

THE DEVELOPMENT OF A THEORETICAL MODEL FOR
DIFFUSING THE TRI-ETHNIC CURRICULUM PROJECT

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ABSTRACT

THE DEVELOPMENT OF A THEORETICAL MODEL FOR DIFFUSING THE TRI-ETHNIC CURRICULUM PROJECT

By

Christine Davidson S.S.J.

The major purpose of this study was to develop a theoretical model for the diffusion and subsequent implementation of the Tri-Ethnic Curriculum Project. The first phase is a program of teacher "awareness of role" in the Tri-Ethnic Experiences: Black American; American Indian; and Spanish-speaking American. The model could have implications in determining the procedures for program development, the decision making process, and administrative functions as the Tri-Ethnic Curriculum Project moves through a second and then third phase.

The diffusion model was produced through the logical derivation of a set of research implications for educational innovations to which several elements from sociology and psychology are interrelated. An inter-disciplinary approach was used, applying social science findings to persons, groups, organizations and school systems in the process of curriculum development and the diffusion of innovations in education.

A model was constructed using three phases which were extracted from common elements found in the literature and which appeared appropriate for the development of a theoretical diffusion model. They include antecedent activities, adaptation activities, and follow-through activities.

The diffusion process was developed by synthesizing factors related to three perspectives: the Social-interaction Model; the

Research Development, and Diffusion Model; and the Problem-Solving Model.

The curriculum model, implementation mechanism, and the recommendations from which these were synthesized were directed to the superintendents of parochial schools in the five dioceses of Michigan who are ultimately responsible for improved curriculum in the five diocesan school systems.

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PREFACE

The teacher in-service phase of the Tri-Ethnic Curriculum Project was designed to create awareness and to stimulate reaction to a national problem: the forces in our society which feed upon the fears of man and which put man against man because of ethnic and/or racial background. The second intent was to provide stimulus that might lead to a felt need within teachers to better understand the role of the teacher in the Tri-Ethnic Experience:

- 1) Develop an awareness and understanding of the Tri-Ethnic History and Cultures.
- 2) Knowledge of the Black community, Spanish-speaking community, and American Indian community with regard to mores, organization of community, the family, etc.
- 3) Develop an insight into the needs of people of ethnic groups, e.i., their most pressing concerns and how they may best achieve them.
- 4) Self-awareness, the teacher looking into himself in an attempt to define his role and what he brings to the overall objectives of the Tri-Ethnic Experience.

The theoretical model developed in this study for diffusing Phase I of the Tri-Ethnic Curriculum Project was derived from a synthesis of models presented from three perspectives: social-interaction; research, development and dissemination; and problem-solving.

A study of organizational roles; people and groups of people; systems for teacher education and interaction; and the diffusion process provided implications from which recommendations were derived for determining the roles and functions of those initiating and receiving the awareness and reaction program.

Phase II and III of TECP will follow should Phase I bring about a felt need to assess the problem at the local levels, and interest eliciting concern, diagnosis, alternatives and decisions toward the development of educational programs specifically designed to further the Tri-Ethnic Experience. The theoretical diffusion model assumes the continuum of Phases I, II and III, although there is no assurance that all or any of the local school systems will move through the complete process.

CHAPTER I

ORGANIZATION AND DEVELOPMENT OF THE TRI-ETHNIC CURRICULUM PROJECT

The five bishops of Michigan recently agreed to fund the Tri-Ethnic Curriculum Project for the selection and organization of curriculum materials and the initiation of instructional programs in the three principal minority groups' histories and cultures (Black, Spanish-speaking American and American-Indian) under the general coordination of the five diocesan superintendents. The Tri-Ethnic Curriculum Project (TECP) will likely alternate summer planning with academic year program development for a three year period.

Organization and Development

TECP began its work in June, 1970. The full-time staff consisted of a director for the project, curriculum specialists of history and the humanities, and a librarian. Consultants and resource people were enlisted from diocesan education staffs, from the Lansing Public schools, from Michigan State University, from the University of Michigan, Madonna and Aquinas Colleges, and from elementary and secondary schools over the state. This team included members of the tri-ethnic groups as well as anglo educators.

Their specific goals for the summer of 1970 included the following:

- 1) To promote action programs in the Catholic schools in Michigan with special emphasis on teacher awareness and motivation in tri-ethnic histories and cultures

- 2) To identify and classify available written and visual materials as well as human resources for continuing teacher education
- 3) To develop annotated bibliographical material identified according to instructional levels and subject matter
- 4) To disseminate research and annotated bibliographies to superintendents, diocesan curriculum staffs, principals and teachers
- 5) To research diffusion processes involving administrators and teachers in meaningful interaction that might facilitate the implementation of action programs

This group completed a guide (150 pages) containing a complete description of the Tri-Ethnic Curriculum Project. There are annotated guides and suggested strategies for implementing a program of awareness for teachers and available materials in the Tri-Ethnic experience for administrators, teachers and students.

Design and Purpose of the Study

This study was designed as a synthesis investigation. The major purpose was to develop a model which would provide a theoretical structure for the subsequent diffusion and adoption of the Tri-Ethnic Curriculum Project.

The model could have implications in determining the procedures for program development, in-service programs, the decision making process and administrative functions for the implementation of the Tri-Ethnic Curriculum Project.

The following procedures were pursued in constructing the model: a comprehensive review of literature and research was made on the utilization and dissemination of knowledge and the diffusion of change; an interdisciplinary approach was used applying social science findings to persons, groups, organizations and school systems; studies of diffusion and adoption models from different research traditions were

compiled evolving a theory based on them; a theoretical model was developed.

The following issues were investigated relative to the reviews of research studies and professional literature:

- 1) What is the relevance of previous research dealing with the diffusion and adoption of innovations for the Tri-Ethnic Curriculum Project?
- 2) What are the findings of diffusion research regarding the organizational functions which need to be developed within the school system for initiating and diffusing change? What are the implications of these findings for the Tri-Ethnic Curriculum Project?
- 3) What are the findings of diffusion research focusing on the internal functioning of the school system in the process of change? What are the implications of these findings for the Tri-Ethnic Curriculum Project?

Basic Assumptions

- 1) The research studies and professional literature provide a valid picture of the special properties and processes of educational change.
- 2) Certain elements, characteristic of the knowledge utilization and diffusion-adoption process, are applicable to the diffusion and adoption of the Tri-Ethnic Curriculum Project.
- 3) Diffusion and adoption of innovations in schools or school systems should not be equated with chance, but with development.

Limitations to the Study

This study was limited to the observations and reviews that the writer was able to make. It was further limited to the isolation of issues which could be used in building a model for a specific project, namely, the Tri-Ethnic Curriculum Project.

The researcher's background of involvement in the Tri-Ethnic Curriculum Project was a limitation in that complete objectivity may have been lacking. This may have influenced the choice and



interpretation of research and literature on the subject of diffusion processes from which the theoretical model was constructed and defended.

The exploratory nature of the study represented a limitation as far as the specificity of results are concerned.

Definition of Terms

Diffusion: the process of transmitting a message from a source system, be it a person or aggregate of persons, through a second system, which acts first as a receiver then as a source, to a third and to later systems.¹

Dissemination: a similar process having three more ingredients:

- 1) the system within which the transmission takes place is well defined;
- 2) the transmission is a deliberate effort on the part of the source component;
- 3) the description and control of the transmission process within the system is more or less complete and precise.²

Process: the inter-action in which staff members experience relations between and among themselves which allow for reciprocal influences of one upon the other, behavioral outcomes in the classroom, and growth in educational philosophy.

Organization or institution: a system with the following attributes:

- 1) A number of offices have specified functions
- 2) The offices are structured along hierarchial lines
- 3) Within each office are specific positions which have specific roles in terms of the functions and products of the system
- 4) Rewards and punishments are regulated according to established rules which usually specify the required competence of the occupant of the position



- 5) Operational communication and interaction, except in infrequent, deliberately arranged occasions, takes place along the lines of hierarchical structure.³

Change: measurable alteration or difference in the school system or a sub-system, such as administrators, teachers, pupils or parents.

Change orientation: an individual's degree of general predisposition to change.

Curriculum: the result of interaction of a complex of factors, including the physical environment and the desires, beliefs, knowledge, attitudes and skills of the persons served by and serving the schools, namely, the learners, community, adults, and educators.⁴

Background Research

Although scholars in several research traditions have studied diffusion, Rogers tells us that there has been little "diffusion" among these traditions. For example, medical sociologists, rural sociologists, anthropologists and educators are mostly unaware of each other's findings. "Every research area", he says, "reaches the point where greater returns are available from a synthesis of the findings already available than from investing resources and efforts in additional research."⁵

The diffusion research tradition is exemplified by studies in the fields of rural sociology, education, medical sociology and communication. In the rural sociology tradition, central attention has been directed toward the diffusion of agricultural innovations such as hybrid seed corn (Ryan, Lionberger, Rogers).⁶ In the medical sociology tradition, the diffusion of new drugs has been the focus of attention (Katz, Menzel, Winick).⁷ In education, Columbia University's Teachers College conducted an extensive research program under the leadership of Paul Mort to study the adaptability of schools to change and innovation.

In fact, Carlson tells us that the history of diffusion research in education has been tied to this one man.⁸

The most significant integrative effort to date in the general area of dissemination and utilization has been the work of Everett M. Rogers and his associates at The Ohio State University and currently at Michigan State University. He has undertaken a comprehensive review of the literature and has employed an interdisciplinary comparative approach, compiling studies from several different research traditions. Finally, he has attempted to integrate these findings and evolve a theory based on them.⁹

Rogers summarized graphically six major research traditions on the diffusion of innovations:¹⁰

TABLE 1.

A COMPARISON OF THE DIFFUSION RESEARCH TRADITIONS

Tradition	Main Disciplines Represented	Main Method of Data-Gathering and Analysis	Main Unit of Analysis	Major Types of Findings
1. Anthropology	Anthropology	Participant observer combines with descriptive analysis	Societies or tribes	How idea diffuses from one society to another; consequences of innovation
2. Early sociology	Sociology	Data from secondary sources, and a type of statistical analysis	Mainly communities, but also individuals	S-shaped adopter distribution; correlates of innovativeness



Table 1 (cont'd.)

