

After deciding upon themes, the disseminator will plan the specific content of each message. He will also plan the timing of his dissemination campaign (i.e., for each audience, he must determine the precise time at which the campaign should begin and the times at which various items of information should be presented).

Media Selection

The essence of any dissemination campaign is communication. There are numerous communication channels or media from which the diffuser may choose: periodicals aimed primarily at specialized audiences (administrators, teachers, supervisors); conferences, meetings and conventions of special interest groups; direct mail access to these groups through their membership lists; direct contact by visiting the schools; mass media channels that reach the larger audience of citizens, parents, and students; and informal interpersonal channels of communication. Which channel(s) the diffuser selects will depend partly upon the stage that has been reached in the adoption process and partly upon the size and characteristics of the audience.

Mass media channels are those means of transmitting messages that

involve a mass medium, such as radio, television, film, newspapers, or magazines. These enable a source of one or a few individuals to reach an audience of many. The mass media have several advantages: they can reach a large audience rapidly; they are effective in creating knowledge and spreading information; and they can lead to changes in weakly held attitudes. Mass media are relatively more effective at the awareness stage of diffusion and are most important for earlier adopters than for later adopters.

The main disadvantages of the mass media are that they lead to selective attention, selective exposure, and selective retention--that is, people tend to expose themselves only to what they want to be exposed to, pay attention only to those messages to which they wish to attend, and remember only what they wish to retain.

Printed messages permit easy re-exposure, are economical in reaching specialized audiences, and demand more participation on the part of the recipient thus leading to greater individual involvement with the message. The broadcasting media provide a greater sense of reality and are more similar to a face-to-face situation than printed media. Audio-visual media (e.g., films and television) can gain more complete attention from the audience and are likely to provide for greater acceptance and retention of facts.

Interpersonal channels are those involving a face-to-face exchange between two or more individuals. Many studies have shown that interpersonal communication channels are by far the most effective means of influencing an audience. Information spreads best when people talk to one another. Thus, the linker must seek to activate this interpersonal network of communication in addition to using the mass media.

Interpersonal channels tend to be more effective at the evaluation and trial (decision) stages of adoption and are more important for later than for earlier adopters. In diffusing new ideas, interpersonal channels have a number of advantages over mass media. Not only are interpersonal channels more effective in the face of resistance or apathy, and more capable of changing strongly held attitudes, but also they allow a two-way exchange of ideas that permits the receiver to obtain clarification or additional information from the source very quickly--usually immediately.

In the case of mass media, the audience usually selects the source; in the case of interpersonal contacts, however, the communicator can select his audience and thus can more easily overcome the problem of selective exposure. Interpersonal communication also enables the communicator to detect and correct misunderstandings, thus overcoming selective perception, and can reiterate, which helps him to overcome the problem of selective retention. The main disadvantage of interpersonal channels is that they are relatively slow for reaching a large audience.

Opinion Leaders

In attempting to make use of informal or interpersonal communication networks, the diffuser must identify individuals who are more active than others in introducing new information into the network. Such persons have been given a number of labels, including "opinion leaders," "influentials," and "gatekeepers." These members of one's target audience admit new information into the audience's interpersonal communication network. Such persons are important in diffusing new ideas in education, not only because of the access to the target system they provide but also because, as research

has shown, they exert a disproportionate amount of influence in the adoption of ideas.

Since the change agent needs to locate the opinion leaders in the target audience, three techniques have been employed to accomplish this: opinion leaders have been asked to identify themselves; other group members have been asked to identify them; and key informants have been asked to identify them.*

However, it may not be necessary for the diffuser to use any of these methods since numerous studies have established what characteristics opinion leaders tend to exhibit, thus making it possible to identify such persons via their characteristics. Opinion leaders are different from the remainder of their group in several ways. They are more innovative, and they more frequently rely on the mass media and other sources external to their group for information. Being more likely to be "cosmopolite" in terms of general orientation toward persons and events outside their own group, opinion leaders are more likely to attend conventions, travel, be interested in new things, belong to special organizations, and be in contact with persons outside their group.

In addition, opinion leaders tend to maintain a high level of social participation within their group. They seek new information and make it available to other group members. In other words, opinion leaders can serve as secondary linkers between the diffuser and the client system.

Often, but not always, the opinion leader may be in a position of slightly higher status than those he influences. The nature of his job,

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*Sociometric techniques have often been used for identification of opinion leaders. For a manual on this, see Mary L. Northway's A Primer of Sociometry, 2d ed. Toronto: University of Toronto Press, 1967.

in fact, may make him a gatekeeper because of the functions it requires of him.

In summation, opinion leaders provide access to one's target audience and its interpersonal communication network and are more likely to be receptive to the new ideas being disseminated.

Evaluation

Evaluation of the effectiveness of the dissemination campaign is essential. The change agent should plan ways of determining what action, if any, prospective adopters have taken and perhaps devise further approaches to persons not yet "sold" on the innovation. In evaluating dissemination, the following criteria should be kept in mind:

1) Clarity. The information should be clearly stated, with a particular audience in mind.
2) Validity. The information should present a true picture.
3) Pervasiveness. The information should reach all of the intended audience.
4) Impact. The information should evoke the desired response from the intended audience.
5) Timeliness. The information should be disseminated at the most opportune time.
6) Practicality. The information should be presented in the form best suited to the scope of the project, considering such limitations as distance and available resources. (U.S. Office of Education 1966)

Principles of Persuasion

Research has established a number of general principles about persuasive communications that the diffuser should keep in mind when disseminating information about innovations. The most important of these principles,

summarized from Abelson, are presented below:

1) Present both sides of the argument if the audience starts out disagreeing with you or if the audience will probably hear the other side elsewhere. Giving both sides implies that the communicator has objectivity; appeals to the desire of the audience to be treated as mature, informed individuals; and enables the communicator to mention counter-arguments before the audience does. It is especially important to present an unbiased treatment when the audience is unfriendly, suspicious, or knowledgeable about the issues being discussed.

2) Present one side of the argument if the audience is generally friendly, if your position is the only one to which the audience will be exposed, or if you want immediate (though perhaps temporary) opinion change.

3) In presenting both sides, present your own argument last if audience interest is high or if the audience has been exposed to the issue previously and is familiar with at least some aspects of it.

4) Present the major arguments first if the information is new to the audience (because of the impact of novel information) or if interest is initially low (since such a group is not likely to develop interest from hearing weak arguments).

5) - Stating your conclusions explicitly is more effective in producing opinion change than letting the audience draw conclusions (see exceptions under 6 below) since this usually increases the likelihood that the audience will understand what you are driving at and what you want.

6) Let the audience draw conclusions (i.e., communicate your arguments implicitly) if the validity of an explicit argument might be questioned, if you are asking the audience to take risks, or if the consequences of your arguments are unknown and you do not want to take full responsibility for

the consequences.

7) State your argument in such a way that it does not conflict with group norms, since it is well known that an individual's opinions are greatly influenced by the groups to which he belongs. Moreover, the individual is rewarded for conforming to group standards and is punished for deviating from them. Those who are most strongly attached to their group are least likely to be influenced by communications that conflict with group norms. They tend either to distort and misinterpret what they hear so that it comes closer to their present beliefs or to shrug off the new communication by discrediting either the content or the communicator. Therefore, messages that are in accord with (or at least not directly contrary to) the group's norms will have a much greater chance of succeeding.

8) Emphasize the acceptability of the innovation to important reference groups. (This point is dealt with more fully in other sections of this paper).

9) Repeat your communication in order to prolong its influence, since the effects of a persuasive communication tend to wear off. Incidentally, the effects of a message will last longer if it provides satisfaction for the individual, if the immediate impact of the message is strong, and if the recipient regards it as true and approves of the content.

10) Express some views that are also held by the audience, since people tend to seek information that supports their own viewpoints. A communication that expresses agreement with the audience on some issue will tend to be more effective than otherwise.

11) For a highly intelligent audience, use logical arguments, since persons of high intelligence tend to be more influenced than persons of low intelligence by communications that rely primarily on facts, impressive logical arguments, and relevant argumentation.

12) Tailor your communication to an individual's personality traits, since personality traits of an individual greatly affect his susceptibility to persuasion. For example, research has found that authoritarian-type persons can be influenced most easily by appeals that take a harsh point of view, etc.

13) Strive to maintain a high degree of credibility, since the credibility of the communicator has an important effect on the audience's reaction to the message. A communicator is seen as "credible" to the extent that the audience regards him as expert and trustworthy. If he lacks credibility, the audience will tend to pay less attention to what he says and will have less inclination to accept his message. The motives attributed to a communicator may also affect his success in influencing other people.

14) Advocate a relatively large amount of opinion change, since research has found that the more extreme the opinion change asked for, the more actual change the communicator is likely to obtain. In other words, communications advocating a greater amount of change from an audience tend to produce more change than do communications advocating a position not much different from the position the audience already holds. This finding, which may seem surprising, may be due to the recipient's tendency not to notice the difference between his opinion and a highly similar opinion and, therefore, not see a need to change his behavior; he may "assimilate it it"--perceive it to be the same as what he already believes.

15) Try to obtain public expression of attitudes favorable to your position and avoid public commitment to opposing views, since opinions that people make known to others are harder to change than opinions that people hold privately. Moreover, if there is a discrepancy between what a person thinks and what he says (perhaps as a result of group pressure), his opinions

will tend to change in the direction of what he says. Thus, it is very desirable to get the recipient to commit himself to the ideas you are promoting and to avoid public expression of opposing views. (Abelson 1960)

It should be noted that the foregoing principles for effective persuasive communication, although supported by research, should be regarded only as general guidelines that must sometimes be modified or ignored as a particular situation requires. Further, effective communication and persuasive messages need not imply the use of propagandistic techniques. If the principles of persuasion are employed to mislead schools into adopting an innovation unsuited for their needs, then indeed these principles have been misused. However, to prepare a convincing argument--be it a speech or a letter to the school board calling for a school to begin trying various types of innovations--constitutes a professional application of persuasion and communication principles. To ignore these principles for fear that they might be misused by unscrupulous change agents is to follow the same reasoning that prompts a school board to require the omission of controversial issues in the classroom because some students might misinterpret discussions of them.

Demonstration (Showing)

A demonstration is an activity in which participants observe planned, carefully presented examples of real or simulated behavior illustrating certain techniques, materials, equipment, and procedures as these might realistically be employed. (Harris, Bessent, and McIntyre 1969, p. 245) In education, the term "demonstration" has been used in various ways. There are "demonstration centers," a number of which were established under

Title III (Elementary and Secondary Education Act) legislation but which have now largely been discontinued. Also, there are "demonstration schools," which offer a testimonial to the effectiveness of a practice initiated in some institutional setting. Another use of demonstrations is exemplified by the "demonstration day" programs of the Eastern Regional Institute for Education, which has made wide use of these programs as a means of securing adoption of new curriculum materials--that is, on demonstration days, teachers from various schools are invited to spend an entire day at a "host school" where the innovation is already in operation. (Mahan 1970) Malcolm Richland's well-known "traveling seminar," in which a group of prominent educators toured the country with selected innovations, is also a form of demonstration. (Richland 1965) Further, the term "demonstration lesson" refers to a situation in which teachers (from the same or other schools) are invited to observe while the demonstrating teacher shows how to use a new set of curriculum materials or a new technique in an actual classroom situation. Demonstrations can also constitute a part of inservice programs, such as workshops, institutes, and conferences.

Many experts on educational change regard demonstrations as a very important part of the change process. According to Brickell, the most effective way of convincing educators of the value of an innovation is to demonstrate it. (Brickell 1961, pp. 27-28) In his well-known study of educational change in New York State, Brickell asked hundreds of teachers and administrators what it took to persuade them to try a program being used in another school. The essence of all the responses was that the only way to judge a new program was to see it in operation--that the description of an innovation given by the superintendent's office or by the principal could not be taken at face value and that "it is necessary to go directly

into the classrooms and watch the behavior of the students as they receive the instruction." Respondents in Brickell's study also felt that talking with the teacher afterward was very helpful, as well as talking with the students themselves. Brickell concluded:

> The most persuasive experience a school person can have is to visit a successful new program and to observe it in action. Speeches, literature, research reports and conversations with participants outside the actual instructional setting are interesting but relatively unconvincing. IMPLICATION: Recommended new programs must be demonstrated so that they can be observed in action. (Brickell 1961)

A demonstration can serve a number of purposes. Like dissemination, demonstration can be used to inform observers of new materials, equipment, and techniques, thus creating awareness; it can help develop an understanding of the items being demonstrated through explaining them and showing them in operation; and it can help stimulate interest in the use of these items. Probably the most important function of a demonstration, however, is building conviction concerning the feasibility and the usefulness of an innovation for the potential adopter.

To accomplish these purposes effectively, a demonstration should meet three criteria (Clark and Guba 1965, p. 15):

1) Convenience. The demonstrations should be conducted at a site within a reasonable distance of the intended audience and should be easily accessible.

2) Evidential assessment. The demonstration should provide an opportunity for potential adopters to examine and assess the operating qualities of the innovation. Accurate assessment can be made only if the demonstration provides evidence that can be examined thoroughly, critically, and personally. Moreover, the demonstration should illustrate both positive and negative factors related to the innovation and its implementation, so

that an observer can reach a valid professional judgment about its utility for him.

3) Credibility. The demonstration must be convincing and compelling. To achieve this, it must be conducted under circumstances very similar to those in which the innovation would be used by potential adopters. As Brickell points out, anything abnormal, unreal, or artificial in the circumstances surrounding an observed program--that is, anything appreciably different from conditions in the visitors' own school system--can rob the demonstration of its persuasive effect. (Brickell 1961, p. 29) Observers tend to be very sensitive to any distinctive characteristics of the host school (pupils' mental ability, financial support, physical facilities, teacher characteristics, etc.) If these characteristics are unlike those of his own school, he will tend to attribute the apparent success of the program to these differences.

Planning a Demonstration

In planning a demonstration, location is extremely important and should be selected so as to offer maximum convenience and credibility. In addition, if a school is to be the site of the demonstration, it should be selected on the basis of such factors as its leadership, its policies toward experimentation, the attitude of the school board, and the facilities available.

Another important task is to select a person (or persons) to conduct the demonstration who has considerable skill, knowledge, flexibility, interest, and enthusiasm. Demonstrations by peers are more effective than demonstrations by high-status persons. Often, it is best to use teachers as the demonstrators, especially if curriculum materials and students are involved and if the observers are teachers.

In selecting an audience for the demonstration, attention should be

given to the optimum group size. The problem of having too many persons in attendance must be weighed against the disadvantage of having too few. The optimum size of the group depends in part upon the size of the objects and the movements to be demonstrated. Thus, sometimes five or ten persons will be enough; sometimes 40 or 50 will be desirable.

It is usually best not to invite "just anyone" but to select persons who will profit from the demonstration. They can be selected on the basis of their interest, expressed need, or diagnosed need. It is sometimes advisable to include high-status persons who can provide follow-up support after the demonstration.

Attention should be devoted to preparing an effective letter of invitation to be mailed out with the registration forms. If possible, a descriptive article, brochure, or other orientation materials providing background information about the innovation to be demonstrated should be sent to the participants in advance.

It is also advisable to prepare a detailed plan of the demonstration itself including the following steps: (1) outline the sequence of events; (2) review and revise the outline, providing a detailed description of each event; (3) prepare materials and equipment that will be needed before and after the demonstration and during each event, considering such resources as space, facilities, and personnel; (4) stage a "dry run" of the demonstration, with only a few persons present to suggest refinements; and (5) prepare a final revision of the demonstration plan, with a carefully developed time schedule, and incorporate this in a printed program or agenda.

Follow-up Activities

Follow-up activities are often planned for immediately after the demonstration while impressions are still vivid and interest is high. A possible

follow-up activity may include:

1) Discussion of techniques, procedures, and materials observed. It is usually best to provide for answering questions and for discussion, explanations, and analysis after the demonstration. This is especially true if explanatory comments during the demonstration would detract from the realism of the situation.

2) Laboratory sessions. These give the observers, sometimes in a group, opportunity to try what has been demonstrated.

3) Directed-practice sessions. In these, the individual observer is guided in his efforts to do what has been demonstrated.

4) Interviews with observers. This provides a chance to plan ways of using demonstrated procedures in a real situation. (Harris, Bessent, and McIntyre 1969, p. 247)

There are also follow-up activities that may be desirable after observers have returned to their home schools. Providing them with assistance in implementing the observed procedures, for example, would undoubtedly do much to increase the effectiveness of the demonstration as a diffusion method. (House, Kerins, and Steele 1971)

Evaluation

A final but important task is to evaluate the participants' reactions, both at the time of the demonstration and sometime later after they have returned to their own school situations. Often a simple evaluation instrument is prepared for participants to fill out at the end of the demonstration program. The more important evaluation task, however, is to determine the extent to which the innovation has actually been adopted as a result of the demonstration. Data relevant to this question can be obtained through follow-up letters, telephone calls, personal visits to schools and district

offices, examination of inservice workshop rosters, and, in some cases, regional equipment and materials salesmen.

Another type of follow-up activity that may prove profitable would be to arrange some form of contact with those potentially interested persons who were invited but were unable to attend the demonstration.