Tradition	Main Disciplines Represented	Main Method of Data-Gathering and Analysis	Main Unit of Analysis	Major Types of Findings
3. Rural sociology	Sociology	Personal interviews and statistical analysis	Individual farmers	Correlates of innovativeness; characteristics of ideas related to their rate of adoption; source of information at adoption process stages; S-shaped adopter distribution
4. Education	Education	Mailed questionnaires and statistical analysis	School systems	Correlates of innovativeness; S-shaped adopter distribution
5. Industrial	Industrial economists; Industrial historians; Industrial engineers	Case studies and statistical analysis	Industrial	Correlates of innovativeness
6. Medical sociology	Sociology; Public Health	Personal interviews and statistical analysis	Individuals	Opinion leadership in diffusion; correlates of innovativeness

Bennis, Benne and Chin studied change broadly enough to include intersystem linkage problems and influence processes as major aspects. Their volume gives valuable leads into the social-psychological and

*A research tradition is a series of research studies on a similar topic in which successive studies are influenced by preceding investigations. (Rogers)

sociological literature pertaining to utilization that are not found in Rogers.¹¹

Miles has also compiled a reference volume. A number of studies are included which define innovation broadly enough to encompass organizational change. Of special note is Miles'¹² discussion of "temporary systems" in which he includes such phenomena as conferences, collaborative action-research projects, and other mechanisms used for dissemination and utilization purposes in diffusing change.

A third set of papers has been produced as a part of the Cooperative Project for Educational Development edited by Watson.¹³ These papers provide a broad theoretical background on the problems of knowledge dissemination and utilization in general, with specific emphasis on education. Taken together, they range across nearly every area which is relevant to educational change: properties of schools as social systems, crucial issues in organizational development, strategies for working on problems of change in school systems, and change agents. They are authored by some of the known scholars in the field; Benne, Lippitt, Miles, Havelock, Thelen, Jung and Watson.

In 1969, Ronald Havelock et al., presented a report to the United States Office of Education. It provided a framework for understanding the processes of innovation, dissemination and utilization. He viewed dissemination and utilization as a transfer of messages by various media between resource systems and users.¹⁴

Organization of the Study

This chapter has presented the problem, described the purpose and design of the study. The basic assumptions and limitations of the study were also presented. The study was premised on the relevance



of the findings of research and literature for the development of a theoretical model for diffusing the Tri-Ethnic Curriculum Project. Chapter II formulates the findings of research, focusing on the internal and external processes critical to knowledge dissemination and utilization and the implications of these findings for the diffusion and adoption of the Tri-Ethnic Curriculum Project. Chapter III describes the characteristics of diffusion models. On the basis of the issues researched, and from the implications derived in Chapter III, a theoretical model was synthesized for the diffusion of the Tri-Ethnic Curriculum Project. A summary of the recommendations is presented in Chapter IV, along with the theoretical model.

FOOTNOTES

¹Nan Lin, et al., The Diffusion of an Innovation in Three Michigan High Schools: Institution Building through Change, (Michigan State University, Department of Communication, 1966), p. 12.

²Ibid, p. 79.

³Ibid, pp. 78-79.

⁴Alice Miel, Changing the Curriculum: A Social Process, (New York, D. Appleton-Century Co. Inc., 1946), p. 6

⁵Everett Rogers, The Diffusion of Innovations, (New York, The Free Press, 1969), p. 6.

⁶Ryan, Bryce, and Neal Gross, "The Diffusion of Hybrid Seed Corn in Two Iowa Communities", Rural Sociology, Vol. 8, 1943, pp. 15-24.

Herbert F. Lionberger, "The Diffusion of Farm and Home Information as an Area of Sociological Research", Rural Sociology, Vol. 17, 1952, pp. 132-140.

Everett Rogers, Diffusion of Innovations, (New York, The Free Press, 1962), pp. 33-35.

⁷Elinu Katz and Herbert Menzel, "On the Flow of Scientific Information in the Medical Profession", Mimeographed Report, Columbia University Bureau of Applied Social Research, 1954.

Charles Winick, "The Diffusion of an Innovation Among Physicians in a Large City", Sociometry, Vol. 24, 1961, pp. 384-396.

⁸Richard O. Carlson, "Summary and Critique of Educational Diffusion Research", presented at the National Conference on the Diffusion of Educational Ideas, printed in Research Implications for Educational Diffusion, Michigan Department of Education, 1968, p. 16.

⁹Everett Roger, *ibid*.

¹⁰Ibid, pp. 55-56.

¹¹Warren Bennis, Kenneth Bennis, Robert Chin, The Planning of Change, (New York, Holt-Rinehart and Winston, 1966).

¹²Mathew Miles, ed., Innovation in Education, (New York, Teachers College Press, Columbia University, 1964).

¹³Goodwin Watson, ed., Change in School Systems, Cooperative Project for Educational Development, NTL Institute for Applied Behavioral Science, Washington, D.C., 1967.

¹⁴Ronald Havelock, et al, Planning for Innovation through Dissemination and Utilization of Knowledge, Final Report to United States department of Health, Education, and Welfare, United States Office of Education, 1969.

CHAPTER II

FROM RESEARCH TO PRACTICE

Introduction

The main purpose of this chapter is to synthesize available research findings and theories on the diffusion of innovations. The most common orientation taken by those doing diffusion research on educational innovation consists of elements connected to what is called communication theory. In 1968, Carlson stated that no theory of diffusion had guided research on educational innovations, nor had one been developed from such research. There was, at that time, no real agreement on concepts involved in adoption behavior and there was no adequate synthesis of concepts into a general theory.¹

A Collaborative Enterprise

The utilization process has been broken down by some researchers into two major categories. The first of these are called interpersonal and group membership issues, which deal essentially with the permeability problem, the problem of how individuals share their knowledge. The second aspect could be called technical issues. These deal with the content of the message itself, the manner in which it is prepared and transmitted, and the medium through which it is transmitted.

Lippitt summarizes several key challenges of change which can be coped with by the framework of retrieving, processing, and using external and internal knowledge resources:

- 1) "Closing the gap between problem-pain and diagnostic sophistication: Every educational practitioner with some type of "problem itch" **needs to illuminate and articulate the problem by using methods of self-search and/or self-inquiry and methods of scanning the experiences of others and getting feedback from others.**
- 2) Closing the gap between good intentions and effective output: Basic research and evaluation research tell us that the processes of linkage between intention and action are complex and frequently non-actualized. The issues of effective commitment, skill security, and social support must be recognized and coped with. This requires a process of retrieved internal knowledge of the self and external knowledge from research on decision making and action taking."

These two gaps have been problems of individual change. Lippitt cites other gaps which are "inter-individual and inter-group." One is that between the students and those adults who work directly with them -- teachers, counselors, and others. Another gap is between the direct workers and those in the school system who are responsible for supporting, supervising, guiding their performance -- principals, consultants, supervisors and the like. A third gap is between the active educational team and the policy team of sanctioners, planners, opportunity providers -- the superintendent, school board, community resource leader, parents and so on. All three of these collaborative contexts must be the focus of continuous external and internal knowledge retrieval and utilization.³

Benne further states that planned educational change which is to be successful will require the collaboration of practitioners with social scientists and with engineering methodologists.⁴

Among seven factors included by Havelock in the diffusion and utilization process is "linkage". He defines linkage as the "number, variety, and mutuality of Resource System -- User System contacts, degree of inter-relatedness and collaborative relationships."⁵

Lippitt raises some pertinent questions in looking at a total socialization program of the society:

- 1) Development of dialogue about socialization objectives.
"There is a critical need to involve our social and educational philosophers, religious leaders, and humanists in the concrete analysis of the basic goals and instrumental objectives of the socialization process — not general philosophical analysis, but disciplined dialogue with the scientists and practitioners to inquire into and clarify the varied goal orientations needed as basic guidelines for the performance of all socialization agents.
- 2) Co-ordination of the socialization community noting the "chaotic medley of socialization vested interests which impinge on the life space of the socializee". In the pluralistic community and society, there is no room for the "socialization czar", but critical need for voluntary sharing of values and the development of program collaboration.
- 3) In-service education for parents and family units.
- 4) Comprehensive school improvement programs: "The school receives far too little collaborative help from other segments of the community and far too much criticism of failure . . . at the same time, the school is typically very backward in utilizing the resources of social research and theory to improve its functioning as a sub-system of community and as an organization."
- 5) The involvement of all segments of the socialization community: "To involve the socializees to the greatest extent possible in setting goals, providing feedback about their response to their socialization experiences, and taking initiative in innovating growth and development experiences for themselves."
- 6) Mobilization and development of university resources: "There is a great need for basic research to increase the range and validity of the diagnostic insights required by those who should lead the engineering of improved socialized practice."

Research Utilization: The Process of Internal Linkage

In the typical research utilization process, there are linkages having to do with connection between the production of a piece of knowledge (new data, theory, practice, method) and its adoption and

utilization by relevant users. One part of the linking process takes place within the knowledge consumption unit -- a person or group or organization.

An action-research team headed by Ronald Lippitt has worked in collaboration with several school systems representing a large and varied sample of elementary and secondary classroom teachers. They discovered that the innovation and spread of high quality teaching practices is a different process from the spread of new developments in agriculture, medicine and industry. In these other fields, which apply new biological and physical research knowledge, the invention is usually a new physical product, e.g., machine, seed, drug, insecticide. Its utilization is primarily a process of objective evaluation and distribution for use. But in an applied social science field, such as education, the new invention is usually a pattern of human behavior, e.g., a new way of behaving toward a group of young learners. Adoption of the social practice or invention must be compatible with the values, attitudes and behavioral skills of the potential adopter. If not, changes in these complex intra-personal belief systems and behavior patterns are required.⁶

Since the adopter (Student, teacher, administrator) is also a member of and accountable to, an intricate social system, interpersonal and social relations would well be taken into account in innovation and diffusion processes.

Verticle and Horizontal Linkage

Research has been focusing on two basically different types of bridging processes linking teachers to new resources and supporting their improvement efforts. They might be thought of as verticle and

horizontal linkages. Lippitt identifies the two processes:

"One form of verticle linking connects the teacher to the knowledge and methods of the behavioral sciences in order to enable him to conduct a personal research and development process in his classroom. . . . Another example of verticle linking is the common process by which scientific or administrative suggestions are passed on to teachers by administrators and supervisors."⁷

He then defines horizontal linking:

"By horizontal linking we mean connecting the teacher to other teachers who are interested in sharing or adopting relevant teaching innovations. In addition to the critical role of the scientist or professional consultant, the interpersonal conditions or relationships in the school building make a great difference in this diffusion process."⁸

Benne further develops the idea of internal collaboration for change:

"The engineering of change and the meeting of pressures on a group or organization must be collaborative. This norm prescribes two general kinds of collaboration. In the first place, it emphasizes the need for collaboration across lines of divergent action interests in a given situation requiring change. Individuals and groups must be helped to see that the task is to discover and construct a common interest out of the conflicting interests which they bring to the interpretation of the situation and to the direction of changes in it."

"The second kind of collaboration required is across lines of 'theory' and 'practice'. A planned change in a school situation must be one which is based on the best available knowledge of relevant relationships and structures, of social forces and factors promoting and impeding various possible changes."⁹

Pellegrin lists ten sources of educational innovation: 1) the classroom teacher; 2) the administrator (principal and/or superintendent); 3) the school board; 4) the lay public; 5) the state department of education; 6) education faculties in colleges and universities; 7) professional associations; 8) the United States Office of Education; 9) textbook publishers; 10) scientists, technical specialists, and other experts. Only the first two can be considered as internal. He

emphasizes the crucial nature of the teacher and the administrator in the diffusion process and adoption of change.¹⁰

Implications from Preceding Research

The implication of the preceding research is that most system innovations come about through diffusion in some way and that there is, therefore, need for transmission processes, for improved diffusion programs.

Studies show that since educational changes are very complex, there are some basic factors in setting diffusion programs:

1. The involvement of a collaborative team within the changing institution
2. A degree of division of labor, co-ordination, and collaboration throughout the social system
3. Collaborative interaction making solutions more relevant, valid and effective

The social system is made up of inter-locking positions and interacting roles. Among the positions in the school system are those of parent, board member, superintendent, principal, teacher, and pupil. Each position requires role-performance in relation to what persons in other roles expect and do as well as building relationships of trust and mutual perceptions within the social system.

Recommendations for the Tri-Ethnic Curriculum Project (TECP):

- 2.01 Collaborative involvement of all members of the social system: superintendent, diocesan curriculum staff, local administrators, building curriculum co-ordinators, teachers, students, school boards and parents.
- 2.02 Determination of process and roles for disseminating the Tri-Ethnic Curriculum Project throughout the system:

- 1) Utilizing a team approach to the knowledge flow and linkage **process**
- 2) Taking **cognizance** of the tasks for which collaboration efforts **amke** a contribution

2.03 Recognition of a need and planning for a functioning system of knowledge linking on the part of administration:

- 1) An institution which includes and supports roles of various linkers
- 2) Need to recruit candidates to serve in these roles
- 3) The need to train recruits to fill these roles

2.04 Appointment and training of a socialization agent to accept and support the development of personalized initiative and identity.

The Intra-Psychic Aspect

An analysis of the utilization of educational innovations leads to an examination of the internal processes within the person which determine whether there will be adoption reflecting a process described by Kelman as "compliance" or more solidly based processes of "identification" and "internalization".¹¹

Lippitt found growing evidence that cognitive knowledge, intention and plan do not predict action or success.¹²

In a study of school classroom behavior, Morse, et al. found no correlation between teachers' statements of philosophy of teaching and their intentions, and what was their actual observed classroom behavior.¹³

Kelman charts three different processes of change which he labels compliance, identification, and internalization.¹⁴

TABLE 2.

SUMMARY OF THE DISTINCTIONS BETWEEN THE THREE PROCESSES

	Compliance	Identification	Internalization
ANTECEDENTS:			
1. Basis for the importance of the induction	Concern with social effect of behavior	Concern with social anchorage of behavior	Concern with value congruence of behavior
2. Source of power of the influencing agent	Means-control	Attractiveness	Credibility
3. Manner of achieving pre-potency of the induced response	Limitation of choice behavior	Delineation of role requirements	Reorganization of means-ends framework
CONSEQUENTS:			
1. Conditions of performance of induced response	Surveillance by influencing agent	Salience of relationship to agent	Relevance of values to issue
2. Conditions of change and extinction of induced response	Changed perception of conditions for social rewards	Changed perception of conditions for satisfying self-defining relationships	Changed perceptions of conditions for value maximization
3. Type of behavior system in which induced response is embedded	External demands of a specific setting	Expectations defining a specific role	Person's value-system

In compliance, the agent of change possesses means of control or surveillance. The actor adopts the induced behavior because he expects to gain specific rewards or approval and avoid specific punishment or disapproval by conforming. The response of the actor does not become part of his framework of values. As soon as the foreign worker leaves, the initiated innovations are likely to be abandoned.

In identification, the agent of change is an attractive figure. The actor accepts influence because he wants to establish or maintain a satisfying, self-defining relationship to the agent. The actor believes in the response which he adopts, but their specific content is more or less irrelevant. The new response is accepted as a value, but it is isolated from other values held by the actor.

In internalization, the agent of change is credible rather than just attractive. The actor's cognitive field is reorganized. The actor sees the nature and utility of the new behavior and perceives its relevance to issues. The new is not only valued; it is also integrated with other values. Havelock proposes that the "congruence-internalization process represents the most direct knowledge utilization strategy; to the extent that information is congruent with his beliefs, a person will accept it". On the other hand, he later states that, "while individuals most readily internalize information which is congruent with their beliefs, they might also be willing to listen to, and possibly be influenced by, information which is incongruent with their beliefs".¹⁵

In a study conducted by Havelock and Benne, they identified fourteen issues with respect to value orientation which are likely to create conflicts among potential senders and receivers in the utilization process. Among those issues identified were general vs unique;

orientation to past, present, or future; unitary vs pluralistic; man vs nature; elegance vs practicality; handwork vs brainwork; autonomy vs dependence; and value-cherishing vs value rejecting.¹⁶

They illustrate the operation of some of these different value orientations by comparing and contrasting the orientations of a health practitioner with those of a basic researcher in a health related discipline:

"The value orientation of the knowledge builder coaches him to choose activities which will maximize knowledge production. The individual cases which he studies are viewed and evaluated from a 'general' rather than a 'unique' perspective, as instances which will confirm or not confirm some generalization which he is seeking to test as a candidate for knowledge status. His value orientation tends further to be 'unitary' rather than 'pluralistic' — he assumes that there are lawful relationships which will reduce the apparent plurality of qualitatively perceived objects and events. His time orientation tends to be toward the future — he emphasizes the need for time to perform all the research operations necessary to support confident statements about the subject matter he is studying. He tends to delay practical decisions in the interest of 'accuracy' and 'truth'."

"On the other hand, the practitioner tends to operate with a 'unique' rather than a 'general' orientation to his cases and clients. His primary objective is to help improve the particular case, to abolish the difficulties or symptoms that initially brought him into a relationship with it, whether the difficulty was one of pain, distress, inefficiency, ignorance, or uneconomic operation. The practitioner sees knowledge and technology as important, but his criteria for judging primary importance are derived from difficulties in the case situations he is committed to help, not in terms of their fruitfulness in generating more knowledge. His world of cases tends to be pluralistically organized rather than seen and evaluated in a unitary perspective. His time perspective is oriented to the present and the immediate future — rewards that matter tend to come as immediate payoff rather than as some hoped-for long-range and ideal solution of types or classes of difficulty for all clients and cases."¹⁷

The Inter-personal Aspect

Osgood, Merton, and Kelman all see change as a function not only of intra-psychic forces, but also of inter-personal relations. The credibility which the person holds in any community, the kinds of inter-personal relations he is capable of establishing, are crucial factors in effecting change.¹⁸

Adequate collaborative strategies for planned change call for knowledge from the various social sciences. Skills in creating those social-psychological conditions which will support a problem-solving approach in various phases of change must be available.

One outstanding means used today for bringing about acceptance of new ideas is the establishment of what is called an "in-group", i.e., a group in which the members feel belongingness. "Under these circumstances," Lewin says, "the individual accepts the new system of values and beliefs by accepting belongingness to a group."¹⁹

Lippitt is involved in a project disseminating action research methodology to school building teams. The tentative conclusions from this research include two generalizations.

One is that entering into commitment to action seems feasible to the person to the degree that he feels he is part of a team whose members develop (1) trust in each other, and (2) joint commitment to action and to support of each other. THE SECOND generalization is that the adopting unit most needs outside support at the point of greatest risk taking. Entry into the change effort role in the initial tryout situation is the greatest point of risk; it is not in a pre-service summer institute, but at the time of the first class session, when first trying to get colleagues involved, or when first trying to

practice what he has learned. A crucial research focus, then, is to discover what types of support for adoption effort are needed for what types of innovations in what types of social contexts. For example, if the innovation will disrupt or threaten students or colleagues, more support will be needed; this is also true if the adoption requires a high degree of behavioral change of the adopter.²⁰

Allport formulates this point as a general principle of teaching people when he says, "It is an axiom that people cannot be taught who feel that they are at the same time being attacked."²¹

This statement is reinforced by Lewin:

"Re-education influences conduct only when the new system of values and beliefs dominates the individual's perception. The acceptance of the new system is linked with the acceptance of a specific group, a particular role, a definite source of authority as new points of reference. It is basic for re-education that this linkage between acceptance of new facts or values and acceptance of certain groups or roles is very intimate and that the second is frequently a prerequisite of the first. . . . This linkage is a main factor behind resistance to re-education, but can also be made a powerful means for successful re-education."²²

Social influence has been the concern for experimental social psychology almost since its beginnings. Kelman lists three general research traditions which can be distinguished in this area: (1) the study of social influences on judgments; (2) the study of social influences arising from small group inter-action; (3) the study of social influences arising from persuasive communications. He states that, in recent years, there has been a considerable convergence between these three traditions, going hand in hand with an increased interest in developing general principles of social influence and socially induced behavior change.²³

The element of group cohesiveness is intricately interwoven with group processes. Lin found in his investigation that the teacher's

degree of change orientation was positively related to his perception of how cohesive he thought the school faculty to be.²⁴

He quotes Back, "The individual who perceives himself to be in a cohesive situation will direct his behavior to maintaining that cohesiveness and eliminating differences."²⁵

Lin also cites studies by Festinger and Thibout which indicated that the greater the perception of cohesiveness within the group and the greater the pressure to change, the greater will be the actual change in the individual toward the group norm.²⁶

At any level of school system activity there are repeated encounters between people which involve learned skills of relating. Four areas of such interpersonal skills are suggested here as illustrations by Jung:

- A. "Communicating. This involves sensitivity in listening and expressing on a feeling level as well as a cognitive level.
- B. Identifying and coping with barriers to interaction. This would include barriers in self and in others such as inappropriate expectations or inaccurate perceptions. It would also include barriers in the system such as norms hindering the development of mutual trust or scheduling which tends to isolate individuals or groups.
- C. Developing interdependence. This would involve relating in such a way as to expose individual needs and resources to one another and promoting individual initiative in applying a reality-testing orientation towards using the best available resources to meet appropriate needs.
- D. Helping others and being helped. This area illustrates how the other skill areas can interact and combine to support temporary and alternating roles -- in this case, the roles of helper and helpee. Skill in promoting interdependence should make it more acceptable and feasible to move in and out of helper and helpee roles to best utilize the resources of different individuals relative to concerns that arise.

This would include a need for skills in identifying potential barriers to the helper-helpee interaction. It would also include communication skills of clearly presenting the nature of the help needed and of responding with equal clarity regarding the nature of the help offered."²⁷

Lin's study dealt with change orientation which he found to be related to both innovation awareness and innovation internalization. This general concept was further investigated as a measure of the extent to which a teacher was willing to accept educational change. Change orientation was found to be related to age, dogmatism, and a number of institutional variables.²⁸

Based on these findings he recommended that emphasis be placed on the social-structural aspects of the institution in order to lessen potential resistance to change.