Additional Suggestions

Some additional suggestions that have been found by change agents to help maximize the effectiveness of demonstrations are listed below.

1) Offer the observers something new or different, or at least something more highly refined than that with which they are already familiar.

2) Encourage team attendance, if possible--that is, try to have several persons from the same school attend the demonstration.

3) Design the demonstration to make maximum use of viewing, using listening as a supporting element.

4) Arrange in advance for adequate facilities, including good lighting and acoustics, sitting or standing room for good viewing, a physical setting that can be staged to approximate reality, and microphones that can be suspended over the demonstration area.

5) Design an observation instrument to encourage note-taking.

6) Introduce the demonstration briefly, giving information that is needed for meaningful observation; tell the participants why they are observing, what to look for, and how to observe.

7) Arrange for newspaper or television publicity.

8) Use persons other than the demonstrator for follow-up activities in order to avoid the problems of fatigue, emotional involvement, and role shift. Follow-up leaders should be selected, trained, and briefed in advance.

9) Arrange for coffee or other refreshments at the beginning of the

meeting and, wherever possible, make allowances for smokers.

10) Permit and encourage free verbal interchange with classroom teachers who have used the innovation.

11) Avoid formal presentations by outside experts and too much participation by representatives of educational change agencies.

With regard to the last two points, the Eastern Regional Institute for Education (ERIE) reports that feedback from evaluation questionnaires completed by demonstration day visitors

> ...tended to underscore the impact of observation of classroom teaching and free verbal interchange with classroom teachers... They did not come to be lectured at or to discuss theoretical frameworks for educational change. They came to see and to get the facts from teachers for whom the new curriculum was an everyday classroom reality. (Mahan 1970, p. 25)

In addition, the ERIE lab demonstration-day programs provided an opportunity for questioning the pupils observed; provided an opportunity for evaluation of the innovation before trying it. Also, demonstration is a highly visible and publicizable technique; it stimulates activity and involvement on the part of potential users; and it reinforces the adoption behavior of the demonstrator himself (if he is a user) through the public commitment he makes by demonstrating the innovation.

Demonstration also has some limitations. While the demonstration may be useful for developing knowledge, understanding, interest, and perhaps even conviction, it is not feasible to attempt to develop actual skills through a demonstration since the audience usually only observes. Another limitation is that only a relatively small number of persons can be influenced through a demonstration because the size of the audience must be limited. Also, there may sometimes be a tendency for demonstrators to over-emphasize the success of the innovation and play down the difficulties and possible failures. Finally, a demonstration that fails may have a very

negative effect on a change effort; however, as Huber and Havelock point out, this actually may be beneficial if the failure is due to the complexity and real difficulties inherent in the innovation rather than to the sponsor's failure to plan effectively and carry out the demonstration. (Havelock 1971, Chapter 9, p. 15)

Serving as a Consultant or Facilitator (Helping)

The change agent who emphasizes the technique of "helping" is assuming a role very much in line with the PS and Linkage Models. The use of "helping" as an approach to bringing about change can be used by any member of a school system--a teacher who possesses special knowledge or experience with regard to an innovation, a department chairman, a curriculum coordinator, or a principal--or by an outside consultant. Although the present section will deal mainly with the consultant type of role, it should be kept in mind that the various kinds of "helping" functions discussed here can be performed by either an "inside" or an "outside" change agent, whatever his official position.

Havelock defines a consultant as "a facilitator, helper, objective observer, and specialist in how to diagnose needs, how to identify resources, and how to retrieve from expert sources." (Havelock 1970, Chapter 7, p. 6) The diffusion technique called "helping" is different from the techniques discussed previously in that the helper in this case, rather than striving for distribution and adoption of a particular innovation, is working directly with an individual school system and is trying to help solve its unique problems (e.g., he may be helping to install a certain innovation that has already been decided upon).

The National Training Laboratories (now called the Institute for Applied

Behavioral Science) of the National Educational Association have developed a highly flexible "change agent" conception of a consultant, who is trained to provide whatever kind of help is needed by a school system or other organization. As experts in the change process, these persons help the client system as active participants and collaborators in bringing about change. For example, they may assist by providing information on how to conduct a self-survey; by pointing out various kinds of change strategies; by trying to develop a receptivity to change, a positive attitude toward research findings, an interest in new developments from outside the system, and a willingness to engage in self-evaluation; or by attempting to motivate members of an organization to change through provision of encouragement and sometimes even training.

One of the most important tasks of the helper or facilitator is to create a favorable climate for change. This requires the following conditions, all of which are highly interrelated: an absence of personal threat, a nonjudgmental or nonevaluative atmosphere, understanding and acceptance, open and trusting communication, and a desire to confront conflict and manage it rationally. In working with a particular system, the following considerations should be kept in mind by the helper: (1) that the needs and make-up of each system are unique--depending upon its structure, personnel, students, and community--and that what works in one system may not work in another; (2) that given the multiplicity of unpredictable factors operating in the change process, the helper needs firsthand knowledge of the system, its values, its personnel, and the interrelationships among these; and (3) that innovations may differ greatly and each may require a different set of activities.

It is usually best to work first with those parts of the system that

desire to change. As Bennis, Benne, and Chin point out, "The first task of the change agent is to locate and mobilize this invisible strength." (Bennis, Benne, and Chin 1969, p. 316)

A Guide to Innovation in Education provides a detailed, step-by-step description of the process a change agent may follow in helping a school system institute change. The following discussion provides a very brief summary of Havelock's description. (Havelock 1970)

If the helper is an "outside" change agent, his first task is building a relationship with the client system. This involves determining and understanding the norms of the system, locating and relating to the leaders and influentials, selecting the groups and persons with whom to work, and influencing key persons to endorse the change effort. Havelock lists the following characteristics of an "ideal relationship" between the consultant and those with whom he is working: reciprocity, openness, realistic expectations, expectations of reward, structure, equal power, minimum threat, confrontation of differences, and involvement of all relevant parties. The change agent must also relate to the larger social environment, which requires understanding the norms of the community as well as locating influential persons in that community.

The second task is diagnosing needs and determining objectives. This involves identifying the problems, opportunities, and potentials, and making a diagnostic inventory of the client system's goals, structure, communication patterns, reward system, and capability to achieve its goals.

The helper or consultant must also assist the client system in acquiring relevant resources for the various stages in the change process--including awareness, evaluation, trial, post-trial evaluation, installation, and maintenance. He then helps to plan and implement an acquisition strategy.

This entails devising procedures for acquiring diagnostic information and for developing and maintaining awareness of available resources. He will also be concerned with building a permanent capacity for resource acquisition.

The next step for the consultant is choosing a solution. Here he will attempt to generate a range of solution ideas (e.g., by brainstorming techniques, considering research implications, and testing possible solutions in terms of their potential benefit, workability, and diffusibility). He will also consider adaptations that may be needed to fit the chosen solution to the needs of the particular client system.

Once a solution has been decided upon, the change agent will focus on gaining acceptance of the innovation, both by individual members and by the system as a whole. Here he must concern himself with tailoring his communication media and approaches to particular individuals and a given stage of the adoption process.

Another way in which the change agent can help is by stabilizing the innovation--that is, ensuring its continuance by achieving its structural integration into the system and providing for practice and routinization, reward, evaluation, and maintenance.

Finally, the helper will aim at developing a permanent self-renewal capacity on the part of the client system by creating a positive attitude toward innovation in general, an internal agency for promoting and implementing change, and an orientation toward the external environment and toward the future.

The school administrator who is serving in the role of a facilitator of change can, of course, assist the change process in such ways as providing the necessary funds and resources for innovation; making appropriate

allocations of personnel and time (e.g., reduced teaching loads or released time for teachers involved in innovation); securing needed facilities, materials, and equipment; providing teachers with needed training; publicizing their innovative activities; and giving them his encouragement in their efforts to bring about improvements in their teaching.

Although some forms of help can be provided only by the administrator, most of the facilitating actions mentioned in this section can be undertaken by any change agent, inside or outside the school system, who is desirous of bringing about improvements in education.

Group Techniques (Involving)

Leadership Style

In the 1930s White and Lippitt conducted a now-famous series of experiments wherein three types of leadership were tested: authoritarian, in which the leader determines all policies; laissez-faire, in which there is complete freedom for group or individual decision with a minimum of participation by the leader; and democratic leadership, in which all policies are arrived at through group discussion and group decision. It was concluded that, while some situations may require authoritarian or laissez-faire leadership, in normal situations groups function most effectively when leadership functions are democratically shared among group members. Although somewhat slower in getting their work started, democratically led groups are more strongly motivated, become increasingly productive with time, are characterized by more friendliness and teamwork, praise one another more frequently, and express greater satisfaction. (White and Lippitt 1960) In other words, democratic leadership creates a healthier work climate, which is of utmost importance for school-change situations.

Since the early studies on leadership, the value of involving staff members in decision-making has been supported by a large body of research. This applies as much to teachers as to members of any other occupation or profession. Chase conducted a study of 1,800 teachers in 216 school systems in 43 states and found that teachers who had an opportunity to participate regularly in formulating school policies were more enthusiastic about their school systems than those without such opportunity. (Chase 1952, pp. 1-4) A direct relationship between teacher satisfaction and degree of participation in decision-making was also found in a study by Sharma involving 500 teachers from all parts of the United States. (Sharma 1952, pp. 1-4)

Participation is especially important in bringing about change. Pellegrin, among others, has shown that resistance to change is reduced and acceptance of change is much more likely if educational personnel are included in discussions about the change. (Pellegrin 1966, pp. 16-17) Participation with others in decision-making groups usually results in commitment to the group's actions. The facilitating effect of group discussion and involvement in decisions is due to such factors as peer support, the perceived consensus of the group and the resulting social pressure, and public commitment to the decision. Under some circumstances, these same factors can, of course, operate to increase resistance to an innovation. However, the important thing for the change agent to keep in mind is that, in most situations, the chances for bringing about change successfully are greatly increased through involvement of those persons who will be affected by the change. Thus, one of the most effective diffusion techniques is to involve the members of the target system in the diffusion-adoption process.

Although the authoritative approach to change may appear to be faster and more efficient than the participative approach, the former often leads

to superficial change that will be discontinued as soon as surveillance by those in authority is removed. Teachers can find many ways of resisting an unwanted innovation that has been forced on them. They may, for example, deliberately misuse it or use it in a sloppy manner; they may remain coldly indifferent to it or rigidly over-conform, to the detriment of the organization's goals; or they may express their opposition openly through hostility and stirring up dissension.

Thus, instead of imposing decisions on teachers, the effective leader or change agent will provide them with opportunities to demonstrate leadership and to involve them in decision-making. He will stimulate and aid them to define common objectives and to design ways of achieving these objectives. As Novotney has pointed out:

> Planned change demands input from numerous sources so that wise decisions can be made; in a school this means that contributions from all members of the staff should be included in planning. Where the staff is united for the achievement of mutually derived goals--where there is an atmosphere of cooperation--planned change can occur. (Novotney 1968, p. 76)

Griffiths has stated that "the effectiveness of a chief executive is inversely proportional to the number of decisions which he personally must make concerning the affairs of the organization." (Griffiths 1959, p. 73) Unfortunately, in education there is a strong tradition for school administrators to make many decisions alone that should be made by, or at least with, the entire staff. This is one of the major stumbling blocks to effective staff involvement in schools. Many principals are not eager to permit teachers to make instructional decisions, and teachers lack the interest and competence to do so, in large part because of their lack of opportunity to practice decision-making:

> The habit of relying upon the principal or central office to make instructional decisions has become so ingrained over the

> years that many teachers have stopped questioning the practice, and indeed, often resist taking a more active role in decision-making. The most logical remedy is to systematically increase the decision-making responsibilities of teachers in the hope that experience will improve ability. (Myers 1968, p. 101)

For those educational administrators and change agents who do see the value of staff involvement in decisions, and who wish to develop truly effective teamwork within the school, the following pages will outline some of the characteristics of productive groups.

Building an Effective Group

Behavioral scientists have identified ten factors that should be kept in mind in trying to achieve productive staff involvement in educational change: goals, shared leadership, communication, cooperation and conflict resolution, productivity, evaluation and feedback, structure, cohesiveness, satisfaction, and atmosphere.

Goals. Teachers' participation should be guided by explicit goals. The importance of clear objectives has been emphasized by systems analysis, administrative theory, and curriculum theory. Goals should be cooperatively determined, realistic, clearly stated, and translatable into criteria for evaluating progress.

Shared leadership. The most productive groups are characterized by functional leadership (i.e., leadership that is distributed among the group members so that different persons can assume the role of leader, depending upon the function to be performed). One person rarely possesses all of the qualities needed to lead a group in all situations.

Communication. Members of the group should feel free to engage in frank discussion of all problems. Effective team effort requires honest consideration of objectives, methods, and results. Definite means of communication

should be set up for sharing knowledge, plans, and decisions, as well as for regular communication with formal leaders.

Cooperation and conflict resolution. Group members should learn to cooperate effectively with one another and to handle conflict constructively. Conflicts should be dealt with openly rather than being ignored because they are unpleasant. Mann has developed a useful technique for handling misunderstandings and verbal conflicts. It is based on the assumption that conflict often stems from misunderstanding due to failure to listen to the other person. That is, the "listener" often is preoccupied with planning what to say as soon as he has a chance. If he does listen to what is being said, he tends to do so not in order to understand the other's point of view but only to marshal his own counter-arguments. Thus, the individuals are soon talking past each other rather than to each other. Mann's technique for stopping or avoiding an argument is to require each person to restate or "reflect" accurately the ideas and feelings of the previous speaker before he replies. This rule, which is based on an idea of Carl Rogers, tends to reduce misunderstanding and to lower the emotional level of a discussion. (Mann 1967)

Productivity. Group activities and meetings cannot all be judged by the same standard; each must be evaluated in terms of the degree to which it has accomplished its goals. Some meetings may be productive because a required task was completed, others because new ideas were generated.

Evaluation and feedback. To develop an effective working group, it is important to devise methods for evaluating the behavior of individual participants and feeding this information back to the members. Research has found that individuals usually do not change their behavior unless they are provided with data showing how their behavior is viewed by others.

There should also be a periodic evaluation of group processes and functioning as well as of progress toward accomplishment of goals. A useful set of forms for evaluating various kinds of meetings and other group activities is provided in a book by George Beal entitled Leadership and Dynamic Group Action (1962).

Structure. Various kinds of group structuring can be used to accomplish different goals, and the group needs to be able to change its structure to accomplish particular tasks. If a given type of structure or subgrouping does not work successfully, a rearrangement should be attempted or the group should dissolve and try to reconstitute itself along other lines.

Satisfaction. In an effective group, individual members feel a sense of satisfaction with their own performance and feel that they have contributed to the group's accomplishments.

Cohesiveness. Cohesiveness, a shared sense of belonging to the group, is reflected in the degree and quality of member participation in group activities as well as in attendance at meetings.

Atmosphere. The atmosphere of a productive group is characterized by a constructive attitude and cooperative sharing, as well as by friendliness, warmth, and permissiveness.

In summary, then, the administrator or change agent working with groups toward the accomplishment of educational change should let group members set their own goals; encourage other members to assume leadership when appropriate; promote free and open communication; encourage open handling of conflicts; and provide for evaluative feedback, consideration of alternative structures, cohesiveness, satisfaction, and a positive atmosphere.

Knowles has developed a list of 18 criteria for a mature, productive, democratic group which state some of the foregoing principles in more

explicit terms. These include:

1) Recognizes the values and limitations of democratic procedures.
2) Provides an atmosphere of psychological freedom for the expression of all feelings and points of view.
3) Achieves a high degree of effective intercommunication.
4) Has a clear understanding of its purposes and goals.
5) Is able to initiate and carry on effective, logical problem solving that results in action.
6) Recognizes that means must be consistent with ends.
7) Faces reality and works on a basis of fact rather than fancy.
8) Provides for the diffusion and sharing of leadership responsibilities.
9) Makes intelligent use of the differing abilities of its outside membership and recognizes the need for and utilizes outside resources.
10) Strikes an appropriate balance between group productivity and the satisfaction of other "felt" needs.
11) Provides for satisfactory integration of individual values, needs, and goals with those of the group.
12) Is objective about its own functioning: can face its procedural-emotional problems and can make needed modifications.
13) Has the ability to detect rhythms of fatigue, tension, emotional atmosphere, etc., and to take appropriate control measures.
14) Achieves an appropriate balance between problem-solving and process-orientation.
15) Strikes a useful balance between using established methods and a willingness to change procedural patterns to meet a situation.

16) Has a high degree of solidarity--but not to the extent of stifling individuality.

17) Finds a healthy balance between cooperative and competitive behavior among its members.

18) Strikes a balance between emotionality and rationality.

(Knowles 1969, pp. 59-62)

Myers has found that, in a school with good staff involvement, the following conditions exist: teachers attend courses at colleges and universities; read literature in education; discuss issues in depth--often for several hours; are the last ones to leave the building; make periodic visits to other schools and classrooms; experiment with a variety of new materials; attend local and, often, state conferences; and are constructive members of a group. (Myers 1968, p. 94)

The Group as a Medium of Change

Researchers in the area of group dynamics have found that the group can exert a powerful influence on the attitudes and reactions of group members. From the vast amount of literature that has appeared on social influence and conformity, several important principles have emerged with which the change agent should be familiar.