To accomplish this goal, Lin suggested that the relationship between the principal and teachers be improved as much as possible by:

- 1) Having the principal openly demonstrate his interest in and support of change
- 2) Having the principal frequently discuss teaching performance with individual teachers
- 3) Enhancing the principal's image as a credible source of information (measured in terms of competence, trustworthiness, and dynamism)
- 4) Encouraging a friendly and understanding relationship between the principal and the teachers, and
- 5) Providing teachers with the opportunity to participate meaningfully in school decisions which may affect them.²⁸

He further recommended "that effort be made to promote a cohesive atmosphere among teachers in a school."²⁹

Implications from Preceding Research:

Viewing intrapersonal and group membership as a whole, certain

broad implications seem to appear:

- 1) Effective linkage requires that the giver and receiver both have a sense of security or trust in themselves
- 2) Beyond that and building on that, they must have a sense of trust in each other
- 3) The adoption of a social practice must be compatible with the values, attitudes and behavioral skills of the potential adopter — if not, change in these complex intra-personal belief systems and behavioral patterns is required for meaningful change
- 4) Changes in behavior, attitudes and values are often mediated by interpersonal relations and are of varying depth and performance
- 5) The patterns of interaction which take place within the structures of the system play a meaningful role in forming the attitudes of participants
- 6) There is a correlation between the team support and "belongingness" of the individual to the group, its cohesiveness and the teachers' degree of change orientation

Recommendations for TECP

2.05 Enhancement of the principal's image as a credible source of information (measured in terms of competence, trustworthiness and dynamism) through:

- 1) Training for administrators providing knowledge of relevant relationships and structures, of social forces and factors promoting and impeding various possible changes
- 2) Wholehearted support and concern from top officials of the system (general superintendents, deputy superintendents, curriculum consultants)

2.06 On going provision of opportunities for teachers to participate meaningfully in school decisions which may affect them.

2.07 Collaboration of administrators joining with teachers in diagnostic efforts leading them to agree on the basic problem and to feel its importance.

2.08 Emphasis on the social-structural aspects of local staff and faculty in each case, i.e., between administration and teachers and between teachers themselves.

2.09 Provision of an opportunity for large group presentation initiating awareness and interest; also, allowing for initial catharsis and reaction.

2.10 A training program for small group facilitators; include skills in identifying potential barriers to total system interaction.

2.11 Small group interaction sessions held to promote recognition of the importance of self-esteem, self-identity maintenance, group identity maintenance, and group acceptance.

2.12 Provision of face-to-face transmission of Tri-Ethnic Program through varied and sufficient small group sessions and feedback opportunity.

Resistance, a Positive Factor

A critical variable among the internal conditions for knowledge utilization is that of acceptance of internal resistance as a legitimate problem-solving issue. The potential adopter needs to accept that resistance with himself is a natural, understandable and acceptable thing, as he considers any new potential materials or behavior patterns.

Watson defines resistance as "all the forces which contribute to stability in personality." He views resistance from a broad and inclusive perspective: "the tendencies to achieve, to preserve, to return to equilibrium." These he sees as most salutary rather than obstructions to innovation.³⁰

"During the life of a typical innovation or change enterprise perceived resistance moves through a cycle", he explains. "In the

early stage, when only a few pioneer thinkers take this reform seriously, resistance appears massive and undifferentiated. In the second stage, when the movement for change has begun to grow, the forces pro and con become identifiable. The opposition can be defined by its position in the social system, and its power can be appraised. Direct conflict and a showdown mark the third stage, as resistance becomes mobilized to crush the proposal."³¹

At this point, survival is often seen by the change seekers in building up power to overcome the enemy. Actually, Lewin's force-field analysis indicates that the easier and more stable victory can be won by lowering the potency of the opposing forces.³²

The fourth stage, set forth by Watson, finds the supporters of change in power. He makes it imperative, at this time, that there be care in dealing, not only with the overt opponents, but with the still dissonant elements within the majority who appear to have adopted the innovation. In a fifth stage, the adversaries are as few, and as alienated as were the advocates in the first stage.³³

Lewin has directed attention to reducing resistance if meaningful change is to be accomplished. "The more usual strategies of increasing pressures by persuasion and discussion raise tensions within the system. If the opposite strategy (that of neutralizing or transforming resistance) be adopted, the forces of change already present in the 'system-in-situation' will suffice to produce movement." The example that he gives has to do with administrators who try by exhortation to get teachers to pay more attention to individual differences among pupils. Analyzing the factors which now prevent such attention (large classes, single textbooks, standard tests) and removing these pressures release

a natural tendency for teachers to adapt to the different individual pupils.³⁴

Lippitt found that most of the significant new research and development inputs in education represent confrontations with existing values and attitudes held by potential adopters. They challenge the satisfactions with current process, and the skills mastered as practitioners. "Therefore, new knowledge needs to be introduced through interaction with trusted resource persons, and in a climate of non-threatening support. Examining the skills required for taking outreach initiative and learning how to support exploration on a "not-playing-for-keeps" basis are crucial areas for research."³⁵

He suggests that some of the new developmental efforts at providing teachers and administrators with micro-experiences of what it might be like if they were to adopt (but without committing themselves) deserve close examination.³⁶

In a program of work, conducting regional research utilization workshops, Lippitt discovered a great deal of resistance to deriving action implications from data. "When we began to add some human relations sensitivity training sessions as part of the design, we began to find some breakthroughs in facing the problem of resistance to scientists; changes in the rejection of the relevance of the research done elsewhere; lowered resistance to sharing of problems and sharing of needs for help; and an increase in readiness to perceive their own behavior as a part of the problem." So, he asserts, a critical area for research is not only to discover the most effective ways for working on the substantive task of using new ideas, but also to inquire into the personal and group interrelationship processes.³⁷

Goodwin summarizes some concise principals on sources of resistance within people and within institutions. He points out that these are not absolute laws but are based on generalizations which are usually true and likely to be pertinent:

A. "Who brings the change?"

1. Resistance will be less if administrators, teachers, board members, and community leaders feel that the project is their own — not one devised and operated by outsiders.
2. Resistance will be less if the project clearly has wholehearted support from top officials of the system.

B. What kind of change?

3. Resistance will be less if participants see the change as reducing rather than increasing their present burdens.
4. Resistance will be less if the project accords with values and ideals which have long been acknowledged by participants.
5. Resistance will be less if the program offers the kind of new experience which interests participants.
6. Resistance will be less if participants feel that their autonomy and their security is not threatened.

C. Procedures in instituting change

7. Resistance will be less if participants have joined in diagnostic efforts leading them to agree on the basic problem and to feel its importance.
8. Resistance will be less if the project is adopted by consensual group decision.
9. Resistance will be reduced if proponents are able to empathize with opponents, to recognize valid objections, and to take steps to relieve unnecessary fears.
10. Resistance will be reduced if it is recognized that innovations are likely to be misunderstood and

misinterpreted, and if provision is made for feedback of perceptions of the project and for further clarification as needed.

11. Resistance will be reduced if participants experience acceptance, support, trust, and confidence in their relations with one another.
12. Resistance will be reduced if the project is kept open to revision and reconsideration if experience indicates that changes would be desirable.

D. Climate for change

13. Readiness for change gradually becomes a characteristic of certain individuals, groups, organizations, and civilizations. They no longer look nostalgically at a Golden Age in the past but anticipate their Utopia in days to come. The spontaneity of youth is cherished and innovations are protected until they have had a chance to establish their worth. The ideal is more and more seen as possible.³⁸

Havelock and Benne found that "all barriers may be characterized as having a greater or lesser degree of rigidity, durability, interconnectedness, and visibility; and the overall permeability of barriers is some function of these various properties." Among factors which seemed to cause forces of more or less permeability, they found references to age and education, levels of status, cohesiveness (psychological distance) and perceived external threat (self-preservation).³⁹

Most researchers agree that there are many interpersonal and intergroup barriers to be contended with in the process of communication and knowledge utilization and that the game is to see them for what they are worth and to deal with them competently.

Implication from Preceding Research:

Resistance to change is a normal, and, perhaps, healthy thing. A number of researchers agree that, if dealt with competently, resistance can be an asset to the decision-making process and to internalizing



new programs and procedures in education.

Recommendations for TECP:

2.13 Emphasis on the social-structural aspects of the institution in order to lessen potential resistance to change, focusing on:

- 1) Collaborative involvement in program adaptivity to needs and situations in each local case (administrators, teachers, board members, and community leaders)
- 2) The values and ideals which have long been acknowledged by participants
- 3) A non-threatening atmosphere assuring autonomy, support and security to potential adopters
- 4) Diagnostic efforts leading participants to agree on the basic problem and to feel its importance
- 5) Assurance that the adoption will be by consensual group decision
- 6) Open two-way communication
- 7) Consistent feedback on perceptions of the project and further clarification when needed
- 8) Collaborative acceptance, support, trust and confidence in relations with one another
- 9) Consistent openness to revision and reconsideration when experience indicates need for changes

2.14 Human relations sensitivity training sessions as a part of the design for Phase I of TECP to ensure

- 1) Some breakthroughs in confronting the problems of resistance to facing racial issues
- 2) Changes in the rejection of some teachers of the relevance of the research provided by TECP
- 3) Lowered resistance to sharing of problems and sharing need for help
- 4) An increase in readiness to perceive their own racial attitudes

2.15 New developmental efforts at providing teachers and administrators with micro-experiences of what it might be like to adopt Tri-Ethnic programs that might take place and predicted outcomes, without the threat of uncertainty of consequences that comes with final commitment.

FOOTNOTES

¹Richard O. Carlson, "Summary and Critique of Educational Diffusion Research", presented at the National Conference on the Diffusion of Educational Ideas, printed in Research Implications for Educational Diffusion, Michigan Department of Education, 1968, p. 15.

²Ronald Lippitt, "The Use of Social Research to Improve Social Practice", ed. Goodwin Watson, Concepts for Social Change, Co-operative Project for Educational Development, NTL Institute for Behavioral Sciences, (NEA, Washington, D.C., 1969), p. 79.

³Ibid, pp. 80-81.

⁴Kenneth D. Benne, "Deliberate Changing as the Facilitation of Growth", (ed.) Bennis, Benne, and Chin, The Planning of Change, (New York, Holt-Rinehart-Winston, 1967), p. 231.

⁵Ronald Havelock, Planning for Innovation through Dissemination and Utilization of Knowledge, A Final Report to the United States Department of Health, Education and Welfare, Office of Education, Bureau of Research, 1969, Summary. p. V.

⁶Ronald Lippitt, (ed.) Richard Miller, Perspectives in Educational Change, York, Appleton, Century, Crofts, 1967, p. 308.

⁷Ibid, p. 309.

⁸Ibid, p. 309.