With regard to the tendency of the individual to conform to group standards, it has been found that the strength of pressure to conform is determined by the following factors: the degree of group unanimity toward the issue, the importance to the individual of the issue, and the individual's attraction to the group. A group tends to be attractive to an individual and to command his loyalty to the extent that it satisfies his needs and helps him achieve goals that are compelling to him; it

provides him with a feeling of acceptance and security; it is highly valued by outsiders; and its membership is congenial to him. (Knowles 1969, pp. 59-62) In attempts to change attitudes, values, or behavior, the more the attractiveness of the group is based on these factors, the greater will be the group's influence. (Cartwright 1951, pp. 382-392)

The change agent should be aware of the wide variety of techniques available for group discussion and group interaction. Some of these techniques are especially useful for conveying information; others for arousing interest; and others for arriving at a group decision. An excellent description of these different methods--pointing out their uses, advantages, and dangers as well as a step-by-step account of how to implement each--is given in Leadership and Dynamic Group Action by Beals (1962). The methods covered in depth by Beals include large group discussions, the huddle method, "buzz" groups, panel discussions, interrogator panels, committee hearings, and brainstorming.

Special Group Techniques for Promoting Change

Two special techniques used extensively in recent years to promote change in individuals through the use of small groups are role-playing and sensitivity training.

Role-playing. Role-playing is a technique for giving an individual a better understanding of himself, of others, and of his interpersonal interactions through having him assume the roles of others in various situations and actually enacting these roles. Extensive research has attested to the effectiveness of role-playing, both as a learning technique and as a means for changing attitudes. As a training device, role-playing can be useful not only in giving the role-player an understanding of the

points of view of other persons but also in giving him the opportunity to practice playing a particular role, such as that of a change agent, in various situations and with various types of people.

With regard to the use of role-playing for attitude change, it has been found that persons who are asked to improvise arguments in support of a particular position and to express these arguments publicly in a role-playing situation, or in a debate, show considerable attitude change in the direction of the stand that they have taken. Apparently the individual becomes involved in the arguments he improvises and expresses, and thus internalizes them. The role-playing technique is effective mainly for changing the attitudes and behavior of an individual rather than for obtaining concerted group action.

Sensitivity Training. The sensitivity training group (T-group) is an approach to human relations training in which group members analyze and discuss the dynamics of ongoing group processes. The purpose of the T-group is to develop the individual's self-insight, his sensitivity to others, and his awarenesss of the effect he has on others, thereby improving his communication and interactions with others. The structure of the T-group is designed to provide a free, open, supportive environment for the development of new interpersonal behavior patterns.

The Institute for Applied Behavioral Science has developed several models for "laboratory" programs utilizing T-groups to improve the functioning of organizations and individuals. These programs aim at developing relationships characterized by openness, supportiveness, informality, trust, and equality, so that group members will work together more effectively for problem-solving and innovation. T-group leadership requires special skills; thus, change agents who have not been trained as leaders

should seek the help of qualified persons before attempting such group sessions.

Workshops and Inservice Activities (Training)

Although the training approach to change has received relatively little attention in diffusion literature, its importance for educational innovation is obvious. Many new kinds of instructional approaches and materials require special skills that teachers do not obtain in their regular training. This lack of required skills is frequently the cause for the failure or discontinuance of an innovation that has been adopted, sometimes with initial enthusiasm on the part of teachers.

Special skills on the part of the teacher are required by some of the new inquiry-oriented curriculum materials in the social studies, and some of the project developers have recognized and provided for this need by conducting workshops and other inservice programs. In other cases, it is left to the school system to provide whatever supplementary training teachers need for implementing new techniques.

Nonetheless, Anderson et al. (1953); Diederich and Van Til (1945); Harris, Bessent, and McIntyre (1969); Kelley (1957); and Ritz and Wallace (1970) have provided useful publications dealing with inservice education. Thus, the following section will provide only an overview of some of the major factors to be considered in utilizing training as a diffusion technique.

Planning an Inservice Program

The first step in planning a workshop or other training activity is to formulate objectives and then to decide upon suitable activities

for achieving these objectives. The term "objective" imples that the program should have some predetermined result that may be expressed in terms of people's behavior. Harris et al. have classified the objectives (or outcomes) of inservice programs into the following types: knowledge, comprehension, application, synthesis, values and attitudes, and adjustment. (Harris, Bessent, and McIntyre 1969, p. 37). He notes that his ordering has been adapted from the Taxonomy of Educational Objectives (Bloom 1956)

A wide variety of activities is possible, including lectures, demonstrations, observation, interviewing, brainstorming, group discussions, buzz sessions, role-playing, and guided practice (playing the role in a real situation).

The choice of a workshop director is very important, and the success of the program will depend in large measure upon the dictator's leadership, organizational ability, and innovativeness. A carefully developed plan is desirable, but it should be sufficiently flexible to accomodate unanticipated problems and wishes of participants.

In planning an inservice program, careful attention must be given to the provision of adequate facilities. For example, if participants are to be divided into teams, each team should have a separate room where it can meet undisturbed; if possible, these rooms should be close enough to facilitate intergroup communication. It is often desirable to have a nearby room for typewriters, duplicating equipment, audio-visual equipment, etc. Audio- and videotape recorders can be useful for providing a permanent record of the program, for resolving disagreements, and for encouraging self analysis.

Attention must also be given to having an audience of the desired size

and composition. Incentives should be provided for attendance--for example, emphasizing the program's usefulness to participants, arranging for university credit, or providing stipends or reimbursement of tuition fees, if possible. Good publicity is often needed to attract the desired participants.

It should be kept in mind that most teachers value the opportunity to acquire practical skills more than theoretical discussions. A continuing program of inservice training with regularly scheduled sessions throughout the school year may be much more effective than a single, one-shot effort with no reinforcement through follow up. It is highly desirable, where possible, to arrange for teachers to get released time to obtain the needed training rather than extending the length of their working day by conducting inservice programs after school hours. In cases where workshops are to be conducted during summer, planning should be started in November or December of the previous year in order to allow time for the necessary budgetary allocations, finding a good director, and sending out preliminary information before teachers make other plans.

The change agent should not view inservice training as an isolated technique for bringing about the adoption of an innovation. Instead, he should give consideration to all organizational factors that need to be adjusted in order to give the proposed change a supportive environment (e.g., organizational rules or procedures such as grading practices, staffing patterns, grouping, resources, departmentalization). Also he should identify in advance all changes of this type that are required to meet the objectives of the inservice program.

For a detailed coverage of the many things to be considered in conducting an inservice program, the reader is referred to a publication

of the Eastern Regional Institute for Education, by Ritz and Wallace (1970). This report includes detailed flowcharts covering each of the following aspects of conducting a workshop: the instructional program, funding and costs, staffing, materials, scheduling, site logistics, publicity and registration, college credit procedures, non-instructional activities, and evaluation. (It should be noted that this report is now out of print but is available through the ERIC system as ED 051 557).

CHAPTER 5

EXAMPLES OF SOCIAL STUDIES CHANGE PROJECTS

The curriculum development projects of the 1960s fostered renewed interest in the diffusion of social studies innovations. There are various explanations for this increased attention to diffusion. It could have resulted from the mere fact that a large number of innovations of a somewhat distinctive character became available in a short time, so that, by 1972, the variety of such materials was enough to confuse the average social studies teacher. The increased attention might also have resulted from the desire on the part of curriculum development project directors to see the fruits of their labors used on a wide scale. There is little doubt that the availability of federal funds also drew attention to diffusion activities. The result was fly-in conferences, field agent training programs, project newsletters, and national diffusion conferences. The field testing of curriculum materials by the projects also created a natural diffusion device. Summer and academic-year institutes for social studies teachers made it obvious that teachers often knew very little about existing options, but at the same time these institutes provided a vehicle for diffusion of information about the materials related to the institutes' major concerns (the academic disciplines). Whatever the causes, the 1960s provided a time for persons interested in social studies diffusion to try their hands.

It should be recalled, however, that there were persons and organizations that had been quietly working on the problem of social studies

change prior to the curriculum development projects. The Asia Society sponsored workshops and curriculum publications; the American Historical Association's Service Center for Teachers published booklets of special interest to history teachers; the National Council for the Social Studies sponsored a curriculum series and guides for local curriculum committees; and the North Central Association's Foreign Relations Project conducted three-day conferences on such topics as teaching about democracy and totalitarianism. College professors of education, history, and the social sciences taught classes designed especially for the social studies teachers, and an occasional institution established full-time diffusion roles, such as Indiana University's Coordinator for School Social Studies. Almost all of these efforts were aimed at diffusing a "bits-and-pieces" curriculum (i.e., relatively unrelated materials a teacher could use, for example, to enrich a unit on Africa; some new ideas that could be worked into a new unit for a course on problems of democracy; or a new game for use in a civics course for high school. Most of the innovations diffused by these pre-1960 efforts required local development, often in considerable amounts.

Once the products of the curriculum development projects had reached the commercial diffusion stage, different diffusion options presented themselves. Many of the curriculum projects had produced complete courses or, in some cases, even sequences of courses. Often these packages contained all the components needed to teach a course in anthropology, behavioral science, sociology, United States history, etc. In many cases the adopter had little, if any, on-site development to accomplish.

As the diffusion of these complete curriculum packages increased, so did concern over what was described as their "teacher-proof nature."

Some of the critics of the fully developed curriculum--with its detailed teacher's manual, integrated media components, class handouts, and examinations--maintained that it cast the teacher-adopter in the unprofessional role of simply accepting decisions made by the developer. This concern was especially apparent among college professors of social studies education, who evidently were alarmed by the day-to-day curriculum decisions being made at places other than the individual or local level. Meanwhile, project directors were reporting that pilot teachers and early adopters generally welcomed the carefully integrated and packaged materials. More recently, the debate over teacher-proofing seems to have subsided, as teachers across the nation have been demonstrating that even the most highly structured materials can be and are adapted to local needs and to the interests of individual teachers.

The examples of change efforts in social studies described in the following pages illustrate that a wide range of projects has, and continues, to exist. While the examples defy neat categorization, some assume much more in terms of local development and initiative than others. Certain change projects continue to inform teachers about the wide range of materials and strategies from which teachers can choose as they piece together their own courses or credits. Typical of such efforts are those by the African-American Institute, the Center for War-Peace Studies, World Law Fund, and the Center for Teaching International Relations.

Some projects have combined local curriculum development with the diffusion of existing curriculum materials, both complete packages and bits and pieces. Many projects also include teacher-training components. Examples of such projects are the Ottumwa Schools Program to Improve Social Studies Instruction and the Political Science Education Project.

Another group of projects has focused upon informing the adopter of available options and providing him with the data and analysis systems to make informed choices. Among such projects are the Indiana University Social Studies Field Agent Training Program, the Social Studies Education Consortium, Project ALERT and the Integrated Information Units of the Far West Regional Laboratory, the EPDA Civics Dissemination Institutes, and the Social Studies Diffusion Project.

Still another group of change projects has concentrated on diffusing a particular set of curriculum materials and has trained adopters to employ them properly. Examples of this are the training programs run by projects such as Man: A Course of Study and the High School Geography Project.

Because of its unique approach to local curriculum and staff development, the Anthropology Case Materials Project does not fit any of the preceding categories. Its student materials package contains numerous items that must be organized by the adopter. In addition, teachers are provided with a set of scholarly materials that foster faculty discussion of substantive ideas as the basis for curriculum planning. One of the project's major assumptions is that the culture of the school, not the teachers themselves, accounts for the low level of intellectual interchange among teachers. This project is intended to meet the often-felt need to select, adapt, and package materials at the local level, while at the same time making it possible to avoid the costly and time-consuming process of totally developing an entire set of materials from scratch.

From the standpoint of change strategies, the projects described in the following pages represent widely varied assumptions about adopters. To simply inform teachers about a wide range of resources such as maga-

zines, articles, books, paperbacks, films and filmstrips, recordings, and transparencies assumes that teachers have both the time and skills necessary to select and organize such materials into meaningful learning experiences. Further, this strategy views teachers as autonomous, well-trained professionals who would "rather do it themselves." The teacher profile assumed is similar to that of the university scholar who is seen, perhaps wrongly, as master of his own courses and curriculum materials.

Near the other end of the continuum are change projects which assume that most teachers have neither the time nor the detailed knowledge for developing highly specific and detailed curriculum materials. Instead, it is assumed that such materials are best developed and tested in "enriched settings" by development teams representing a variety of skills and backgrounds and with substantial support facilities. The adopter is seen as one who knows local needs and objectives and who can select from the developed and tested alternatives those that best meet his needs. It is also assumed that the adopter will adapt materials to existing requirements but that he will not engage in substantial local development.

Because of the large number and diversity of potential adopters, all of these change efforts have met with some success. Each can document its impact upon social studies curricula and practices. Perhaps the different types of programs appeal to different types of adopters. Thus, the well-trained teacher at a college preparatory school who sees himself as a specialist in world history may reject a highly structured and completely developed set of materials, while the teacher with four different daily preparations who is teaching world history for the first time may find that such materials exactly fit his needs and permit him to survive for another semester. One cannot ask which program is "best" unless he also

asks, "Best for what?"

The change programs described in the following pages were selected because they were thought to be typical of the variety of such efforts. No attempt was made to provide descriptions of all social studies change programs.

University-based Federally Funded Projects

Social Studies Improvement Program for the Ottumwa Schools

The Ottumwa Community Schools, in cooperation with the University of Northern Iowa (UNI), obtained a Title III grant to plan and carry out a comprehensive program to improve social studies in Ottumwa, a city of 30,000 people. The overriding goal of the program is the wide-scale adoption of a new social studies curriculum adapted to the realities of the Ottumwa environment. Revision of the curriculum is to be based on extensive experimentation with new curriculum materials and on the development of the type of teacher who can best use these materials.

A Social Studies Steering Committee was formed to establish some organized method of bringing the Ottumwa curriculum into line with current curriculum research in the field of social studies. The steering committee consists of representatives from the Ottumwa schools and a federal projects coordinator.

A cadre of 15 to 20 innovation teachers was chosen to implement the new social studies projects on an experimental basis. Individual classes were singled out as representative examples of the entire K-12 structure. Teacher selection was based upon the following criteria: (1) must represent the best-qualified social studies teachers in the district (except at the elemen-

tary level, where there is no such specialization); (2) must be willing to experiment with the new curriculum and be willing to share findings with other inservice and preservice teacher workshops; and (3) must be willing to cooperate with the steer ıg committee and to serve as a change agent in curriculum reform.

In the course of the ongoing program, the teachers are to develop personal criteria for the types of teaching strategies that work best for them, and together they will work with the steering committee to establish criteria to be used in the revision of the entire Ottumwa social studies curriculum. This experience is expected to make teachers better able to choose and incorporate into the curriculum the project materials best suited to the student clientele of the school and to alter the various projects to accommodate better the needs of the Ottumwa schools.

The program consists of six phases: planning, materials analysis, teacher training, school trials, evaluation, and dissemination of new curriculum.

Planning. During the planning phase, an analysis of needs was made through a study of the content, strategies, objectives, and values of the existing social studies curriculum. A list of problems evident in the curriculum was drawn up, and a proposal was developed to help solve these problems--including an articulation of the types of student and teacher behavior that would result from a revised social studies curriculum. The planning phase was broadly based, representing the opinions of not only the administrative staff and teachers of Ottumwa but also outside consultants and community leaders.

Materials Analysis. During the materials analysis phase, teachers compared and contrasted the rationale, objectives, structure, evaluation,

and learning theory foundation of the many curriculum materials projects available for use in the schools, through use of the Curriculum Materials Analysis System of the Social Science Education Consortium. The trial teachers combined their theoretical understanding of curriculum with actual classroom practice by teaching one or more of the projects and becoming proficient in the subject matter. The teachers were to analyze the advantages and disadvantages of various teaching strategies in the different social science projects and, along with the participating students, were to share these experiences with the steering committee through both informal and formal evaluation. The use of the new project materials provided the Ottumwa teachers with an experiential base through which they could actively participate in curriculum revision.

Teacher training. Phase 3 consisted of a teacher training program based on the assumption that, unless a teacher can experience new methods of instruction and feel comfortable with them, these methods will never become part of his or her teaching repertoire. During this retraining period, the trials teachers utilized simulation, evaluation, media, inquiry, interaction analysis, guided self-analysis with video tape, microteaching, and behavioral objectives in order to improve their teaching. They were provided with the assistance of expert consultants from selected curriculum project offices.

The teacher training phase was broken down into three general areas: materials utilization, preservice training, and interaction analysis. The bulk of the training centered on the project materials. This aspect of the project was inservice in nature and was conducted periodically throughout the first year on a credit basis with UNI. In the second semester, emphasis shifted from pre-existing teacher training kits to actual development of

kits by the experimenting teachers. A major task was the preparation of materials and techniques for use in a district-wide teacher education program during the second and third years of the project.