⁹Kenneth D. Benne, "Democratic Ethics and Human Engineering", (ed.) Bennis, Benne, and Chin, Planning for Change, (New York, Holt-Rinehart-Winston, 1967), p. 143.

¹⁰Ronald J. Pellegin, "An Analysis of Sources and Processes of Innovation in Education", University of Oregon, Center for Advanced Study of Educational Administration (Eugene, Oregon, 1966), p. 6.

¹¹Robert C. Kelman, "Compliance, Identification, and Internalization: Three Processes of Attitude Change", Journal of Conflict Resolution, 1958, Vol. 2, p. 53.

¹²Ronald Lippitt and Ronald Havelock, "Needed Research on Research Utilization", Research Implications for Educational Diffusion, Michigan Department of Education, 1968, p. 38.

¹³William Morse, et. al., A Study of School Classroom Behavior from Diverse Educative Frameworks; Developmental Mental Health Substantive Learning and Group Process, USOE Project, University of Michigan School of Education, Ann Arbor, 1961, p. 114.

¹⁴Robert C. Kelman, "Process of Opinion Change", (ed.) Bennis, Benne, Chin, The Planning of Change, (New York, Holt-Rinehart-Winston, 1966), p. 515.

¹⁵Ronald Havelock, *ibid*, pp. 4-27.

¹⁶Ronald Havelock and Kenneth Benne, "An Exploratory Study of Knowledge Utilization", (ed) Goodwin Watson, Concepts for Social Change, Cooperative Project for Educational Development, NTL Institute for Applied Behavioral Science, NEA, 1969, pp. 64-65.

¹⁷*Ibid*, p. 65.

¹⁸C. E. Osgood and P. Tannebaum, "The Principle of Congruity and the Prediction of Attitude Change", Psychology Review, Vol. 62, 1955, p. 46.

Robert K. Merton, Social Theory and Social Structure, (Glencoe, Illinois, The Free Press, 1957, p. 140.

Robert C. Kelman, Process of Opinion Change, (ed.) Bennis, Benne, Chin, Planning for Change, (New York, Holt, Rinehart, Winston, 1966, p. 509.

¹⁹Kurt Lewin and Paul Grabbe, "Principles of Re-education", ed. Bennis, Benne, Chin, The Planning of Change, (New York, Holt, Rinehart, Winston, 1966), p. 515.

²⁰Ronald Lippitt, *ibid*, p. 40.

²¹Gordon Allport, "Perception and Public Health", Health Education Monograph, No. 2, 1958, p. 9.

²²Lewin and Grable, *ibid*, p. 510-511.

²³Kelman, *ibid*, p. 509.

²⁴Nan Lin, D. J. Leu, E. Rogers, and D. F. Schwartz, The Diffusion of an Innovation in Three Michigan High Schools: Institution Building Through Change, Institute for International Studies in Education, Michigan State University, December, 1966, p. 71.

²⁵Kurt Back, et al, "Manner of Original Presentation and Subsequent Communication", *Psychological Reports*, 1957, Vol. 3, p. 149, (cited by Lin, *ibid*, p. 71).

²⁶Leon Festinger and J. Thibout, "Interpersonal Communication in Small Groups", Journal of Abnormal Social Psychology, Vol. 46, 1951, p. 94, (cited by Lin, *ibid*, p. 71).

²⁷Charles Jung, "The Trainer Change-Agent Role Within a School System", (ed.) Goodwin Watson, Change in School Systems, Cooperative Project for Educational Development, National Teaching Laboratories, (NEA, Washington, D.C., 1969), p. 101.

²⁸Nan Lin, *ibid*, p. 75.

²⁹*Ibid*, p. 78.

³⁰Goodwin Watson, "Resistance to Change", Concepts for Social Change, Cooperative Project for Educational Development, NTL Institute for Applied Behavioral Science (NEA, Washington, D.C., 1967), p. 10.

³¹*Ibid*, p. 11.

³²George Levinger, "Kurt Lewin's Approach to Conflict and Its Resolution", (ed.) Bennis, Benne, Chin, Planning of Change, (New York, Holt-Rinehart-Winston, 1966), p. 245.

³³Goodwin Watson, *ibid*, p. 12.

³⁴Kurt Lewin and Grabbe, *ibid*, p. 513.

³⁵Ronald Lippitt, *ibid*, p. 48.

³⁶Ibid, p. 48.

³⁷Ibid, p. 49.

³⁸Goodwin Watson, *ibid*, p. 22-23.

³⁹Ronald Havelock and Kenneth Benne, *ibid*, p. 63.

The External Process: Roles, Organizations and Systems in Knowledge Linking

Installing new procedures, technologies and ways of acting involves more factors in the client system than appear at first sight. Chin observes that "we are re-discovering the principle that a change in a simple technology may become completely intertwined with wider factors in the client system . . . the web of ramifications of a change attempt is real and necessitates some refined orientations about it. . . . Social science studies, reminding us of these webs and their interconnections, have been of great use."¹

In his presentation on the external process of knowledge linking for effective utilization, Havelock reminds that "the individual consumer of knowledge is served by a social system, a vast network of individuals and groups, which inhibits, filters, and facilitates the flow of knowledge to him."²

He lists four major aspects of this social system, first the linking person or linking role; second, the linking organization; third, the temporary linking system; and fourth, the permanent linking system. These four aspects or levels are illustrated in a very simplified way in the following figure:³

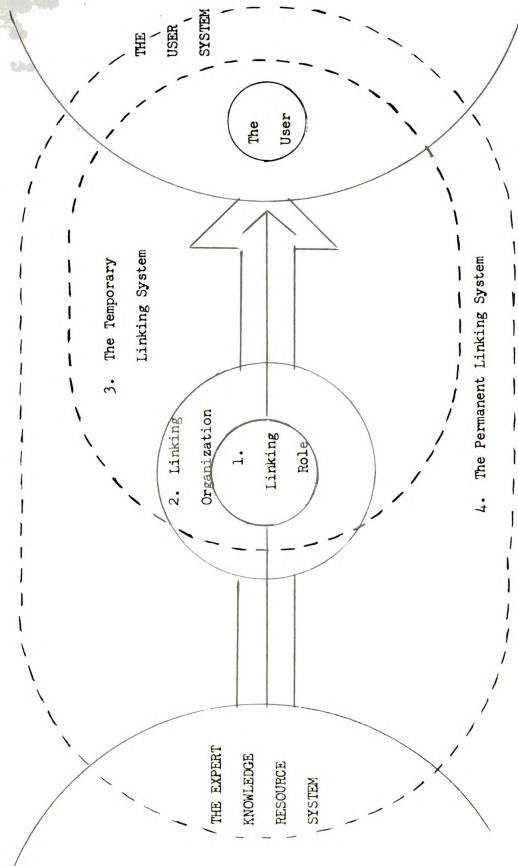


TABLE 3: The Social System which serves the user:
Four Levels of Analysis.

On the right of this figure is depicted the user or consumer of knowledge (it might be an individual or school or school system) and on the left what could be called an expert resource system (it might be the university, the research community.) Between these, getting the knowledge to the consumer is a particular kind of individual designated as a knowledge linker or a person who holds a knowledge linking role.

Strategy for change may involve the combined efforts of external and internal change agents working together to effect some desired result. A change-agent role has been developed by researchers and educational leaders which involves being an internal member of a system which is the target of change and, at the same time, a member of some external system contributing to the change.

The Linking Role

In the thrust toward change, researchers have developed some institutions and some assigned roles for fostering and installing change. Chin lists the following:

"For individuals, we have therapists and teachers; for groups, change agents and trainers; for organizations, consultants; and for developing countries, development specialists."⁴

Havelock suggests that there may be critical individuals who can be termed "change agents", who are outside the consuming system, and that there might be other critical individuals inside. He sees movement toward the conception of "knowledge, a linking role", a defined position within our social system which can be filled by a variety of individuals, but which maintains a link between potential consumers and expert resources, and does this self-consciously and perhaps even on a full time basis.⁵

Lippitt, Watson and Westley report from studies that to the extent that change can be initiated and influenced purposefully, the role of the change agent is central to these phenomena.⁶

The term "change agent" has been utilized by a number of research workers in their analyses of the diffusion of innovations. Among those using the term "change agent" the following are cited by Rogers: Loomis and Beegle (1957), Council of Social Work Education (1959), Rogers (1960), and Stabler (1958). Winston (1933) used the term "diffusion agent". Barnett (1953) preferred "professional advocate" or "advocate of change".⁷

Rogers defines the role of the change agent. . . . "the change agent functions as a communication link between two social systems".⁸

Jung introduces the "trainer change-agent". He focuses on the internal change-agent role and the relationship of this role to external resources, including external change-agents.⁹

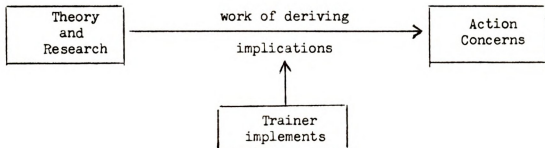
He refers to the role within the system as a trainer role under the assumption that training to develop active behavioral skills is an especially important part of the learning necessary to increase the potential for planned, purposeful change.¹⁰

Jung presents four models of change within which linkage takes place. They are suggested from the vantage point of the practitioner and he points out that "the potential contribution of each model and the comparative value of the models in relation to needs of the particular school systems, remain to be empirically explored."¹¹

TABLE 4.
MODELS OF CHANGE WITHIN WHICH LINKAGE TAKES PLACE

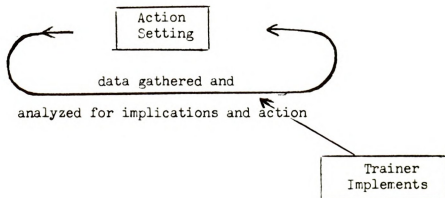
1. Derivation Model

In this model implications for action concerns are derived from theory and research findings.



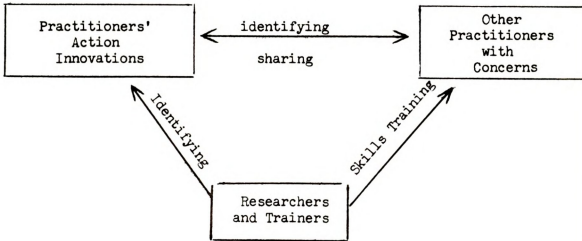
2. Action-Research Model

In this model data are gathered from the action setting and fed back to the practitioner who analyzes their implications for action design and implementation.



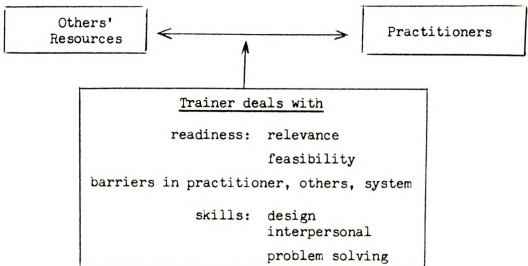
3. Identification and Diffusion of Innovations Model

In this model the salience and relevance of practitioners' action innovations are identified and then the skills embodied in them and their designs are spread to other practitioners with concerns.