The preservice aspect of the teacher training was a two-week program in the rationale, objectives, methods, and learning theory of various projects under consideration. This preservice workshop was conducted by the UNI staff.

The teacher training program also utilized six days per month throughout the year during which UNI worked with students and teachers in the classroom. In addition, during the first two years, 12 consultants were brought to Ottumwa as representatives of the project offices that had developed the curriculum projects; most of these consultants were used in the pre- and inservice workshops during the first year of the project.

The interaction analysis phase of teacher training involved an almost individualized training program for the teachers. Consisting of new methods for analyzing the impact of teachers and materials on students, this phase included the use of video tapes with which each teacher analyzed his or her own teaching behavior. This guided self-analysis of teaching behavior was conducted simultaneously with the rest of the teacher training program in which new curricular and teaching alternatives were experienced by the teacher. These techniques were initially used by the experimenting teachers the first year, and it is hoped that, through this example, the techniques will be used in the second and third years by the entire staff of the Ottumwa schools.

School Trials. The school trials phase of the program will provide for the trial teachers to become change agents in the process of curriculum revision. To ensure that role, the school district will provide monetary

compensation and released time; the teachers will receive direction through the formal and informal use of consultants; and the teachers will be given voice in all decisions involving curriculum revision.

On the assumption that a broadly based curriculum revision is more likely to succeed than one imposed through administrative mandate, the revision is to be based on student and community involvement. The students of Ottumwa will be given voice in determining their curriculum, both indirectly through the program's evaluation and directly through student participation on the steering committee. Provisions have also been made to obtain feedback from the community and the steering committee will keep the community informed of progress through contact with community organizations (PTA, service clubs, and other civic groups), through the news media, and through the distribution of newsletters and reports. Moreover, the steering committee will maintain a depository of the current social studies project materials, which, together with evaluative reports by the Ottumwa teachers, will be available as a resource for interested parties.

Community groups will not only be told about the curriculum changes being made at Ottumwa but also should actually experience the types of social studies materials the children will be using. The director, consultants, and trial teachers will make presentations and give demonstrations at appropriate community meetings. Committees of parents and representatives of various organizations will be invited to attend curriculum meetings and to visit the classrooms where the new materials are being tried. Advisory groups include the Wapello County Historical Society, Wapello County Bar Association, American Association of University Women, Ottumwa Area Ministerial Association, Ottumwa Education Association, and American Federation of Teachers.

Throughout the project, the social studies classes will serve as learning laboratories and are to be available for wider use by interested parties in the district, county, and state. The experimenting teachers will serve as resource personnel for similar types of programs wherever they are started.

Consultants. UNI and its social studies curriculum specialists have an important role in the project. The consultants are to provide the link between the administrative staff and teachers and the current curriculum research in the field. The consultants are also charged with making curriculum alternatives known to the steering committee and, through a program of preservice and inservice training, making these alternatives viable ones that the teachers will feel comfortable using. Finally, the consultants will provide on-the-job supervision to encourage teachers and to help them evaluate the materials they use.

The consultant staff is charged with the following functions: to provide expert knowledge concerning the most recent curriculum development efforts in the social studies; to provide advice on the availability of project materials and consultants able to help in implementation of the materials; to conduct the teacher training program initially, but to work toward establishment of an ongoing inservice training program for and by the teachers of the district; to advise and aid in the evaluation program of the schools; and to supervise the limited implementation of new project materials in the schools.

Evaluation. Evaluation is an ongoing concern throughout all phases of the program. Assessment of project objectives is to be carried out in an overview evaluation several times during the program's development. In addition, the success of each project in limited school trials is to be

assessed with reference to the teachers' views, results of the cognitive evaluation, students' attitude changes, the student questionnaire, consultants' recommendations, and feedback from the community.

Success of the teacher training efforts will be evaluated with reference to the formative evaluation carried out by workshop leaders, attitude scales administered to the teachers, the extent to which the teachers are able to carry out the teacher training program, the degree to which the teachers are able to assess their own progress, the impact the program has on the entire social studies staff and on all teachers in the district, the program's impact outside the district, and the effect of the guided self-analysis program in changing teacher behavior.

Dissemination. The Ottumwa school district has a central resource center in which to house materials from various projects. This resource center is to be used by Ottumwa personnel to familiarize themselves with the variety of inquiry materials available from the U.S. Office of Education's Project Social Studies and other curriculum projects.

A cooperative conference was conducted jointly by the Ottumwa schools and UNI on the UNI campus during the summer of 1972, and another will be held in Ottumwa during the summer of 1973. These three-day conferences afford Ottumwa personnel an opportunity to share their experiences with the new curriculum materials through demonstrations and presentations to teachers returning for graduate work in the summer and to teachers from surrounding communities.

Teachers within a 50-mile radius of Ottumwa were encouraged to participate in the preschool workshops conducted by UNI consultants for Ottumwa trials teachers prior to the 1971-72 school year. The responsibility for conducting the workshops shifted to the first year trials teachers during the subsequent years of the program.

A quarterly project newsletter was initiated during the first year of the project and was mailed to all staff and patrons of the Ottumwa school district, as well as to schools within a 50-mile radius of Ottumwa. Progress reports and information pertinent to on-site visits by lay and professional personnel have received prominent coverage in the newsletter. Representatives of local radio and television stations have been encouraged to visit, film, and interview as an ongoing aspect of the program. Also, the University Relations Office of UNI issues periodic news releases concerning UNI staff involvement in the Ottumwa program.

Center for Teaching International Relations

The Center for Teaching International Relations (CTIR) was established at the University of Denver in 1969, with funds provided by the Education Professions Development Act, "to serve as the administrative unit for coordination of a series of programs and activities designed to improve and expand the teaching of international relations at the secondary level." CTIR has sponsored and supported four types of activities: preservice training of secondary social studies teachers, inservice training of social studies teachers and librarians, development of international relations materials for use in secondary social studies classrooms, and dissemination of materials and information in the area of international education.

Preservice training. Preservice training has been carried out under the Prospective Teacher Fellowship (PTF) Program, a two-year program terminating in an M.A. degree in international relations and certification as a high school social studies teacher. The fellows in this program have developed two slide-tape presentations ("Revolution" and "Authoritarianism"), a multi-media presentation ("War and Peace in Art and Poetry"), and biblio-

graphies of materials suitable for use in teaching international relations concepts at the high school level. The fellows also have compiled lists of data on various countries and have arranged the lists in such a way as to be useful for inquiry teaching sessions in high school social studies classes. In addition, the fellows have demonstrated materials to teachers in CTIR inservice institutes.

Inservice Institutes. CTIR has conducted a number of inservice training institutes for high school social studies teachers and librarians. The purpose of these institutes is to acquaint participants with innovative ideas, materials, techniques, and activities for use in participants' schools and classrooms. Although CTIR serves mainly the Rocky Mountain area, it has also sponsored teacher institutes in other parts of the country, including the East Coast. These conferences have taken up such themes as the Cold War, Comparative Approaches to the Study of Africa, Studying Other Cultures, and the Maoist Style of Politics. Participants viewed some of the films, simulations, and other materials available from CTIR and received bibliographies and other information on the teaching of international affairs.

Also, a series of three-day inservice Institutes in Comparative World Politics were conducted by CTIR in Colorado, New Mexico, Wyoming, Oklahoma, Wisconsin, Kansas, and Indiana. The sessions included lectures, teaching demonstrations, and multi-media presentations by the CTIR staff. In addition, seminars and informal discussions gave participants the opportunity to consult individually with members of CTIR staff and to preview and examine films, books, tapes, and other materials brought by the staff.

Development of Instructional Materials. CTIR has developed, tested, and evaluated many new products and techniques designed to bring international relations into the secondary school classroom. These include simulations,

slide-tape presentations, data analysis exercises for inductive learning, and discussion guides and materials for use with films.

Dissemination. One of the primary means by which CTIR disseminates the materials it develops is through the inservice institutes described above. It also operates a Materials Distribution Center that makes films, filmstrips, simulations, and books available on free loan to teachers in the Rocky Mountain area. The purpose of this is to provide high quality materials in the area of international relations to teachers who either are not aware of such materials or may find the cost of purchasing or renting them prohibitive for their school districts.

In addition, CTIR publishes a regular Newsletter that is sent to more than 2,700 educators, including most secondary social studies teachers in Colorado, New Mexico, and Wyoming. The Newsletter contains announcements of workshops and conferences, reviews of books and films, notes on games and other special materials that have been developed, and summaries of pertinent articles dealing with international affairs. CTIR also sponsored an all-day clinic for secondary teachers at the annual convention of the National Council for the Social Studies, consisting of demonstration lessons on international aspects of the social studies.

EPDA Civics Dissemination Institutes

During 1969-70, Indiana University, with support from USOE, conducted a series of six national three-day institutes to disseminate information about a newly developed course, American Political Behavior (APB). Developed at the Social Studies Development Center at Indiana University by the High School Curriculum Center in Government, APB is a one-year civics course that was in its second year of field testing when the dissemination institutes were held.

Each of the six institutes had three major objectives: to inform opinion leaders of the rationale, development, nature, and evaluation of the experimental course; to promote a discussion among university representatives concerning the implications of courses such as APB for both preservice and inservice teacher education; and to assist persons from secondary schools with formulation of procedures for installing and adapting APB. No attempt was made to prepare teachers to use the course, since it was designed to be taught by persons who had received no special training.

Participants were selected from three populations: (1) social studies department chairmen, curriculum coordinators, assistant superintendents in charge of instruction, and others in school positions with authority to make curriculum decisions in social studies; (2) political scientists and social studies educators interested in preservice or inservice education of social studies teachers; and (3) persons who consult with social studies teachers and curriculum directors or who engage in disseminating information about educational innovations. Representatives from each local host institution were instrumental in ensuring that the persons selected represented these roles in the geographic area served by the institute.

Institutes were held in or near St. Louis, Missouri; Battle Creek, Michigan; Athens, Georgia; San Jose, California; Newark, Delaware; and Bloomington, Indiana. Various sessions were devoted to analyzing why there is a need to revise civics instruction and what it means to study politics through analysis of political behavior; viewing films of students using the experimental materials; becoming involved in one or more lessons from the course; and discussing with other participants what might be done to disseminate further a political behavior approach to the study of politics. Each participant received an experimental version of the student and

teacher's materials. The final session of each conference provided participants with an overview of other efforts to change civics instruction in the schools.

The most unique feature of these conferences was the focus upon a single set of new materials. Prior to these institutes, USOE had sponsored only conferences at which a wide variety of materials was reviewed and participants spent much time discussing the merits of each. In contrast, these dissemination conferences were designed to thoroughly inform potential adopters and disseminators about a particular course in order that they might evaluate it in terms of local adoption needs. It was only in the final session that other projects and materials were mentioned.

Foundation-Sponsored Projects

Man: A Course of Study Diffusion Program

Since 1969, with major support from the National Science Foundation (NSF), a multi-state "campus-school team strategy" has been used to diffuse and install Man: A Course of Study (MACOS). Both biological and social sciences are represented in this inquiry-oriented curriculum, which was developed by the Educational Development Center in Cambridge, Massachusetts, with NSF support.

During the first two years of its operation, the MACOS diffusion program was run by the Eastern Regional Institute for Education (ERIE) in Syracuse, New York. Since ERIE was discontinued in June 1971, the program has been carried out under the auspices of the MACOS Project of the State University of New York (SUNY), with headquarters in Albany. (The campus-team strategy was designed by Dr. John Herlihey, who was in charge of coordinating this

program for ERIE and who is continuing to carry it out as director of the MACOS Project under SUNY sponsorship).

From 1969 to 1971, ERIE utilized a ten-campus network to diffuse and install MACOS in the schools of Michigan, New York, Pennsylvania, and one province in Canada. The program has now been expanded with five new campus sites in a five-state area that includes Ohio and Indiana in addition to the aforementioned states. This campus network is part of a national strategy for diffusing and implementing MACOS.

The goal of the campus-school team strategy is to help colleges and universities to become centers of dissemination and installation by arranging cooperative college/public school inservice and preservice education programs. The dissemination-installation program consists of training campus teams, each made up of a college professor of elementary social science methods and a campus or collaborative school teacher, to use MACOS as a vehicle of instruction.

The college professor employs the techniques and materials of MACOS in his methods class and the campus school teacher teaches MACOS to a fifth- or sixth-grade class. Through the team's efforts, preservice students in the methods course, in observation classes, and in student teaching have the opportunity to watch and teach this model elementary social science curriculum. In this way, the MACOS curriculum constitutes the basis of preservice social science education. The campus team also conducts orientation and inservice education classes for from five to ten "satellite" public school classroom teachers who wish to install the MACOS curriculum.

Each cooperating college independently develops a training model to prepare both teachers and students to utilize this curriculum fully. SUNY provides the leadership (formerly provided by ERIE) to coordinate and monitor

the inservice and preservice training strategies of the campus and satellite school network. SUNY also collects and analyzes data on the installation and teaching strategies at each campus center, so that the different approaches toward curriculum implementation taken by each campus team can be evaluated.

Other agencies cooperate in this program. In addition to 15 colleges and 30 public school districts, the cooperating organizations include the Educational Development Center, which developed the curriculum; Curriculum Development Associates, which has the primary responsibility for dissemination of MACOS on a nationwide basis; NSF; two regional educational laboratories; and two state departments of education. The latter have involved their personnel in the program and have provided assistance in suggesting participants and selecting installation sites. All of the cooperating agencies are provided with feedback about the effectiveness of classroom operations, workshop design, and the dissemination of MACOS.

During the 1969-70 school year, the MACOS network developed by ERIE reached 2,000 public school pupils in 80 classrooms taught by 70 teachers. These figures were tripled during the 1970-71 school year. About 500 preservice college students were involved in 1969-70 and about 1,000 in 1970-71, before ERIE was discontinued. In 1971-72 the MACOS Project, centered at Albany, included 17 colleges and 60 school districts.

Preparation for Leadership. Campus-school teams for the dissemination-installation program were trained in a four-week workshop conducted by the MACOS Project at Albany in the summer of 1971. This workshop, which emphasized process skills as well as the content of MACOS, had the following objectives: (1) to develop familiarity with MACOS content; (2) to promote team-building skills; (3) to augment interpersonal communication skills; (4) to help participants become familiar with the learner's role in MACOS,

including active involvement, lack of closure, group work, observation and data collection, problem-solving skills, and value inquiry; and (5) to assist campus teams in documenting the implementation and effects of MACOS.

The first two weeks of the workshop focused on reviewing MACOS materials, other materials, and instructional management skills. The last two weeks provided workshop participants an opportunity to apply their skills in a classroom setting with children. During these last two weeks, each professor-teacher team was paired with another professor-teacher team to form a quartet. One team planned and taught the lesson and the other team designed an observation schema to provide data on the lesson. The teams reversed roles regularly. The quartets used video equipment as a data collection tool. Feedback sessions were conducted after each lesson.

Inservice Training. During the school year following the four-week workshop, inservice and preservice programs were established by the campus-school teams at their respective institutions. One task of the campus-school team (professor and teacher) is to conduct an inservice program for teachers from local schools. After the four-week summer workshop, each team conducts a three-day orientation session for fith- or sixth-grade satellite classroom teachers before the start of school. Each satellite teacher then teaches MACOS in his classroom. The campus-school team holds biweekly meetings throughout the school year to continue inservice education of these teachers.

The inservice plan is designed to maintain a year-long support system. The 18 biweekly inservice sessions focus on intensifying teacher preparation and reviewing classroom experiences. Part of each inservice class is devoted to instructional problems introduced by the satellite teachers and to topics needing special work, as suggested by analysis of lesson report forms filed by the satellite teachers.

The campus-school team provides a ready resource for any instructional management problems that teachers may encounter. This immediate response potential is one of the strong features of the campus-satellite school installation strategy. Instruction tied directly to the material is also important. The program director and consulting scholars regularly attend the inservice meetings to offer further assistance and insight. Local school administrators are encouraged to attend class sessions to help support the curriculum installation and promote school-wide and district-wide expansion.

Preservice Training. The preservice plan established by the campus team is more diversified and complex than the inservice plan because of the greater time blocks, course requirements, and organizational plans for the elementary education sequence at each college. The objective is to use MACOS as the focal point for a social science methods course. Thus, prospective professionals will become familiar with the materials, methods, and teaching skills required for a model elementary course. The campus school or other nearby classroom provides students with the opportunity to observe and teach. One aim of the campus-school team program is to conduct an undergraduate educational sequence consisting of a methods course, classroom observation, and student teaching of MACOS. Such an arrangement establishes a complete teacher education sequence utilizing the methods, scholarship, and skills of a model elementary school social science curriculum. The saturation effect achieved by the combined involvement of satellite classroom teachers, junior year observers, student teachers, and college supervisors all working with MACOS should have a significant impact on teachers, classroom climate, and course content throughout the satellite schools and districts.

Responsibilities of Participants. Campus-based units, in order to

participate in the program, must secure ten fifth-grade or sixth-grade classrooms from local schools that agree to (1) have their school district purchase the materials for MACOS; (2) share the films for MACOS (all classrooms should be in geographical proximity in order to meet this requirement); (3) attend the three-day orientation session at the campus site at the local school district's expense (the principal is also invited to attend); and (4) attend 20 biweekly inservice training sessions at the campus site during the school year.

The professor-campus teacher team from each campus site must agree to (1) jointly attend the full four-week summer workshop; (2) cooperatively conduct a three-day orientation session on the campus for participating teachers and administrators from the local satellite schools; (3) cooperatively develop and conduct a preservice teacher education program on MACOS for at least two sections of undergraduate courses; (4) cooperatively develop and conduct a biweekly inservice teacher education program for participating teachers from local satellite schools; (5) cooperatively provide for interaction between preservice students at the college and inservice teachers from local participating schools; (6) assist in regular evaluation of the program by allowing project personnel to administer tests and questionnaires to campus school elementary students, preservice education students, and inservice teachers from the satellite schools; and (7) collaboratively prepare a detailed report describing the development, content, method, and implementation of the preservice and inservice programs.

Satellite schools selected by the colleges must formally agree to share in the cost of installing MACOS. Teachers of the participating satellite schools must be (1) generally supportive of MACOS; (2) willing to attend the 20 biweekly inservice training sessions (2-3 hours per session), usually

conducted at the local college campus; (3) willing to work in their own classrooms with preservice student teachers in relation to MACOS; (4) willing to have observers in their classrooms to learn about the program; (5) willing to have their pupils' behavior evaluated by individual examinations, group tests, and classroom observations; and (6) willing to have their teaching behavior observed and measured for purposes of learning more about effective methodology.

Through its activities, the campus-school team MACOS Project has been able to identify, develop, implement, and test instructional modules for both inservice and preservice teachers and to promote the roles and behaviors appropriate to process education.

Anthropology Case Materials Project

The Anthropology Case Materials Project (ACMP), directed by Robert Hanvey, is a "curriculum/professional growth project" sponsored by Indiana University and funded by NSF. The project, a part of the Social Studies Development Center at Indiana University, began in January 1970. First-draft materials were tested in 1971, and revised materials were available in 1972.

Materials. The objective of the project is to develop and test instructional materials for high school students and associated "faculty seminar" materials for teachers. The topical focus of the materials is technology and society. The classroom package consists of readings, overhead transparencies, slides, tapes, filmstrips, etc., that are not pre-organized in unit form. This package offers teachers the elements with which to create a unit or mini-course appropriate to local conditions and curriculum. The instructional materials fall within the scope of one or more of the six broad topics: Technology and Environment, Work in Industrial and Post-Industrial Societies,

Technology and Urban Problems, Utopian Societies, Democracy and the Control of Technology, and Visions of the Future.

The seminar package consists of materials for use by faculty discussion groups--including readings and tapes by historians, anthropologists, sociologists, and other scholars whose special interests relate to problems of technology. Although the original plans for the project anticipated drawing heavily upon anthropology for substantive ideas, the first year's work revealed the need to draw from many other disciplines and sources. The seminar materials are meant to be used by groups of teachers interested in exploring some of the current thinking on problems of technology, either as a prelude to developing and teaching a unit or mini-course, or as an end in itself. The seminar package provides the means for discussion of ideas about technology and for consideration of pedagogical questions.

Responsibilities of Participants. It is required that at least three teachers from each participating social studies faculty agree to work on the seminars and units together. These teachers are committed to use the seminar package as a basis for a series of meetings (ten two-hour sessions) structured by the package. Whether the teachers subsequently develop and teach units or mini-courses based upon the classroom package is optional; however, the seminar plans call for single-lesson experimentation with selected items from the classroom package during the period in which the seminar is being held. Since a teacher's involvement in the seminar does not imply a commitment to teach a specific unit on the topic of technology, teachers other than those with such interests can be encouraged to join the seminar. The particular topic, technology and society, is essentially a vehicle for exploring basic issues that will be of general interest to any social studies teacher.

Schools are asked to permit interviews with members of the social studies faculty and principal both prior to use of the experimental materials and again some months after use of the materials. Short opinionnaires may be administered during the interviews. The school should also be willing to permit observation of social studies classes before, during, and after use of the experimental materials. The schools facilitate the seminar by providing released time for teachers and other kinds of assistance.

Purposes of the Project. There are two basic purposes underlying this project. The first is to obtain the participation of teachers in the development process, to the extent that such participation is feasible for them. Many teachers and other educators believe that curriculum-making should be a local matter and wish for the means to create programs that accurately suit local needs, particular courses, and student interests. But instructional materials development is costly and time consuming. Thus, ACMP provides a prototype for testing out teacher response to the availability of instructional materials enabling local design of a unit or mini-course on a significant topic.

The second purpose of the project is to assess the value of providing teachers with scholarly materials that facilitate faculty discussion of substantive ideas as a basis for curriculum planning. In the ordinary course of events, it is frequently difficult for teachers to organize the resources necessary for profitable discussion of ideas. The seminar package provides materials and a suggested outline for a series of meetings of a social studies faculty, focusing on technology as topic but using the discussions to explore ways of more effectively planning social studies curriculum and instruction.

There are several possible advantages of this "faculty seminar" approach. Teachers as intellectuals commonly play one of two hierarchical roles. In their classrooms, teachers are academic authorities and their intellectual dialogue is with "inferiors." If teachers return to the university classroom, they tend to assume the passive student role and dialogue is with a "superior," the instructor. In neither of these relationships is there the bracing quality of a free exchange among peers. Since the ACMP seminar is conducted by the teachers themselves, the participants' roles are not those of students; the teachers are engaged in intellectual inquiry with adult colleagues.

The advantages of this are yet to be determined. However, the seminar format may prove useful in sharpening and maintaining the quality of substantive ideas and instructional strategies. In the bustle of daily school life, questions of curriculum planning and instruction are not frequently discussed with colleagues. New ideas are not jointly explored. Methods become a matter of habit rather than reason. The seminar plan, by exploring various pedagogical questions, may reveal the advantages of continued professional discussion.

Social Science Education Consortium

The Social Science Education Consortium (SSEC) is supported primarily by funds from NSF, with supplemental support from other sources, such as the U.S. Office of Education, for special projects. Located in Boulder, Colorado, SSEC serves a nationwide audience of social scientists and educationists. Its overall purposes are to encourage improvement of social science education in the nation's schools, universities, and colleges and to facilitate communication among persons involved in social science

education at all levels of the educational enterprise. To these ends the SSEC offers a variety of informational, interaction, and training opportunities.

Curriculum Materials Analysis. The SSEC was originally established, in 1963, in order to increase the exchange of ideas among social science curriculum developers and to help disseminate the fruits of their efforts. One of its earliest projects, aimed at achieving these goals, was the development of the Curriculum Materials Analysis System (CMAS), mentioned earlier in this work. The CMAS (Morrissett and Stevens, 1967) provides a detailed set of questions to guide curriculum developers in making the choices necessary to constructing materials to meet specific needs and to guide teachers and curriculum adoption committees in systematically comparing several sets of materials and selecting appropriate sets from among them. This tool helps to clarify and describe, in a systematic, orderly manner, the various central properties of curriculum materials, including their content; physical characteristics; instructional strategies; appropriateness for particular student, teacher, community, and school needs; objectives; rationale underlying the objectives; and effectiveness in previously evaluated situations.

A number of extensive analyses of materials from the national curriculum projects of the '60s have been written by teachers and Consortium staff, using the CMAS. These are available through the SSEC. However, because these are frequently quite long and detailed, curriculum committees and teachers have found them somewhat cumbersome for use in the early, overview stages of curriculum selection. Therefore, the SSEC developed the Social Studies Curriculum Materials Data Book, which gives concise "vital statistics" on over 100 national project materials packages, as well

as numerous innovative textbooks, games, and simulations. Each set of materials is described on a two-page, loose-leaf "data sheet"; the information contained on the data sheet deals with the same categories used in the CMAS. The Data Book is updated, with revisions to old data sheets and addition of new analyses, every six months; these supplements are available by subscription. The Data Book, thus, provides a quick reference on available innovative social studies materials.

Other Publications. In addition to the Data Book and the longer Curriculum Materials Analyses, the SSEC publishes occasional papers, books, and a tri-annual Newsletter. The occasional papers are primarily of three sorts: some provide thoughtful, scholarly discussions of topics of general concern to social scientists and educationists (such as state-of-the arts papers and the like), while others are aimed more directly at providing immediate, specific assistance to teachers and teacher-educators, and still others focus on using the structures of the social science disciplines as the basis for curriculum construction. The books published by the SSEC deal with similar topics, though in a more detailed, extensive manner, of course.

The SSEC Newsletter is designed to provide both current information of SSEC and other organization's activities and scholarly grist for its readers' intellects. Each issue contains a lead article on some recent practical or intellectual development in social science education, as well as various short "newsy" articles. Subscriptions to the Newsletter are free upon request.

Workshops, Consulting Services, and Conferences. One of the most important aspects of the SSEC's work, from the point of view of diffusion of educational innovation, is its extensive involvement in active inter-

change with educational personnel. It serves as a linking agent between sources of innovation and potential adopters through the workshops and conferences it conducts and the consulting services it offers. Its staff attempts not only to play the role of intermediary but also to bring the developers and social scientists into direct, working contact with practitioners.

The SSEC's workshop program consists of a number of different alternative approaches. It conducts on-site Visitor Workshops, for school districts and individual teachers in its immediate area. During these, the participants are encouraged to utilize the SSEC's extensive collection of curriculum materials, evaluative and research documents, textbooks, and games and simulations in its Resource and Reference Center. When on-site workshops are not possible, SSEC staff are equipped to travel, with trunks full of curriculum materials, to districts in all areas of the country, for inservice training or consulting designed to meet the particular needs of the "client" group. The SSEC also conducts the Team Regional Inservice Analysis and Dissemination (TRIAD) program, which involves extended work with a school district in analyzing, piloting, adapting, and selecting for adoption new curriculum materials. Another kind of workshop program is the Teacher Educator Workshop project, in which a staff member of the Consortium conducts short workshops for teams of social science and school of education faculty involved in teacher training at small colleges. Finally, "Skill Labs" for teachers and curriculum consultants are conducted by the SSEC during annual meetings of organizations such as the National Council for the Social Studies.

In addition to these several kinds of workshop programs, the SSEC sponsors conferences bringing together social scientists, curriculum

developers, teachers, administrators, teacher trainers, and many others to discuss specific topics of current concern to the profession or to develop concrete plans of action in response to current needs in the field.

Social Studies Diffusion Project

The Social Studies Diffusion Project (SSDP) serves as the diffusion component of the Social Studies Development Center at Indiana University. The purposes of SSDP, which is funded by the Ford Foundation, are to assess experiences in social studies dissemination and to develop diffusion strategies for helping schools to better use the array of available resources for developing or improving their social studies program. The project will experiment with different models but is especially interested in developing ways in which schools can increase their long range capacity to change. Toward that end the project will develop strong links with a selected number of schools with whom they will work closely.

Projects of Professional Organizations

Political Science Education Project

In 1970, USOE made a grant to Indiana University for operation of the Political Science Education Project of the American Political Science Association (APSA). This project developed from the work of APSA's Committee on Pre-Collegiate Education, charged with seeking ways of expanding and strengthening the relationships of political science to elementary and secondary school curricula and teaching.

Purposes of the Political Science Education Project are to disseminate information about political science and civic education materials and to

conduct a series of workshops for the purpose of analyzing and discussing the nature of these materials. In addition, the APSA-Indiana project was designated to serve as a coordinating and liaison agency for the entire group of projects funded by USOE in 1970 at seven institutions to improve the teaching of political science and related subjects in the secondary schools.

In 1970, the APSA, together with the University of Colorado, engaged Mary Jane Turner to undertake an exhaustive survey of innovative secondary social studies curriculum materials, with the purpose of selecting those containing political science subject matter that might be of interest to teachers of civics, government, problems of democracy, and history. Forty-nine sets of curriculum materials were selected, most of which were produced in recent years by curriculum materials development projects funded by USOE and NSF.

This study resulted in publication of a 200-page book entitled Materials for Civics, Government, and Problems of Democracy: Political Science in the New Social Studies. The 49 packages of materials analyzed in the book were produced by 42 social science curriculum projects. Each analysis includes both a narrative description (data sheet) and an information checklist.

Each narrative description provides information on publisher, publication dates, cost of materials, grade levels, kinds of existing course structures into which the materials might fit, the social science discipline that provides the dominant or organizing thread for the materials, the rationale behind development of the project, and the objectives of the materials. In addition, characteristics that might make the materials more or less useful in various educational settings are noted.

The checklist for each project follows the narrative analysis and provides information about the project in a format designed to facilitate comparison and retrieval. The last section of the checklist, "Strategies Employed and Evaluation Information," lists the kinds of techniques and resources advocated by the project and gives brief reviews of available data on evaluative processes and outcomes.

The introductory paper in the book states that this study "can help the selectors of new programs to make judgments about the fit between their educational needs and several instructional packages created to improve education in political science, government, and law."

Private Organizations as Diffusers

World Law Fund

The goal of the World Law Fund (WLF) is to initiate and foster a worldwide educational program on world order. The study of world order, as defined by WLF, is an inquiry into strategies for achieving the fulfillment of three basic values: the prevention of war, the advancement of the economic welfare of all mankind, and the assurance of social justice in the world community. Disarmament, arms control, peace-keeping, pacific settlement of disputes, enforceable world law, economic development and welfare, the technological and scientific revolutions, and human and social rights constitute topics within the realm of world order.

When WLF was organized in 1962, the opportunity for such study was virtually non-existent in school systems. It was felt that if WLF could create good educational materials on world order and gain acceptance of them by schools, colleges, and universities, then a relatively limited

expenditure of effort and money would have initiated a continuing educational program of significant proportions. WLF sees its role as that of a catalyst and an agent combining and disseminating the efforts of all those committed to education for peace.

The study of world order promoted by WLF is futuristic and global in its perspective and process-oriented and multidisciplinary in its approach, focusing on the evaluation of various alternative international systems. WLF embraces the question of how change occurs and how we can bring about changes leading to a preferred world system. Students begin by confronting the "as is" with the basic impediments to peace built into the system and move well beyond this to view these problems through the projection of preferred international system models and the development of strategies that seem best able to achieve transition from the system "as is" to the system "as should be."

Simulation is utilized in this approach to get students to analyze models by testing them through game play. Game play leads quite naturally into a critique of the simulation by the students. This critique is carried one step further, into attempts to get students to construct and simulate their own models. The traditional approach to the study of the international system generally attempts to teach students how the system operates, whereas the WLF approach imposes on them the obligation to evaluate the system and to suggest changes that would enable the system to work more effectively toward the realization of world-order values.

WLF now has a field staff of more than 30 professional consultants who help to introduce world-order studies into schools throughout the country. The WLF "School Program" is divided into two major seg-

ments: materials development and teacher training. A third aspect, teacher services--informing teachers about materials, resources, and opportunities for training--has evolved from the other two.

Materials Development. WLF has developed extensive curriculum materials incorporating new process-oriented teaching techniques such as simulation games and model-building. Among the materials are various multi-text series, mainly for grades 8 to 12; a series of simulation games such as Conflict; and multiple filmstrip packages, including Confrontation and Revolution. The WLF staff tries these materials by demonstrating them in the schools in experimental form, revises them accordingly, and then turns the more successful ones over to a commercial publisher. During the next few years, efforts will be devoted to development of a complete range and variety of learning materials for high school, combined with the initiation of a development program for elementary materials. An attempt will be made to "trans-nationalize" all programs to develop a global perspective on world-order issues so that these materials and methods will be suitable for students and teachers throughout the world.

Teacher Training and Teacher Services. Teacher training has been carried out through a series of summer institutes. A basic textbook on world order for teacher preservice training is now being written.

In providing teacher services, WLF has sponsored seminars and workshops in cooperation with the Foreign Policy Association and other organizations and held special sessions at annual meetings of the National Council for the Social Studies. Through these activities hundreds of teachers have been introduced to the topic of world order.

Since 1969, WLF has put out a semi-annual publication entitled World Law Fund Progress Report. The WLF School Program publishes a

special supplement for teachers entitled Ways and Means of Teaching About World Order, which provides sample learning strategies for problem analysis and solution, such as a device for introducing futuristics for problem analysis and solution.

Center for War-Peace Studies

The purpose of the Center for War-Peace Studies is to improve the teaching of international relations in American schools through inservice training and through dissemination of information and materials concerning the teaching of international affairs. Sponsoring two regular publications--War-Peace Report and Intercom, a monthly journal that publishes articles and sometimes special issues about various areas of the world--the Center also publishes teacher-developed instructional materials.

In addition, the Center, through its School Services Division, sponsors a School Institute that conducts conferences and workshops throughout the country. Lists of available curriculum materials and projects are sent to the schools in advance so that teachers can indicate what kinds of materials they would like to have demonstrated. The Center then obtains copies of the materials from the publishers so that participants can take the literature home. If a teacher is interested enough to use the materials, the Center will send him additional materials without cost.

The Center for War-Peace Studies also sponsors institutes and workshops jointly with other organizations concerned with international affairs, such as the Center for Teaching International Relations. For example, these two organizations cooperatively sponsored a workshop, "Teaching About China," in October 1971, to outline teaching needs in this area, judge whether available materials accomplish this, and design and improve relevant materials. Available materials, including multi-media materials, were demon-

strated and participating teachers were invited to demonstrate lessons of their own where applicable.