4. Consumer Education Model

In this model practitioners work at developing their skills at consuming, or taking advantage of, the resources of others.



Havelock suggests the need for concern with how to make the linking role better, i.e., "more permanent and more viable and also more successful". He describes four kinds of things, in general, needed to bring about a successful knowledge linking role. "The first might be a better understanding by individuals filling the role of what the role means, i.e., what are the role expectations and what are the role requirements? Secondly, those who hold knowledge linking roles need a better understanding of that the process of knowledge linking is and what the process of change is. Thirdly, they need more efficient and effective access to knowledge sources. And finally, they need a better understanding of how they should organize and invest their time and energy."¹²

In a doctoral study, Peggy Miller presented seven screening criteria which were selected from consistent research re-inforcement for effective change-agent behavior:

- 1) The change agent should identify the characteristics and needs of the client system and base plans on them.
- 2) The change agent should seek, and play a major role in the establishment of rapport and the building of mutual trust and respect between the client system and itself.
- 3) The change agent should view the change process as a mutual, collaborative, reciprocal undertaking between the client system and itself.
- 4) The change agent should identify key leaders, formal and informal, in the client system, and work through them.
- 5) The change agent should understand the communication—diffusion of innovations process and utilize a strategy in working with the client system.
- 6) The change agent should seek continual self-improvement in performing its role.

- 7) The change agent should teach the clients to be their own change agents, to understand the process of change, to develop self-renewing behavior.¹³

Jung presents a number of ideas about an appropriate orientation of the trainer-change agent:

- 1) Identifying and helping the staff identify their needs for particular kinds of in-service education experience. This includes efforts to promote an active posture of the staff toward learning and skill development as well as toward reaching out to the resources of others.
- 2) Maintaining awareness of the knowledge resources (e.g., new research and theory) and an active relationship with the resource sources and experts who may be needed to help provide staff learning opportunities.
- 3) Increasing theory awareness and skills in designing a variety of types of staff learning experiences using recent developments in such fields as training technology, action research, and research utilization.
- 4) Increasing interpersonal and group leadership skills needed to work skillfully as a problem-solving leader, group trainer, group consultant, and action-research leader.
- 5) Increasing evaluation skills needed to assess the movement or lack of movement of staff members toward in-service growth objectives and to contribute new knowledge and insights to the theory and practice of planned change.
- 6) Communicating to and maintaining the involvement of central administrators of the school system.
- 7) Involving himself appropriately as a participant in training experience.
- 8) Participating with trainees in the training experience in a way which seeks to increase his own skills and insights as well as those of the trainees.¹⁴

Jung sees the trainer-change agent contributing to developing skills of action problem-solving at all levels of the system. He includes operations concerned with diagnosis, planning of change, feasibility testing of change plans, evaluation of results, and the modification

and spread of such models. The operational organization of the system would need to allow the trainer change-agent to be a key member of a system-wide problem-solving team including top administrators, policy makers, and research evaluators of the system. He summarizes the trainer-change-agent's functions:

- 1) "Relates to staffs of schools and to central administrators in identifying needs for and providing training.
- 2) Provides demonstration of some skills.
- 3) Trains staff in some skills.
- 4) Makes support for training available (e.g., clerical help, released time).
- 5) Arranges staff access to other training resources (e.g., brings in trainers from outside for internal events, arranges involvement in outside training activities, provides materials for self-training).
- 6) Works to coordinate administration, research, and training as integrated parts of the system's problem-solving procedures."

The trainer-change agent's role within the system is summarized as follows:

- 1) "Upper administrative responsibility with corresponding remuneration.
- 2) Some large degree of autonomy in responding to expression of need and developing training experiences for personnel throughout the system.
- 3) Clear and active lines of communication within the system to review: the place of training activities in relation to the system as a whole; problems that are met; results of training; modifications of training; modifications of the system which seem indicated as a result of integrated functioning of research and training efforts within the system.
- 4) Team-working relationship with evaluators and researchers of the system.
- 5) Source of referral to consultation and resource help from outside of the system."¹⁵

Implications from Preceding Research:

A number of researchers have agreed that the task of communication is not completed when interpersonal problems are solved. Even when there is an atmosphere of acceptance and mutual understanding, the message must be composed, transcribed, translated, transmitted, received and checked back for errors.

In view of this evidence from research, the following implications were extracted:

- 1) Strategy for change will involve the combined efforts of external and internal change agents.
- 2) There is a defined position within our social system which maintains a link between potential consumers and expert resources.
- 3) This role is fulfilled self-consciously and perhaps on a full time basis.
- 4) The change-agent role may involve membership in the internal system which is the target for change, and, at the same time, of some external system contributing to that change.
- 5) The role within the system might be a "trainer role" under the assumption that training to develop active behavioral skills is an important part of the learning necessary for potential participation in collaborative involvement in planned change processes.
- 6) The trainer change-agent could contribute to developing skills of action problem-solving at all levels of the system.
- 7) The trainer change-agent would need some degree of autonomy in responding to expressed needs and developing training experiences throughout the system.

Recommendations for TECP:

2.16 Appointment of one individual or a team in each area whole role is designated as primary change-agent for the system.

2.17 Definition of position for the change-agent: a trainer role under the assumption that training to develop active behavioral skills is an

especially important part of the learning necessary to increase the potential for planned, purposeful change.

2.18 Definition of core responsibilities of trainer change-agent: 1) to link outside curriculum resources to the classroom teacher; 2) to give leadership to defining educational objectives; 3) to co-ordinate the process of developing curriculum; 4) to facilitate and support programs of in-service education; 5) to develop the support system which must surround and help the teacher; support through colleagues, administrators, parents.

2.19 Definition of functions for trainer change-agent:

- 1) Staff: Helping staff identify needs; using interpersonal and group leadership skills, maintaining involvement of central administrators.
- 2) School staff and resource center (TECP): Introducing knowledge resources and designing experience in their use.
- 3) School faculty and school administration: Helping staff identify needs, developing problem-solving skills and skills of communication - listening and expressing; identifying and coping with barriers to interaction in self and others; developing interdependence between administrators and staff.
- 4) School staff and pupils: Developing problem-solving skills of diagnosing classroom situations, planning changes to meet concerns, implementing plans, evaluating results of change efforts; developing interpersonal skills of communicating, identifying and coping with barriers to interaction; developing interdependence with peers and pupils.

Organizational Linkage

Organizations play a vital and pervasive role in the diffusion and utilization process. Most new knowledge originates in organizational settings; most knowledge is processed by organizations; it is transmitted by and through organizations; and most knowledge is

consumed by organizations.*

Some organizational factors have particular potency in explaining the knowledge flow -- factors of training, leadership styles, structure and roles. Havelock draws special attention to these factors:

"Training indicates to the organizational member what is expected of him and how he is to behave; the leadership style of his superior largely determines how much freedom, responsibility and contact with others in his group he will be able to have; the structure of the organization provides the framework of interpersonal contact and reporting linkages; the role designations stipulate in a formal way what position he is expected to fill in the system."¹⁶

Goldhammer takes a dim view of the present organization of educational institutions:

"It would be advantageous if educational organizations could be constantly self-adjustive to their environment and the needs of society of which they are a part. It seems more likely, however, that most will change because they are forced to follow certain directions rather than because they are truly adaptive mechanisms."¹⁷

Watson describes the prevailing patterns of change in school systems:

"School buildings of the 1960's are clearly different from those of fifty years ago. What goes on inside the buildings may or may not be as modern. By and large, most changes have been introduced:

- a) sporadically rather than continuously;
- b) by outside pressure rather than generated from within the system itself;
- c) for expediency rather than as an expression of conviction or planning;
- d) one here, one there, rather than in a cumulative and integrated design;
- e) much later than desirable -- lagging rather than leading."¹⁸

* Organization is defined here as an aggregate of groups, each constituted by individuals. (Havelock)

Organizational Development

Paul Buchanan has examined several cases of organization development in order to determine if there are any common and critical issues discernable and elements of strategy applied in a selected group of cases. Of approximately thirty three issues which there was reason to believe are important in organization development, he identified three as being of particular centrality. These issues were:

- 1) "Introducing a new model of operation which the members of an organization can consider as a basis for formulating improvement goals regarding a dimension or operation which is central to the performance of the organization.
- 2) Sequencing objectives and action steps in such a way that linkage is established between the initial point of change and other persons, parts, and dimensions of operation internal to the target system.
- 3) Sequencing objectives and action steps in such a way that linkage is established between the initial point of change and other persons, parts, and dimensions of the external system with which the target system has important interdependency."¹⁹

The cases examined included studies by Guest, Blake and Moutan, Jacques, Beckhard, Shepard and Buchanan, Dennis, Zand, Miles, and Lytel.²⁰ In their study of organizational development largely based on industry, Shepard and Blake describe a five-stage change methodology:

Stage 1: Creating interpersonal openness and a problem-solving climate . . . to create conditions in which people can shift their own interpersonal relationships from win-lose defensiveness to openness, with the increased possibility of relations which are on an "everyone can win" basis, rather than one person winning only at the loss of someone else.

Stage 2: Organizational diagnosis through an application laboratory. Such organizational variables as climate, concepts,

structure, policy, procedure, personnel, operations and environment are considered.

Stage 3: Flexibility in implementation and follow-up depending on the nature of the organizational situation itself and the problems confronting it.

Stage 4: Intervention in ongoing organizational activities. This involves a particular kind of staff intervention in the organization's routine work and in its emergency and crisis events.

Stage 5: Creative reorganization. This stage sees the gradual emergence of an "adaptive organization" — namely, an organization that can mobilize its resources to create and test novel approaches to old problems and new challenges.²¹

The first four stages move the organizational climate in the direction of greater openness, and provide enough restructuring and support to maintain a new climate. The fifth stage consists of basic research into conditions required for, and the dynamics of, an adequately functioning organic system, and of applied research directed toward the development of new approaches and procedures based on what is presently known.

System Co-ordination

Havelock suggests that co-ordination might be a key research concept in dealing with institutional forms of knowledge linking. He presumes that the basic reasons for having a linking organization rather than a linking individual acting alone is to pool resources, to bring people together, to co-ordinate their efforts so that more can be accomplished.²² Lippitt sees four system levels as potential targets

for change involvement. He thinks of these being the classroom level, the building level, the school system level or the educational community level:

"At the classroom level there are too many restraining forces -- from himself, in terms of fear and anxiety, from students, from colleagues, and from the administrative structure, for the teacher to be an appropriate unit of effort for change all by himself.