The African-American Institute

The African-American Institute (AAI) is the major private agency in the United States working to further African development and to strengthen African-American understanding. The School Services Division of AAI provides services and materials for teaching about Africa in the nation's schools and has prepared a number of bibliographies and lists of suggested resources for African studies that are distributed free to teachers in any quantities desired. These are available in the AAI Educational Materials Center. For example, one mimeographed publication disseminated by AAI was "A Summary Note on the Possible Uses of African Literature in American Schools." Other such publications have included "A Note Concerning Suggested Resources for African Studies," "Publications Available from the African-American Institute Educational Materials Center," "African Curriculum Materials and Their Possible Applicability to American Needs in the Area of African Studies or World History," "African Periodicals and Magazines for Use in American Secondary Schools," and "African Newspapers." AAI is also planning to publish a critical bibliography of widely used teaching materials on Africa, in cooperation with the African Studies Association.

Further, a proposal has been submitted for several rounds of consultation and dissemination of information on materials and methods for teachers in North Carolina. Beginning in September 1971, North Carolina has required a curriculum component on Africa to be taught in all 7th-grade classes, and an attempt has been made to build a model that would be exportable to other

states, in cooperation with state department of education staff.

Displays, such as collections of teaching materials on Africa prepared in Africa, are presented in the New York City office of AAI. Also, AAI sponsors an inservice teacher training program.

Projects Sponsored by Regional Educational Laboratories

The ALERT System

Purposes of ALERT (Alternatives for Learning Through Educational Research and Technology), sponsored by the Far West Laboratory for Educational Research and Development, are to provide an information service for educators and to increase their awareness, understanding, and decision-oriented evaluation of new educational programs. The primary target audience is school decision-makers, broadly defined to include teachers, students, parents, and community spokesmen.

The ALERT system provides objective, summarized, analyzed, "packaged" information, at different levels of detail, about the best developed and tested innovative programs and projects throughout the country. The long-range purpose of ALERT is to develop the technology necessary to produce such information so that agents other than the Far West Laboratory can continue the work, since the latter plans to terminate its role and assign it to some other agency or agencies.

A variety of educational developments is included in the system. However, the focus is on products and processes that have demonstrated their effectiveness. For the most part, traditional programs and materials such as commercial textbooks are not included unless "development" and field testing have been conducted. ALERT will also include "maverick" programs that offer

new, unique solutions to pressing problems but that have not necessarily been tested and evaluated; programs that are unique in their coverage of content; and programs that have been widely adopted but effects of which are not yet well known.

The emphasis is on information about development, not research. Once-only projects being developed by schools are included only when there is reason to believe that another school could satisfactorily obtain the materials and training necessary to duplicate that effort. Further definition of standards by which programs in each category are included in the system is in progress.

It is important to note that ALERT does not provide the training necessary actually to implement the programs it describes. The inservice and preservice training required to operate new programs must be designed by those responsible for development. ALERT focuses only on providing sufficient information to enable ALERT users to decide whether to adopt, reject, or adapt a development.

The specific information products available from ALERT at present include the ALERT Card File and three types of information units.

ALERT Card File. The ALERT Card File is a box of edge-punched sort cards describing the key features of each educational program in ALERT in less than 300 words. Using edge punches corresponding to the major characteristics of educational programs, the user can sort the cards to identify a comprehensive set of alternatives to be studied in detail. The sorting system is accompanied by instructions, guides to help with curriculum evaluation, newsletters, and preprinted routing envelopes to circulate to staff and interested laymen. As demands rise and resources become available, special versions of the sorting system will be developed in specific subject

areas.

After gaining access to the system through the ALERT Card File, the user can obtain additional information to help in decision-making through three kinds of detailed products within the system: Summaries, Audiovisual Briefings, and Reports. Summaries consist of brochures that describe each program in less than 1,000 words. Photographs are used where appropriate. Audiovisual Briefings are coordinated filmstrips and tapes showing the programs in action and focusing on what happens when the child is learning. These materials are especially suited for use with groups of people. Reports provide detailed descriptions of each program, including information on general goals, specific objectives, content, materials, teaching strategies, implementation requirements, cost, and evaluation.

Information Units. The various information products described above are based in three types of information units designed to meet the needs of decision-makers:

Individual Information Units designed for the needs of one person or one school package information products on specific educational programs th the user identifies through use of the ALERT card sort system.

Prepackaged Information Units are provided in general fields such as elementary science or secondary social studies. These units consist of groups of Summaries, Briefings, and Reports, along with decision-making guides, in areas where a large number of schools or groups would have essentially similar needs for information. Of special interest to social studies teachers is The American Government Information Unit: Curriculum Alternatives for Secondary Schools (discussed below).

Reviews, a third type of information unit, deals with trends in selected fields. In areas where there is not a large number of well developed alter-

natives, special information units will be developed to assist school decision-makers in selecting an "interim" course of action. Using these Reviews, a school might decide to do nothing until the field is better defined and materials are available, or the school staff might pull together existing resources in a specially designed program. Plans are under way for development of a curriculum analysis service whereby a user could complete a detailed questionnaire that analyzes his curriculum needs. Using computers, this profile would be compared with the characteristics of existing resources to define a special curriculum.

The American Government Information Unit

The first social studies information unit prepared by the Far West Laboratory was published in 1971 and is entitled The American Government Information Unit: Curriculum Alternatives for Secondary Schools. This oversized paperbound book was field tested and demonstrated at program sessions of two national conventions of the National Council for the Social Studies. Purposes of the unit are to inform school personnel, school boards, and communities about the new social studies; to help educators make adoption decisions for secondary government, civics, and other social science courses; and to provide materials for summer institutes and curriculum planning.

The book compares and contrasts the major characteristics of nine new American government programs that involve "inquiry" and "discovery" approaches. A full-scale report on each of the programs covers goals and objectives, content and materials, classroom strategy, student and teacher prerequisites, implementation (requirements and costs), program development and evaluation, and project history. The programs included are Thinking Reflectively About Public Issues, American Political Behavior, Episodes

in Social Inquiry, Public Issues Series, Comparative Political Systems, Lincoln Filene Center (LFC) Secondary Social Studies, Justice in Urban America, The Price of Freedom, and The Amherst Project.

This information unit provides administrators, teachers, and teacher trainers with a single source containing everything needed to make rigorous and impartial decisions. It has been found that decisions can be made more quickly and less expensively when a group of options can be examined comparatively and without bias. Another reported advantage is that the decision-maker can now be confident that he has not overlooked some actionable alternative that was looming just beyond his horizon.

Dissemination Activities of Curriculum Developers

The High School Geography Project

Numerous curriculum materials projects have turned attention to the problems of how teachers can learn to use the new materials effectively. In its last year of operation (1969-70), the High School Geography Project (HSGP) devoted substantial effort to the development of three teacher education kits that addressed the problems of Using Simulation to Improve Instruction, Using Evaluation to Improve Instruction, and Using Media to Improve Instruction.

The model used in teacher training by the HSGP is extremely simple. The teachers experience the theme under consideration (media, simulation, or evaluation) through using actual HSGP materials much as the students would in the classroom. Once the theme has been experienced, the teaching methodology is debriefed. In the simulation kit, for example, the teachers debrief the "metfab" simulation according to established game theory. The third step is application of the theme to a new simulation.

Videotapes are provided for application purposes.

The advantage of the HSGP model is that, although geography provides the medium for the kit, the model tends to change teacher behavior in all situations and classes dealing with the theme under consideration.

CHAPTER 6

SOCIAL STUDIES FIELD AGENT TRAINING PROGRAM, INDIANA UNIVERSITY

This chapter describes in detail a specific attempt to train social studies field agents. As indicated by the preceding chapters, there have been many efforts to promote change in the area of social studies. However, to our knowledge, the Social Studies Field Agent Training Program was the first attempt to prepare persons specifically to fill change-agent roles in this particular subject area. The program is not being described because it is one that all should emulate; rather, the description should serve as a useful case study of one kind of effort to move ideas more systematically from developer to adopter.

History of the Project

In 1969, Professor Howard Mehlinger of Indiana University conducted a study for the Ford Foundation on the problem of diffusion of innovation in the social studies. The study sought answers to four questions: (1) Is there a need for "field agents" in social studies? (2) Are there people who could be recruited to fill the field-agent role if the need is established? (3) If people were recruited as field agents, what kinds of institutional affiliations would be most desirable? and (4) If there is a need, if field agents could be recruited, and if they could establish an appropriate base, is it likely that the schools would pay for field-agent services once they were available and once they could be demonstrated to be useful and effective?

During his two-month study, Professor Mehlinger interviewed nearly 40 persons, including university faculty members, school teachers and administrators, USOE personnel, foundation officials, and individuals currently engaged in social studies research, development, and dissemination. All agreed that some kind of diffusion agent in social studies is needed, that it is very difficult to reach classroom teachers and school administrators with information about current developments in the social studies, and that current efforts to disseminate and demonstrate innovations were mostly ineffective. Some individuals noted that the transmission of information should flow in two directions: while teachers need information about efforts of researchers and developers, the latter must become more aware than in the past of the concerns of social studies teachers and school administrators.

A set of field-agent specifications emerged from the interviews. The respondents indicated that a field agent should be a bright, articulate individual, broadly trained in history and the social sciences, with a sound knowledge of research and development in the social studies. He should like working directly with teachers and should be willing to disseminate the work of others. He should have a capacity for organization; an ability to gain access to developers, teachers, principals, scholars, and administrators; and an unusual amount of patience.

The persons interviewed also felt that there were two major sources of field agents: social studies teachers in the public schools and doctoral candidates in social studies education. The present project decided to concentrate on social studies teachers. These persons would be carefully selected and would be given special training for the field-agent role.

Another purpose of the survey was to find out whether field-agent services, once established, could become self supporting. The school administrators who were interviewed expressed a willingness to buy services that had been shown to result in positive change. It was realized, however, that outside support would be required to establish such services and to test and perfect the system.

On the basis of Professor Mehlinger's study, a proposal for an experimental program to train social studies field agents was prepared by Professor Gerald Marker and Professor Mehlinger and was submitted in 1969 to the Bureau of Educational Professional Development of USOE for funding.

The project was approved for the period of May 18, 1970, to June 30, 1972, by USOE and was funded at $135,570. Supplementary funds were obtained from the Ford Foundation for the period September 1, 1970, to September 1, 1971, for the purpose of providing kits of needed materials for the field agents to take back to their schools, for the support of doctoral associates, and for the diffusion of the field-agent idea.

Description of the Program

Objectives

The primary short-term objective of the proposed program was to train 11 social studies teachers who would return to their schools and serve as field agents for their geographic regions. After completing their training, they would return to their school systems to fill new roles agreed to by their superintendents and principals, while continuing to maintain contact with the university center at which they were trained.

Specifically, the program was intended to (1) increase participants' knowledge of the basic concepts, principles, and analytic skills in history and the social sciences; (2) familiarize participants with a wide range of curriculum materials and teaching strategies; (3) introduce participants to the many university resources upon which they could draw after returning to the field; (4) give participants an opportunity to participate in development of curriculum materials; (5) give participants experience in planning and conducting diffusion workshops and conferences; (6) teach participants principles and generalizations regarding the change process, enabling them to apply this learning to local settings; and (7) encourage the development of attitudes supportive of innovation and change (e.g., open-mindedness, flexibility, tolerance of ambiguity, rational decision-making).

The long-term objectives were to (1) demonstrate that social studies field agents can be recruited and trained; (2) provide a training and utilization model for other colleges and universities; (3) broaden and strengthen the social studies education program at Indiana University; and (4) assist the university in more adequately serving the needs of the schools in its region of influence.

To accomplish these objectives, the trainees were to spend a full academic year (two semesters plus a summer session) at Indiana University, where they would receive training. They would then return to their schools, where, with assistance from the University in terms of consultation and materials, site visits, and workshops, the trainees would attempt to introduce desired changes in the social studies programs in their schools.

Role of Indiana University

Indiana University was to provide (1) the needed training with respect to new social studies approaches and curriculum materials, and (2) the follow-up support the field agents would need when they returned to their schools.

With regard to the university's training role, two aspects were involved: (1) the academic program through which the participants would take a specially designed series of courses in social studies and on the change process, and (2) internship-type activities through which the participants would obtain actual experience in developing and modifying curriculum materials, planning and conducting workshops, and participating in dissemination efforts.

A number of activities related to social studies development at Indiana University made this an ideal site at which such a program could be based. In 1968, the Social Studies Development Center was established at the university to foster the invention, development, and diffusion of new products and forms of practice that could improve social studies instruction in the school. This interdepartmental center, administered by a policy committee appointed jointly by the Dean of the College of Arts and Sciences and the Dean of the School of Education, includes faculty members from the political science, history, sociology, and anthropology departments, as well as from the school of education.

One project affiliated with the Social Studies Development Center is the High School Curriculum Center in Government, cosponsored by the Department of Political Science and the School of Education. Supported by USOE, this project is developing improved materials for civics and government courses. It has developed a two-semester high school course

entitled American Political Behavior.

The center also cosponsors, with the Department of History, the American Historical Association's History Education Project, through which teams of historians, social studies specialists, and social studies teachers throughout the country work together to improve the teaching of history in the schools. Funds have also been received from the NSF to continue the development of materials on anthropology begun in connection with the Anthropology Curriculum Study Project. Other projects at various stages of development include an effort to develop a high school world history course that seeks to take advantage of concepts and perspectives drawn from the social sciences and a project in conjunction with the National Instructional Television Center at Indiana University to develop a series of instructional television programs on contemporary affairs for use in grades 5-7. The most recent undertaking of the Social Studies Development Center is the Social Studies Diffusion Project described in Chapter 5.

All of these projects provide the trainees with an opportunity to meet and work with social studies researchers and developers. In addition to providing internship opportunities, such contacts put the trainees in close touch with current developments in the field and give them vital communication links that can be maintained after returning to their schools.

Another reason for Indiana University's unusual capability for training social studies field agents and establishing support services for them is its Office of the Coordinator for School Social Studies. The coordinator, a role unique to this university, holds a position in the School of Education, obtains most of his funds from the College of

Arts and Sciences, and reports to an advisory committee of professors from social studies education and from the history and social science departments. The coordinator's major task is to improve the teaching of social studies in Indiana schools. He is responsible for bringing useful information on social studies to the schools through conferences, school visits, and quarterly newsletters, and for reporting the concerns of social studies teachers and school administrators to Indiana faculty members. Professor Gerald Marker, the coordinator and codirector of the training program, and Thomas Brown, his assistant, serve as major disseminators of social studies practices for Indiana and adjacent states.

Recruitment and Selection of Trainess

In late March 1970, as soon as word was received that the program had been funded, a brochure was prepared describing the program and urging interested and qualified persons to apply. This brochure was disseminated using the mailing list of the newsletter of the Office of the Coordinator for Social Studies. (Entitled News and Notes on the Social Sciences, this newsletter reaches about 1,200 teachers, administrators, and libraries). The brochure was also sent to officials of state education departments in Michigan, Ohio, West Virginia, Kentucky, Illinois, and Indiana. This territory covered all school systems within a 300-mile radius of Indiana University. Each chief state school officer (e.g., state superintendent) was sent 50 copies of the brochure to be passed on to interested schools, and copies were also sent to state social studies supervisors. In addition, the Indiana University social studies coordinator and other faculty members distributed information about the program wherever they traveled during the recruitment period.

A number of requirements undoubtedly reduced considerably the number of interested teachers who applied. First, they were to apply only if their participation in such a program, entailing absence from their job, was approved both by their principal and superintendent. Moreover, the superintendents had to make certain commitments to the program. They had to promise to support the field agent after his return to the school by adjusting his teaching load in order to give him released time to work as a field agent; to facilitate his attendance at national and state social studies conventions; to attend follow-up workshops at Indiana University; and to try generally to provide whatever financial and administrative assistance the field agent would need to carry out his objectives. A "statement of intent" outlining these commitments had to be signed by both the principal and superintendent of each applicant.

A total of 34 applications with such letters of intent was received from prospective trainees. The applications were carefully screened in an attempt to seek bright, energetic, young social studies teachers (or supervisors) who wished to take a one-year sabbatical to acquire new skills in social studies. An attempt was made to select applicants who (1) were social studies teachers or supervisors in a school system within a 300-mile radius of Bloomington, Indiana; (2) could demonstrate previous academic achievement that would predict success in the M.A.T. program and were qualified for admission to the Indiana University Graduate School; (3) had demonstrated leadership in their own schools; and (4) possessed other personal qualities indicating that they would be effective field agents.

On the basis of these criteria, the number of prospective trainees was reduced to 16. Of these, 14 applicants came to Bloomington for

personal interviews and the 11 trainees were selected from this group.

The 11 trainess, from the states of Kentucky, Ohio, Michigan, West Virginia, and Indiana, were teachers of a variety of social studies subjects, including government, civics, humanities, citizenship, economics, American history, geography, non-western studies, social problems, comparative political systems, sociology, social dynamics, world history, and international relations. Five of the trainees already had master's degrees and several others had done some graduate study.

Four of the trainees had served as chairmen of their social studies departments and one as acting chairman. Five were already members of the National Council for the Social Studies. The trainees were all relatively young, ranging in age from 22 to 32. Most had been active in several school activities, including coaching in sports or serving as advisor to student government, yearbook, drama club, honors programs, or world affairs clubs.

The Academic Program

All trainess in the program were enrolled in the Social Studies M.A.T. program and received a Social Studies M.A.T. degree upon completion of their year of training. The academic program begain in September 1970 and ended in August 1971. During the first semester, the participants were enrolled in nine hours of history and/or social science, a one-hour internship, and a special three-hour seminar, "Improving the Teaching of Social Studies," taught by Professor Marker. The trainess were counseled in selection of history and social science courses to ensure that they enrolled in ones emphasizing social science inquiry.

During the spring semester, the trainees were again enrolled in

nine hours of history and/or social science, another one-hour internship, and a three-hour seminar, "Sociological Aspects of Educational Diffusion," taught by Professor Alice Jwaideh. The program of studies for the 1971 summer session included six hours of history and/or social science, a one-hour internship, and a three-hour seminar entitled "Practicum in Diffusion Techniques," taught jointly by Professors Marker and Jwaideh.

Thus, by the completion of the formal training program, participants had completed 12 semester hours of political science, 12 hours of other social sciences and history, 9 hours of special seminars, and 3 hours of internships, for a total of 36 semester hours.

The Internship Program

The internship program rotated four participants per semester through those university agencies that could provide direct, practical experience relevant to the tasks to be performed by the field agents upon returning to their schools. Thus, each trainee spent one semester as an intern in each of the following: the Development Division of the Social Studies Development Center, the Office of the Coordinator for School Social Studies, and the social studies teacher training program.

Special Seminars

The three special seminars enrolled only the 11 trainess and were designed specifically for their needs. These seminars focused directly upon the various kinds of skills and knowledge that the participants would need in order to perform the field-agent function.

S519: Improving the Teaching of Social Studies. S519 was included in the training program in order to achieve multiple goals. First, it was apparent from the applications that some of the trainees had only a

limited acquaintance with the nature of the new social studies. If the field agents were to serve as demonstrators of the new material, they would have to understand and practice the required behavior. It was also assumed that with an understanding of the substance of the "revolution" in social studies instruction would come a commitment to the reform movement and the materials that play such an important role therein. The first goal of the course, then, was to develop a thorough understanding of the new social studies materials and teaching methods.

A second goal of the course was to engage trainees in many of the same activities they might use in inservice sessions upon return to their home districts. For example, when performance objectives were the topic for study, the trainees were required to learn how to write and use such objectives in a manner similar to that which they could employ the following year. A similar approach was followed with other aspects of the inquiry approach, including the sequencing and teaching of concepts, hypothesis formulation and validation, and value analysis and clarification.

A third goal of the course was to acquaint the trainees with a wide range of social studies materials and the components of an "awareness net" that would enable them to stay abreast of future developments in the field. Trainees were given the opportunity to apply the Curriculum Materials Analysis System to most of the new curriculum packages, and resulting reports were duplicated and exchanged. Various activities introduced the trainees to persons who could serve as continuing sources of information about developments in social studies (e.g., James Becker, who at that time was the National Director of the Foreign Policy Association's School Services Division; Robert Barr, Chairman of the National

Council for the Social Studies Publications Committee; and Lee Anderson, Director of the American Political Science Association's Political Science Education Project). The seminar also included sessions on the location of available materials, such as the use of the Educational Resources Information Center (ERIC).

Finally, another goal of the course was to introduce the trainees to some of the skills and knowledge that were somewhat peculiar to the role of inside change agents. Early in the course, models of change such as the RDDA Model, the Social Interaction Model, and the Problem Solver Model were introduced. Also, a modified version of the Havelock Diagnostic Model was employed by each of the trainees in analyzing the needs and characteristics of his local school setting. Some class sessions were devoted to early planning of the kits of materials that each trainee assembled and took with him when he returned to his school.

R670: Sociological Aspects of Educational Diffusion. This seminar began with an analysis by each trainee of the roles that he expected to perform upon return to his school system. This was followed by a study of the literature dealing with the role of the change agent in education and the factors that have been found by research to be related to change agent success. Later in the semester, a week was devoted to role-playing sessions, in which the trainees were assigned the roles of various members of a school faculty holding specified attitudes toward the new social specified attitudes toward the new social studies. The member playing the role of the field agent had to try to persuade his "colleagues" to try the new curriculum materials.

Topics covered through lectures, readings, and discussions included:

1) Diffusion: elements in the diffusion process; the adoption process; innovation decisions; adopter categories; characteristics of innovations; types of innovations; models of the diffusion process.

2) Individual variables relevant to diffusion: personality characteristics, including confidence and self-esteem, values, needs, authoritarianism; past experiences; information-seeking patterns; attitudes.

3) Internal and group influences: interpersonal relationships; participation in decision-making; group cohesiveness; conformity and social support; social integration; similarity; status; group norms.

4) Institutional and organizational variables: educational institutions as social systems, including the role of superintendent, principals, teachers, school boards, parents, students; inter-role relationships; institutional barriers to educational change; and applications from research findings dealing with organizational change.

5) Political and economic aspects of change: the role of governmental agencies, the role of community power structures and interest groups, and the role of new economic developments such as accountability and performance contracting.

Each participant selected a topic of special interest to him on which he did research and reported his findings to the rest of the class. The topics covered in this manner were communications in school systems, authoritarianism within school systems, the use of reward systems to promote educational change, how to conduct workshops, group problem-

solving techniques, principles of group dynamics, role-playing techniques, sensitivity training, accountability in education, the role of state government in educational change, and community control of education.

One session was devoted to the use of media techniques by change agents. A member of the University's Division of Instructional Systems Technology gave a series of demonstrations on preparation of audio-visual support materials, and the trainees made transparencies from colored pictures selected from magazines.

R590: Practicum in Diffusion Techniques. "Practicum in Diffusion Techniques" was devoted mainly to (1) the use of different kinds of group discussion techniques applied to various issues of concern to the trainees; (2) an overview of educational evaluation; (3) the planning of a series of inservice training programs; and (4) the development by each participant of a detailed plan for a diffusion/adoption campaign in his own school system.

Several days before the session dealing with a particular technique, the trainees were given a set of mimeographed materials covering (1) a description of the technique; (2) its dynamic characteristics with respect to group interaction; (3) purposes or objectives for which it might be used; (4) particular situations for which it would be appropriate; (5) steps and rules for using it; (6) roles of participants including group leader, recorder, observer, group members, and consultant; and (7) cautions in using the technique. The trainees were asked to prepare for each session by gathering information relevant to the particular content to be covered through a given technique as well as by reading material on the dynamics of the technique. At the beginning of each session, participants were assigned the various roles called for by the

particular technique to be utilized. At the end of the session, summaries were presented by the recorder or by the subgroups into which the participants had been (in some cases) divided.

The following is a list of the group techniques covered, together with the content employed in conjunction with each technique:

Technique	Content
Small group discussions	Reasons why teachers should try new social studies materials.
Huddle method (2 sessions)	Problems to be anticipated in use of new materials and kinds of help field agents can provide; things to do and not to do in conducting demonstration lessons.
Buzz groups	Analysis of the primary characteristics of each set of curriculum materials.
Panel discussion	"Divisibility" of the inquiry materials.
Interrogator panels	The role(s) of the field agents.
Committee hearings	Defense by each trainee of the main set of materials he will be diffusing.

Large-group discussion	Evaluation data on the new social studies materials--teachers' and students' reactions.
Brainstorming (5 sessions)	Planning of workshops and inservice programs on evaluation of inquiry skills, performance objectives, games and simulations, questioning techniques, and values and value clarification.

The other major project for the diffusion techniques practicum was the preparation by each trainee of a detailed plan for a diffusion/adoption campaign. This plan, on which the trainees worked for about a month toward the end of the training program, included the following components, together with a rationale for each component:

1) Analysis of the innovation--including its background, purposes, primary characteristics, advantages, evidence of effectiveness, persons for whom appropriate, teacher training requirements, management considerations (cost, funding, etc.), divisibility, physical facilities needed, preparation required, assistance available, problems that may arise in its use, and possible solutions to these problems.
2) Selection of the audiences to be reached--including administrators, teachers' organizations, school board members, community groups, and parents.
3) Analysis of each audience group in terms of its major characteristics--including attitudes, values, and needs.

4) Selection of the optimum diffusion strategy for each group (e.g., rational, didactic, psychological, economic, political, authority, value).

5) Determination of appropriate content and themes for each group (e.g., financial, child-centered, teacher-centered, community-centered, educational "currency," leadership).

6) Selection of media to be used for various audiences (e.g., slides, filmstrips, transparencies, motion pictures, newsletters, brochures, articles, speeches).

7) Determination of the optimum timing (i.e., stages and scheduling of the campaign for each audience).

8) Selection of appropriate techniques for diffusing the innovation (e.g., conducting demonstrations, involving persons affected by the change, building relationships with individuals, utilizing group interaction, dealing with key persons, dealing with opposition, using outside experts, etc.).

9) Installation of the innovation--including plans for limited trials, funding, provision of necessary materials and equipment, selection of personnel, provision of necessary training, distribution of responsibilities, establishment of reward system.

10) Evaluation and modification of the innovation to meet local needs.

11) Follow-up activities.

12) Evaluation and modification of the diffusion/adoption campaign.

These plans were prepared in consultation with the program director and were evaluated and critiqued by three faculty members before being returned to the trainees. Some of the plans were extremely detailed

and complete, running up to about 50 pages in length. In cases where the trainee would be returning to a new or changed position or school situation, the plans, of necessity, contained certain gaps to be filled in upon the field agent's return to his community.

Special Activities

Evening Seminars. In addition to the formal coursework and internships, a variety of special activities and programs was arranged for the trainees. These included a series of evening seminars, often featuring guest speakers who dealt with topics relevant to the training program. Resource persons brought in for these seminars included Mary Lou Nay, a pilot teacher, who talked about social studies materials and resources available to secondary school teachers; Professor Jack Fraenkel of San Francisco State University, one of the developers of the Taba materials for elementary social studies; Professor Dorothy Skeel, who reviewed projects and trends in elementary social studies; Professor James Mahan of the Center for Innovation in Teacher Education at Indiana University, who spoke on his experiences in curriculum installation while he was with the ERIE Regional Educational Laboratory; and Professor John Brown of the Indiana University Urban Education Program, who spoke on the unique problems of urban schools.

One special evening seminar was devoted to a study of the World History Project (Social Studies Development Center, 914 Atwater Street, Bloomington, Indiana 47401). Four members of the project's staff participated. At another session, representatives of the Ginn Publishing Company described multi-media kits forurban junior high school studies programs. Also, the trainees conducted several of the evening seminars

dealing with such topics as role playing, problems of slow learners, games and simulations, and the teaching of international affairs. Further, the trainees participated in two sessions on interaction analysis systems, and received training in the use of the Flanders system from an expert in this field.

Development of Field Kits. As mentioned earlier supplementary funds were obtained from the Ford Foundation for the development by each trainee of a "field kit" of innovative materials to take back with him to his school district. The purpose of the kit was to support the trainee's efforts to promote the diffusion of innovations in social studies. The Ford grant allowed for the expenditure by each trainee of $500 for this purpose.

It was originally expected that the trainees might wish to develop some materials themselves to supplement those that were commercially available. Thus, two audio-visual consultants were assigned to assist in accomplishing this goal. Although a few of the trainees did produce original filmstrips, slides, and transparencies, it turned out that, because of time pressures, most of the money allotted for kit development was used to purchase or duplicate materials that had already been developed.

Kinds of things the trainees acquired for their kits included cassette tape recorders, sample copies of exemplary social studies curriculum materials, copies of outstanding new social studies textbooks, books on the change process and diffusion techniques, supplementary reading materials for use in teaching social studies, copies of games and simulations, copies of transparencies, and materials on some of the special skills required for teaching the new social studies (e.g., materials on preparing performance objectives, value analysis and clarification, questioning technique, hypothesis formation).

Social Studies Administrators' Conference. Early in the spring semester, administrators from the trainees' school districts gathered in Bloomington for a two-day conference with the trainees and faculty members involved in the training program. The school personnel who attended the conference included superintendents, principals, curriculum directors, department chairmen, and teachers. There was at least one administrator from every trainee's school system, and each administrator was urged to bring with him one or more social studies teachers interested in change.

The conference included talks by the Dean of the School of Education and by the codirectors of the training program; a panel discussion by four of the trainees; a report on the baseline evaluation data obtained through field interviews at the trainees' schools; and brainstorming sessions on how to maximize the impact of the field agents upon their return to their school systems. An important effect of this conference was that a number of the administrators publicly committed themselves with regard to ways in which they would support the field agents during the coming school year, such as giving them released time for field-agent activities.

NSF Social Studies Orientation Conference. Representatives from seven publishers of new social studies curriculum materials came to Bloomington for a special 12-day conference during the summer of 1971, and the trainees were invited to attend the talks and demonstrations. This conference, which was sponsored by NSF, was designed primarily for the purpose of introducing curriculum directors, supervisors, and principles to some of the latest social studies development projects. These included Man: A Course of Study, the High School Geography Project, the Harvard Public Issues Project, the Social Science Laboratory Units developed at the University of Michigan, Sociological Resources for the Social

Studies, the Carnegie-Mellon materials, and the Anthropology Curriculum Study Project Materials. The presentation by each consultant was accompanied by demonstration lessons.

Other Activities. Various trainees attended several other conferences during the formal training year. These included a conference on international education held in Evansville, Indiana; a dissemination conference on Man: A Course of Study held at Ohio State University; and the Indiana Council for the Social Studies Annual Convention at Indianapolis. The trainees and the director of the training program also visited the trainees' home schools during the spring semester.

Activities During the Follow-up Year

Objectives. To provide a set of criteria for evaluating the effectiveness of the trainees in their field-agent role and, indirectly, the effectiveness of the training program, 18 follow-up-year objectives were formulated. These were, in effect, the desired outcomes of the field agents' activities during the first year back in their school systems: (1) information about new social studies products and practices will be disseminated to social studies teachers and administrators in field agents'areas more rapidly than would have been the case without the field agents; (2) field agents will build conviction about the "new social studies" among persons with whom they come in contact; (3) field agents will, in their own classrooms and in demonstration lessons, serve as examples of inquiry-oriented teachers; (4) teachers and administrators will contact the field agents and ask them to visit schools,speak at departmental meetings, teach demonstration lessons, display materials, etc.; (5) field agents will speak to organizations, such as the PTA, informing them of reforms currently taking place in social studies; (6) field agents will convince some of their

colleagues to try some of the new social studies curriculum materials and will assist in planning simplified field evaluations of such trials (7) field agents will provide the appropriate persons at Indiana University with information about the needs and desires of the schools with regard to new materials, consultant help, inservice training, and the skills and knowledge required of new teachers; (8) field agents will execute the problem-oriented programs they developed during the training year; (9) field agents will secure the services of resource people necessary to meet the needs of area teachers and school systems; (10) field agents will gain reputations in their areas as "the person to see about what is going on in social studies"; (11) field agents will be assigned to committees and will be given other responsibilities that carry curriculum decision-making power in their schools or districts; (12) field agents will actively seek new contacts with social studies teachers and organizations in their areas; (13) field agents will assist teachers in their areas to become more critical consumers of new social studies products; (14) field agents will assist area schools in adapting new social studies products and practice to local needs; (15) field agents will demonstrate a desire to keep informed of changes in social studies by joining local, regional, state, and national social studies organizations; (16) field agents will conduct themselves in such a manner as to effect change without unnecessarily antagonizing those around them; (17) administrators in the field agents' schools will provide explicit support for the field agents and their activities; and (18) field agents will be provided additional support during the 1972-73 school year by their school systems.

The participants completed their formal year of training in August 1971.

Prior to leaving the university to return to their schools, the field agents were given copies of three kinds of report forms for use in recording activities related to their change-agent role and estimating the degree of success achieved. These three forms were designed to obtain records of formal and informal contacts and data for a semi-annual report. The field agents were also given a critiqued copy of the detailed diffusion/adoption plan that they had prepared during the summer.

Diagnostic Workshop. One major event of the follow-up year was the "Social Studies Refresher Diagnosis Workshop for Field Agents," held at Indiana University in October 1971. All of the field agents came back for this two-day workshop, the main purpose of which was to share reports of progress and problems encountered upon the trainees' return to their school systems. Outside speakers included Tom Collins, Director of the School Programs for the Center for War-Peace Studies, who spoke on ways in which the field agents and the Center could be of mutual assistance, and Bob Pierson, who spoke on the use of evening television as an educational resource.

At the workshop sessions, each field agent reported on developments in his school system. After all of the reports had been made, a group discussion was held to identify common problems and to consider possible solutions. Another session was devoted to a discussion of the feedback report forms for recording the field agents' activities. Plans were also made for the field agents' activities at the 1971 annual convention of National Council on the Social Studies and for two refresher diagnosis workshops to be held in the spring and summer of 1972.