The school building level can help build a staff climate with norms for experimentation and freedom to observe and to help the development of staff teams within the staff to work on curricular innovation programs.

At the school system level, superintendents are involved in ideas for the development of the in-service training staff of the system by internships at the university, or setting up field associateships, or for setting up outside-inside pairs to design the training activities of the system."²³

Given the intersystem nature of the school, long lasting innovations may require use of change models used in community development programs as well as in organization change projects. Miles suggests "not only a system-wide involvement in the change process, but also careful work in linkages among the system, other socialization agencies, and other community groups."²⁴

Inter-Agency Organizations

One organizational innovation in educational research and development is the inter-agency organization. An observer of this phenomena, Burton Clark, has noted that:

"At least in education, social forces are greatly increasing the importance of this area that is not bounded by the kind of structures that have usually been designated as organizations. Leadership is moving into the inter-agency compact, the limited alliance, the consortium, the grants committee, the federation."²⁵

David Clark describes the participants and roles of the inter-agency organization:

- 1) Researchers to attack and develop knowledge about problems which were considered unapproachable.
- 2) Social bookkeepers to collect, retain and retrieve up-to-the minute data on people and events.
- 3) Developers to try out innovations in widespread field settings which will result in strong claims of generalizability.
- 4) Diffusion specialists to feed more new knowledge to more practitioners.²⁶

Jung introduces the change-agent team in his discussion of roles to carry out organizational functions for change in school systems. He sees the school system change-agent team concerned with linkage to persons who are experts: organized bodies of knowledge such as theories and research findings; innovations of teachers, persons in other roles in the system; other socializing systems such as organized recreation, therapeutic agencies, or families; services of professional associations; pupils in the system; training resources outside the system; and others.²⁷

Fox and Lippitt follow the idea of team:

"In promoting instructional improvement, the collaborative effort of school administrators, teachers, and outside resource people (as represented by the teacher-principal-consultant change-agent team) provides a more vigorous and productive leadership arrangement than does reliance on any one of these roles alone."²⁸

University - School System Relationships

Jung envisions three kinds of relationships between universities and school systems:

- 1) Information - Affiliate System
The purpose of this affiliate relationship would be the active exchange of information between the school system and COPED (the emerging inter-university facility committed to joint inquiry, to collaborative action and to interdependence among universities and school systems as a means of improving education.)

2) Diagnostic - Affiliate System

This affiliate relationship would provide a school system with the opportunity to actively explore its change needs, the kinds of resources needed for meeting those needs, and the kinds of collaboration which could make such resources available. The inter-university facility would make available instruments for conducting diagnostic inquiries within the system.

3) Action - Research Collaborating System

The purpose of this system would be to support the growth of a research and development function to facilitate ability to continuously diagnose and meet change needs. The university relationship would probably continue for three years with the instrumental purpose of providing training of persons within the system to carry out the research and development function."²⁹

Jung spelled out some specific functions in terms of three years.

The university team would contribute to an increased understanding of models of educational change within the field of education generally. He could see the Action - Research Collaborating System being responsible for committing four or five of its personnel to serve part time as its change-agent team; for collecting and analyzing assessment data; for contributing to awareness of available resources; for conducting periodic regional conferences; and for co-ordinating dissemination efforts.³⁰

The university has been recognized by several writers as the center of expert knowledge for virtually every field. Benne comments on the university:

"The distinctive virtue of the university center is to discover and communicate precise, accurate, sufficiently qualified statements about any number of things and events. The center maintains tentativeness with respect to matters of knowledge where tentativeness is needed and attacks with vigor knowledge claims which incorporate insufficient evidence and intellectual rigor. A university could not be a university without this virtue."³¹

There are several projects emerging as change-agent teams: The Cooperative Project for Educational Development (COPEDE) is a three-year project funded by the United States Office of Education, for the

exploratory development of models of planned change "in about twenty five school systems located in the metropolitan areas of New York, Boston, Chicago, and Detroit-Ann Arbor. It is an emerging inter-university facility committed to joint inquiry, to collaborative action, and to inter-dependence among universities and school systems as a means to improving education. COPEd is thus a linker, joining behavioral scientists and school system 'change-agent teams' within and across regional centers."

The Eight-State Project - Designing Education for the Future is concerned ultimately with improving and strengthening the respective state agencies responsible for education. While each state is making its own appraisals and developing its own plans, these states are joining to study common problems relating to impending changes and their implications.

Educational Research Information Center (ERIC) is designed to provide researchers and practitioners alike, an information storage and retrieval mechanism to make available instantly and in easily accessible indexed form all research and related data relevant to a particular problem.

These are only a few such change-agent team projects in the various states and school districts.

Power Structures in Organization and Administration

The term "power" when used in the social context, generally connotes the influencing of persons or groups of persons in directions which, without the influence, they might not have taken. Some assumptions by Ralph Kimbrough in his studies are that "power is an element essential in human activities. It is one of the elements that

holds society together. It is propellant of revolutions. It is neither good or bad. Power assumes a "good" or "bad" moral connotation when its consequences or its anticipated consequences are assessed according to some value framework."³²

Kimbrough defines power structure as "the distribution of power among the individuals, groups, and social system of a given political unit and the structural relationships between these sources of influence in the establishment of public policy."³³

Dorwin Cartwright in a brief overview of the field of social psychology concludes that, "apart from any practical considerations, a social-psychological theory without the concept of power (or its equivalent) is incomplete. Such concepts as communication, role, attitude, expectation, and norm cannot by themselves account realistically for the processes of influence to which they refer, nor can they deal effectively with social change and resistance to change."³⁴

"That the educational leader will be forced to deal with elements of the total school district power structure in some curriculum innovations," Kimbrough observes, "is a probability greater than change."³⁵

The question of autocratic vs democratic organizational structure, as a facilitator of innovation and effective knowledge dissemination and utilization, is considered a critical and fundamental issue by Havelock, Watson, Fawcett, and Buchanan.³⁶

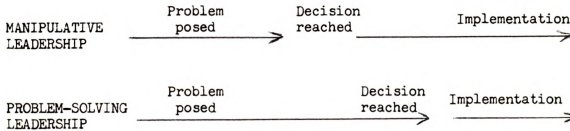
Administrative relationships always function at two levels of interaction. The first level derives from the particular offices or statuses in the social system and is determined by the nature of the roles involved in the interaction. The second level of interaction

derives from the particular people or individuals in the social system and is determined by the personalities involved in the interaction.³⁷

The role of administration should be to monitor the "natural" flow system and develop means to support, facilitate, and co-ordinate linkage activities so that the total system can function more effectively.

Some of the work-doing functions for the administrator in this kind of leadership-facilitator role are listed by Gordon Lippitt: "initiator, information-seeker, information-giver, opinion-seeker, clarifier, elaborator, summarizer." Group-building and maintenance functions are another thing: "encourager, harmonizer, compromiser, gate-keeper, standard-setter, consensus-tester, and follower."³⁸

G. Lippitt pictures two leadership approaches:³⁹



He contends that although "problem-solving" leadership takes longer to reach decisions, implementation is much more rapid than in "manipulative" leadership because members of a group feel more responsible for carrying decisions they have made.⁴⁰

Implications from preceding research:

In viewing research, the organizational role for change in school systems is found to be vital and pervasive. Implications are that in promoting instructional improvement within organizations, the collaborative effort of school administrators, teachers, and outside resource



people i.e., the teacher-principal-consultant change-agent team, provides a more vigorous and productive leadership arrangement than does reliance on any one of these roles alone.

Cooperative change-agent teams offer meaningful contributions. These teams are committed to joint inquiry, to collaborative action, to promoting interdependence among universities and school systems as a means to improving education. This inter-state, inter-district, or more than one state team spreads the experts and their expertise further. It is, perhaps, a better utilization of finance as well as personnel.

2.20 Determination of the TECP staff on-going role: to provide diagnostic insights and concepts relating to the process of change and to supply consulting help as the process proceeds.

2.21 Agreement of the research function of TECP:

- 1) Basic research responsibilities relating to improving understanding of the nature of learning and conditions for it.
- 2) Development of materials, practices, processes and institutions designed to offer research related to improved instructional practices.
- 3) Initiation and support of a range of activities from demonstration to dissemination to in-service programs, in order to facilitate implementation in operational settings once alternatives have been decided on collectively.

2.22 Involve collaboratively all members of the system: superintendent, diocesan curriculum co-ordinator, local administrators, building curriculum co-ordinators, teachers, students, school boards, and parents.

2.23 Dissemination of materials designed by TECP to promote growth and development at all levels of the school system in such processes as increased problem-solving effectiveness, greater potential for action and interaction, and greater capacity for adaptation and change.

2.24 Determination of process for disseminating the Tri-Ethnic Curriculum Project and commitment to follow through at each level:

Responsibilities of the various members included in the dissemination process:

<u>TECP Director</u>	Meetings and reports to Superintendents Meetings and reports to Diocesan Curriculum Staff
<u>Superintendents</u>	Selection and appointment of personnel to promote the Action Program in each Diocese
<u>Diocesan Curriculum Staff</u>	Plan and co-ordinate the Impact Program in each diocese Plan with principals and evaluate local Follow-Through Programs
<u>Building Principals</u>	Co-ordinate the Follow-Through Program locally in cooperation with Diocesan Staff Provide bibliographies for teachers at every level
<u>Teachers</u>	Participate in total action program, Impact and Follow-Through Team for developing an integrated humanities program in the teaching of minority histories and cultures.

2.25 Recognition that validity of objectives for TECP increases when such objectives are specified by a team made up of researchers (TECP), educators and social psychologists, collaborating so as to maximize their appropriate roles:

- 1) Basic and applied researchers to identify content and processes
- 2) Educators to determine teachability, and methods for teaching and to relate TECP objectives to broader objectives; to see the program in the context of total curriculum goals
- 3) Psychologists to relate content, process and method selected to the appropriateness of age and grade placement

Temporary Systems

Temporary systems are special units, short term work-groups, experimental efforts, and special assignments that are formed to accomplish a task and will go out of existence at a designated time.