NCSS Convention. Nine of the 11 field agents attended the annual convention of the National Council on the Social Studies, held in Denver,

Colorado, in November 1971. Providing financial support for attendance at this convention was one of the original commitments made by administrators of the schools from which the field agents had come. Only one school system reneged on this pledge. The other trainee who missed the national convention was unable to attend because of family illness.

In Denver, the field agents met with Professor Fred Newmann, a major developer of the Harvard Public Issues Series, and with John Neal, Senior Social Studies Editor for the Ginn Company, publisher of American Political Behavior. The field agents also visited the Social Science Education Consortium, the ERIC Clearinghouse for Social Studies, and the Human Sciences for Middle Schools Project--all located in Boulder, Colorado.

Evaluation. The information to be provided by the field agents through the three feedback forms mentioned earlier will constitute a major source of data for evaluating their performance. Such information will also help to identify problems the field agents face in their schools and will give the program's staff at Indiana University an opportunity to assist in working out solutions to these problems. In addition to identifying problems through these forms, the field agents have been asked to make collect telephone calls to the University whenever necessary. A detailed phone log is being kept to indicate the frequency and content of the phone conversations. The data obtained will be evaluated against the 18 previously listed objectives.

Problems Encountered by the Field Agents

As expected, the first year of field work for the field agents has surfaced some problem areas (at the time of this writing, the follow-up

year is little more than one half over). Thus, individuals who want to capitalize upon the field-agent experience may wish to consider such problems in designing similar programs since at least some of these problems might be avoided through adjustments in the training program.

One set of problems encountered by the field agents grows out of the organizational nature of schools. Of this set, perhaps the most pervasive problem has been a lack of resources. Two of the field agents were working in schools where the financial pinch was such that the systems had to close their doors for a period of time during the 1971-72 school year. While both systems are now back in operation, faculty morale is low, making it difficult to interest teachers and administrators in long-range planning and experimentation. Teachers faced with the prospect of reduced pay and additional class loads the following year are in no mood to volunteer time for committee work to draft performance objectives or to select materials.

A scarcity of resources in most school systems has also meant that field agents have been without secretarial assistance. This has posed a real problem since many of the requests the field agents receive involve writing letters to obtain examination copies of materials and locating addtional information about new programs. Small problems such as lack of access to telephones from which long-distance calls can be made also have reduced the field agents' communication potential. Lack of funds also has made it difficult--impossible in a few cases--to purchase some of the newer materials for trial use. In at least one case, the only way the field agent could obtain trial materials was to purchase them with his kit money provided by the Ford Foundation.

Another system-related problem stems from the turnover of adminis-

strators in the field agents' schools. In over one third of the cases, field agents returned to schools where the principal and/or superintendent was not the person who had supported the field agent's application to the training program. This meant that, in some cases, there was confusion concerning what the system had agreed to provide in the way of support for the field agent upon his return. This also results in a somewhat lower commitment to the program from the "new" administrators.

Further, when the training program was planned, it was assumed that the field agents would know their fall teaching assignments by the preceding spring. This would have enabled them to select experimental materials for those particular subject and grade levels, so that the classes would serve as demonstrations of the new social studies materials and methods. In reality, it was late summer before some of the field agents even knew in which school they would teach, let alone what courses. In addition, two of the field agents were surprised by assignments involving subjects they had not taught previously. These late assignments to new courses forced the field agents to spend considerable time in the fall preparing lesson-related materials rather than engaging in diffusion activities. The widespread practice of making late assignments may also explain why so many regular teachers are trapped into relying on basic texts in an effort to keep up with two, three, or four preparations each day.

The final system-related problem grows out of the budgeting processes typical of large organizations. Often the field agent had hardly unpacked his bags in the fall before he found that requests for materials purchases were due in a few short days and that these requests were for the following year. Thus, to miss the deadline meant that it would be almost two years before major sets of new materials could be obtained. Under such circum-

stances, it became almost impossible to involve other teachers in the process of selecting and ordering materials.

Another set of problems faced by the field agents relates to their new jobs. In nine of the eleven cases, the field agent's role was new in the school system, and even where it was not (two of the field agents returned to their system as social studies supervisors), the agents hoped to give the old role a new emphasis. While the lack of prior role restraints permitted the field agents to develop a role to fit both their settings and their personal notions of what a field agent is and does, it also made for status insecurity. A teacher faced for the first time with a course in sociology can talk to a colleague across the hall and get advice on day-to-day problems. To whom among his colleagues was the field agent to turn for advice about his diffusion problems?

Overload was another of the role-related problems faced by almost every field agent. Near the end of the training year, some of the field agents had expressed concern that they would return to their schools only to find that no one wanted their help or cared about what they were doing. The agents soon discovered that these fears were unfounded. If anything, there were too many requests for the agents' services, or what some individuals thought were their services. Most of the agents had forgotten how little time was left in the school day when one taught four or five classes.

The field agents also wanted to serve as model inquiry teachers. This, they found, meant taking more time to prepare for each day's lesson. The lack of time, coupled with an intense desire to be of service to colleagues, caused the field agents some agonies in terms of setting priorities. Should they take the time to run errands such as arranging for

another teacher's audiovisual needs, or should they invest what little time they had in preparing long-range inservice plans? Eager to please, they often did whatever was requested in the hope that it would build rapport that would pay later dividends. Only time will tell whether their investments were wise ones.

The 26 days of released time that each system had agreed to provide for each field agent also carried with it unanticipated problems. Program directors had expected that such released days would be used by the field agent to visit nearby schools to sit in on classes of colleagues and to visit demonstration sites to view programs in the trial stage. In practice, the field agents proved reluctant to leave their classes in the care of substitute teachers. On occasions when they did, they reported that the amount of time it took them to prepare for the substitute was almost as great as the amount of time they saved the next day. The arrangement whereby the field agent was given a reduced teaching load by one or two classes seemed much more efficient.

Most field agents also reported experiencing various forms of role conflict. For example, should the field agent attempt to generate dissatisfaction with programs that he believed to be inadequate but with which colleagues were quite happy? With whom was the field agent to side when the principal wanted him to promote one curriculum alternative while his teaching friends urged another? During the training program, the field agent was advised to have colleagues visit his classroom and he was to visit theirs. Yet, in many schools, teacher norms regard such visitations as off-limits. Does the field agent conform to local norms, or does he behave as he was urged to do during the training program? Field-agent responses to these and similar dilemmas have varied, and one can only pre-

dict that, over time decisions will go increasingly in favor of local norms as the influence of the training program diminishes.

Another issue has to do with whose problem gets attention. During the training program, it was urged that the field agents discourage major local development or hasty massive project such as developing scope and sequence charts for K-12 in three or four weeks. Ironically, some of the field agents were asked by their principals and superintendents to do these very tasks. The field agents approached the tasks with little enthusiasm but in the end always relented and did the job: "He who plays the piper still calls the tune."

In some instances a conflict of roles developed between the field agent and the department chairman. In two cases, the field agent, who had "gone away for that special training" was seen by the department chairman as a real threat to job and authority. Such conflicts had been anticipated and actually materialized in fewer instances than had been expected. All of the field agents had attempted to head off such problems by returning to their schools frequently during the training year and by striking a supporting and helpful service stance with their department chairmen. Generally, in cases where good relations had existed before the field agent left, such amiable relations were resumed upon the field agent's return.

The training program may also have produced some marginal men--field agents who, upon return to their schools, were dissatisfied with jobs that prior to the program, had been quite to their liking. For some of the agents, it seemed true that one indeed "can't go home again" and pick up where he left off. Many of the field agents reported that they missed the intellectual stimulation of the training year, the campus attractions (such as special lectures), and the feeling of mutual support from others faced

with the new role. The local scene sometimes looked drab by comparison, and this partially explains why at least three of the 11 will move to new positions during the 1972-73 school year: one will return to graduate school; one will take the department chairmanship of a much larger school; and one will go to a position with a state department of education. Two others are presently looking for new positions. In every case, it is the field agent's dissatisfaction with the present position, rather than a desire by the system to get rid of the field agent, that has led to this mobility.

A final pair of problems can be associated with the nature of the innovations the field agents have been seeking to diffuse. Reports filed by the field agents indicate that "divisible" innovations are most often the subject of the field agents' transactions with their colleagues. As one might suspect, it is much easier to persuade a teacher to take two weeks of the regular course to try a portion of some new materials than it is to convince him to try an entire new course. The risk factor is much less when the adopter tries only a small part of the larger package; if it does not live up to his expectations, one can soon return to the tried-and-true and little has been lost.

A low-risk nature of small trials is also consistent with the need to keep down the dollar cost of such trials. As indicated earlier, most of the field agents' systems face tight budgets, and desirable as they might be, large and expensive trials of innovations are often impossible.

The reliance on small trials is a problem only if one believes that, for major change to occur in the teaching of social studies, large segments of sequential materials must finally be adopted. Put another way, this argument claims that the "bits and pieces" approach simply has not resulted

in major curriculum changes in the past, and for the field agents to over-diffuse portions of larger innovations only delays much-needed changes.

Despite problems such as those just discussed, the field agents appear to have been successful in diffusing social studies innovations.* In some of the school systems, it is the first time that anyone has had the responsibility of informing teachers about the growing number of alternatives in social studies. The frequency with which the field agents have been asked to assist in finding solutions to social studies problems is evidence that teachers and administrators are ready to make use of persons with the special kind of training the field agents have received.

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*Program evaluations at this stage must be subjective since the outside evaluation team has not yet reported its findings. Persons interested in the complete final report of the project should address requests to the Social Studies Development Center, 1129 Atwater Street, Bloomington, Indiana 47401.

APPENDIX: DIAGNOSTIC CHECKLIST*

Stage I - Relationship

1.0 Who is the client (potential adopter)?
- 1.1 What groups will you work with directly?
- 1.2 What are the other groups to whom your direct client is related?

2.0 What are the norms of the client system?

3.0 Who are the formal leaders?
- 3.1 Name, position, address, phone number.
- 3.2 Responsibilities that relate to the change process (e.g., who controls the budget, makes teacher assignments)?

4.0 Who are the influentials (informal opinion leaders)?
- 4.1 Name and position (e.g., James Burns, head basketball coach and American history teacher).
- 4.2 What specific instance(s) causes you to classify this person as a influential?

5.0 Who are the gatekeepers (individuals who control the flow of information)?
- 5.1 Name and position.
- 5.2 What specific instance(s) causes you to classify this person as a gatekeeper?

6.0 With whom should you choose to work?
- 6.1 Name and position of each person.
- 6.2 Which characteristics does this person(s) have that made you select him?
  - 6.2.1 Opinion leadership.
  - 6.2.2 Formal authority.
  - 6.2.3 Represents major faction or vested interest.
  - 6.2.4 Public relations ability.
  - 6.2.5 Credibility and respectability.

7.0 What community factors must be taken into account?
- 7.1 Who are the most powerful and influential people in the community?
- 7.2 How do these people usually react to innovations in the community?
- 7.3 How can these people be approached and influenced to endorse the change effort?
- 7.4 What portion of your efforts should be directed at moving these community people?

8.0 What is your relationship to the client?
- 8.1 How can the client be informed that you have assumed a new and different role?
- 8.2 What would the client have to do to convince you that he accepts you in your new role?

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* Adapted from Havelock (1970).

Stage II - Diagnosis

1.0 What are the client's problems (there may be one or many)? (e.g., students dislike social studies courses; teachers are dissatisfied with current materials; instructional objectives are vaguely stated)?

2.0 What are the client's greatest potentials for change (e.g., what do the clients have going for them?)

3.0 What are the client's goals?
- 3.1 Are these clear to all clients?
- 3.2 Is there consensus on these goals?
- 3.3 Do the clients feel these goals are adequate?
- 3.4 How were these goals established?
- 3.5 Are the goals flexible?

4.0 Is there an adequate structure for achieving these goals?
- 4.1 Is there an adequate structure for achieving these goals?
- 4.2 Do members understand their roles?
- 4.3 Do the different roles fit together?
- 4.4 Are some necessary system elements missing?
- 4.5 Are there weak elements?
- 4.6 Are existing elements adequately coordinated?

5.0 Is there openness in communication?
- 5.1 From within?
- 5.2 From outside?

6.0 Do they have the necessary capacities?
- 6.1 Does the system have (or can it get) the necessary resources?
  - 6.1.1 People?
  - 6.1.2 Time?
  - 6.1.3 Money?
  - 6.1.4 Materials?
  - 6.1.5 Facilities?
- 6.2 Does the system have the necessary skills?
  - 6.2.1 Can it train the people it has?
  - 6.2.2 Can it recruit the people it needs?

7.0 Does the system reward members for working toward its goals?
- 7.1 Are students rewarded?
- 7.2 Are teachers rewarded?
- 7.3 Are administrators rewarded?
- 7.4 Are rewards reliable and predictable?
- 7.5 Do rewards come soon enough?
- 7.6 Are rewards supportive of the overall goals?

Stage III - Acquisition and Analysis

(What is available, potentially useful, relevant, and why has it not previously been adopted?)

1.0 What are the sources of potential solutions to the problems identified in 1.0 of stage II? (These are people or things that you have or will consult as you select possible solutions to your local problems).
- 1.1 Resource persons
- 1.2 Publications
- 1.3 Organizations

2.0 What are the possible innovation solutions to the problem(s) that have been identified?
- 2.1 What are the characteristics of each innovation?
  - 2.1.1 Relative advantage?
  - 2.1.2 Compatibility?
  - 2.1.3 Complexity?
  - 2.1.4 Divisibility
  - 2.1.5 Communicability?

3.0 At what stage in the diffusion-adoption process did the adoption of the potential "innovation solutions" stop?
- 3.1 The adopter lacked awareness of the innovation (i.e., he didn't know that such an alternative existed).
- 3.2 The adopter was aware of, but uninterested in, learning more about the innovation (i.e., he heard about it but didn't pursue the matter).
- 3.3 The adopter was interested, sought and obtained additional information, but after personally evaluating the innovation decided not to try it.
- 3.4 The adopter tried the innovation but decided against permanently adopting it.
- 3.5 The innovation was adopted on a "permanent basis" but after some time was discontinued.

4.0 Why did permanent adoption not take place?
- 4.1 Was it because of characteristics of the adopter?
  - 4.1.1 Did the innovation threaten the status of the adopter, thus causing anxiety and resistance?
  - 4.1.2 Did the innovation run counter to the adopter's values?
  - 4.1.3 Did the innovation require mental ability and conceptual skills not held by the adopter?
  - 4.1.4 Did the innovation threaten the social status of the adopter?
  - 4.1.5 Was the innovation seen as acceptable only to national leaders and organizations but not by the "typical" adopters?
  - 4.1.6 Did the adopter learn of the innovation from someone he viewed as an opinion leader?
- 4.2 Was adoption stalled by the system?
  - 4.2.1 Did it violate local norms?
  - 4.2.2 Did economic constraints or lack of incentives halt adoption?
  - 4.2.3 What other system characteristics hindered adoption (e.g.,

poor role definition, no clear line of authority, lack of decision-making power by teachers)?

4.3 Was the innovation itself responsible for its not being adopted?
- 4.3.1 Did it provide advantages over the present practice?
- 4.3.2 Was it compatible with the adopter?
- 4.3.3 Was it too complex?
- 4.3.4 Could the adoption be tried on a limited basis or did the adopter have to try it all at once?
- 4.3.5 Were the results of adopting the innovation easily communicated to other potential adopters?

Stage IV - Choosing the Solution

1.0 Group identification of the problem.
- 1.1 Data-gathering at local level.
  - 1.1.1 Interviews.
  - 1.1.2 Questionnaires.
  - 1.1.3 Review of past studies.
  - 1.1.4 Outside evaluation team.
- 1.2 Articulation conference to clarify the problem(s).

2.0 Deriving implications from research.
- 2.1 Retrieve research summary statements.
- 2.2 Summarize research.
- 2.3 Establish relevancy to local setting.
- 2.4 State implications for action.

3.0 Building awareness and interest in wide range of possible solutions.
- 3.1 Displays.
- 3.2 Demonstrations.
- 3.3 Observation of innovation in trial or adopted stage in another setting.
- 3.4 Self-instructional programs (Individual Information Units).

4.0 Establishing feasibility solutions.
- 4.1 Relative advantage.
- 4.2 Compatibility.
- 4.3 Complexity.
- 4.4 Divisibility.
- 4.5 Communicability.

Stage V - Gaining Acceptance

1.0 Gaining <u>individual</u> acceptance of the <u>chosen</u> solution(s).
- 1.1 Moving adopters from awareness through institutionalization. (See Stage III, 3.9 and 4.0 for help in deciding where to begin.)

2.0 Gaining group acceptance of the chosen solution(s).
- 2.1 How will you work with the innovators? (Refer to Stage I, 1.1 and 6.0).
- 2.2 How will you work with the resisters?
- 2.3 How will you work with the innovators (opinion leaders)? (Refer to Stage I, 4.0, 5.0, 6.0).

3.0 What is your projected timetable of activities? (What do you hope to be able to report by: October 15, November 25, January 1, March 1, June 15?)

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