The temporary system may be called a "conference", "workshop", "seminar", "project", etc. Havelock describes a number of successful temporary system designs:⁴¹

a) Action Research

Action research is the collaboration of researcher and practitioner in the diagnosis and evaluation of problems existing in the practice setting. The action research technique provides the researcher with an accessible practice setting from which he may retrieve data, usually for publication. It provides the cooperating practitioner system with scientific data about its own operation which may be used for self-evaluation.

b) Collaborative Action Inquiry

The strategy of "collaborative action inquiry" is similar to 'action research'. However, this model places greater emphasis on service to the practitioner system and on the collaborative teaming of researcher and practitioner. The inquiry team collaborates on defining goals, on all phases of the research, and on change strategies (Thelen, in Watson).

c) Organizational Survey Feedback

d) The "Grid" Program for Organizational Development

The "Grid" program for organizational development promoted by Blake and Mouton attempts to build a capacity for self-renewal into the system. The "grid" plan carries the client system through the phases of the change process by a progression of theory input, application to the real situation, and systematic evaluation and planning. This type of temporary system organization emphasizes education (or knowledge input) as the key to achieving and maintaining change in an organization, and its techniques are designed to improve both the communication and the planning aspects of the organization's operation.



e) Training Labs

A further category of designs for temporary systems is the "training" or human relations lab. The laboratory strategies employ a variety of tactics for the purpose of improving the problem-solving capacities of individuals, groups, organizations, and communities.

f) Derivation Conference

The derivation conference is a temporary system which is systematically designed to include representatives from research, who serve as resource persons and from various levels of practice, who are the potential 'client' persons. The conference progresses through a series of collaborative activities: (1) defining the problem area, (2) retrieving relevant findings from research and from the practice setting, (3) deriving implications for action, and (4) setting down specific plans for action—with commitment to try them out. (Jung) The implications for innovation from this design are obvious.

In all its varied manifestations the temporary system possesses a substantial number of distinguishing characteristics. Miles classifies these "as input" characteristics appearing at the time of designing or setting up the temporary system: "process" characteristics occurring during the life of the system; and "output" characteristics -- the resultant changes in persons, groups and organizations."⁴²

Time limited sequences or projects are one form of temporary system. This approach has the motivational advantage in that the linker sees his work in time-limited segments which follow a meaningful sequence from initiation to completion.

The temporary system also has some importance as the vehicle through which interaction and exchange with clients and researchers is carried on. The traditional types of temporary systems are the training course, the conference, and the conventions. Havelock reports that there are new models:

"Recently, however, many new models of temporary systems for linking to new knowledge are taking shape. Human relations training laboratories (Bradford, et al.), "grid" management training programs (Blake and Mouton), organizational survey and survey feedback projects (Mann and Neff), traveling seminars (Richalnd), and collaborative action-inquiry projects (Thelen), represent a few of the unique temporary systems which have evolved in the last decade to bring the linking agent (often called "trainer", "consultant", or "change agent") together with the client in a meaningful sequence of steps designed to help the client by making him more expert, more open to new ideas, more adaptive, and so forth."⁴³

"There are other temporary systems which do involve the researcher directly in a collaborative knowledge retrieval and application activity with linkers and practitioners. At the highest level we have seen this in the Physical Science Study Committee. There is yet another model, however, which seeks to involve not only researchers and linkers, but also policy makers, administrators and practitioners ("direct workers") in a sequential activity of problem diagnosis, research retrieval, derivation of implications and future action planning."⁴⁴

Implications from Preceding Research:

Temporary systems are important as vehicles through which interaction and exchange can be carried on between the researcher, practitioners and consumers.

The "temporary system" is not an isolated workshop nor is it a series of unrelated experiences. It is a process designed for specific resultant changes in persons, groups or organizations.

Time limited segments which follow a meaningful sequence from initiation might allow for readiness at each phase and might provide motivation.

The temporary system is a vehicle through which interaction and exchange with clients and researchers could be achieved.

Recommendations for TECP:

2.26 Establishment of "Impact Program" to begin dissemination, initiating the Tri-Ethnic Curriculum Project.

2.27 Adoption of a "Follow-Through Program" consisting of a series of sessions, the members of each local school staff using the data from the "Impact Program" as a springboard to examine their own current attitudes, work on problems shown in the data, and improve their own problem-solving effectiveness as a team.

2.28 Initiation of and sustaining work procedures which are technically sound.

2.29 Procedure by local systems through steps like the following:

- 1) Problem sensing or identification — attitudinal change and growth through study and interaction in the topic of minority groups.
- 2) Diagnosis: reasons or causes for the problem, identification of forces favoring or blocking movement toward commitment to innovative program (TECP)

2.30 Increased collaboration resulting in:

- 1) A more thorough understanding and use of valid data.
- 2) Decisions made more and more on the basis of knowledge and competence and less and less because someone with formal authority says so.
- 3) Shared decision making

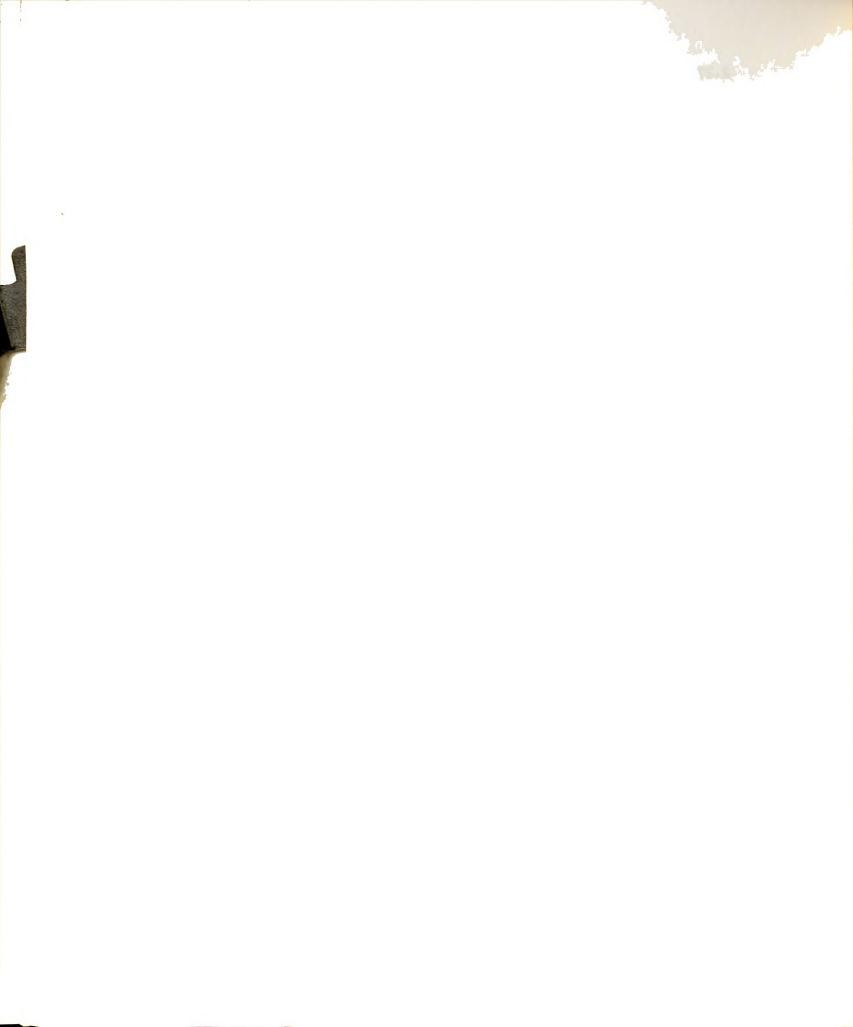
2.31 Adoption of shared decision making in view of these gains:

- 1) Decisions are of higher quality, since more relevant information goes into them.
- 2) People are more committed to carrying them out.

Toward Permanent Linking Systems:

Watson envisions a school system. He begins with basic social theory and develops concepts for the structure and processes needed to insure self-renewal and consistent organizational development:

- 1) "Every social system is composed of interlocking positions and interacting roles. Among the positions in a school system are those of parent, board member,



superintendent, principal, teacher, caretaker, and pupil. Each position requires role-performance in relation to **what persons** in other roles expect and do.

- 2) Smaller systems are either loosely or more tightly integrated within larger social systems. Thus a single school is part of a city school system, and the city school system is itself part of county, state, and federal educational operations. The schools are parts within other systems such as city government; economic and tax structures; and activities of state, national, and world organizations. When one part of a system changes, it produces strain at the interfaces of interaction with other parts until the other parts have adapted to the change.
- 3) As roles interact within a subsystem, and as parts interact within larger systems, they are reciprocally modified toward a working equilibrium. The roles and parts do not change equally. Those lower in any hierarchy of power and prestige adapt-to-conform more than do the higher levels. Some parts of the culture, such as the ritualistic and sacred activities, change less than do others, notably the technological.
- 4) Social systems tend to be stable and homeostatic; after minor disturbances they return to an equilibrium approximating their state before the unsettlement.
- 5) Social systems are generally hierarchical, with level of prestige, power, and responsibility. The higher-level roles are more satisfying to occupants and offer more freedom for self-actualization. Hence, need for change is less apparent to persons at or near the top of the system.
- 6) The structures of a system largely determine the patterns of interaction which take place within it; and these, in turn, form the attitudes of participants. This is the S P A sequence -- from the situation (S) to the processes of social behavior (P) to the consequent attitudes (A). The habits, beliefs, and sentiments which arise within a system (religious, political, commercial, family) have been formed by experiences which have been shaped by the prevailing institutions.⁴⁵

Watson continues to discuss the sources of change in the social

system:

- 7) While either internal or external forces or both together can effect change in a social system, the

usual congruence of member attitudes with the traditional ways of operating means that most change usually is initiated by outside impact rather than internal dissatisfaction. Racially segregated schools have been slow to change, even under the impact of Supreme Court edicts, the economic pressure of federal aid, and active movements for racial equality. Scientists and mathematicians may have been dissatisfied with public school curricula and performance in these disciplines, but not until the first Sputnik symbolized a contest with the U.S.S.R. did the schools change their programs.

- 8) The rapid advance of the scientific and technological sectors of our society creates stress on many interfaces where they impinge on slow-changing institutions. The impact on education has been manifold. Accelerating scientific advance has brought the "explosion of knowledge" which forces revision of curricula. Technological changes have eliminated some traditional occupations and created demands for new kinds of training. Rapid communication and transportation have made the ethnocentric curriculum of American schools an anachronism.
- 9) While internal change-influences are less potent than the contextual pressures, they are still important and occasionally become the main source of an innovation. Every participant in a social system experiences some conflict between his personal needs and the role-demands of his position in the system. When these become intense and shared by many persons, they generate reforms or rebellions. No institution accords perfectly with the values of its members. What seems to be inertia may be rather what Lewin has called a "quasi-stationary equilibrium" in which forces for and against a specific change are fairly evenly balanced. Change may be brought about either by increasing the forces favoring change or by decreasing the resistance to change."⁴⁶
- 10) Most innovations come to be adopted through diffusion. The original innovating person or institution must have responded to unusual pressures and opportunities. Later, others hear about the new ideas or programs. Sociologists distinguish a two-step process by which a small group of "influentials" are the first to learn about the new project and become transmitters to a wider circle.
- 11) School buildings of the 1960's are clearly different from those of fifty years ago. What goes on inside the buildings may or may not be as modern.

- 12) Change has sometimes come so slowly that new educational institutions have arisen to meet the social needs. Traditional academies were replaced by modern secondary schools; youth-serving organizations arose to meet recreational needs the schools did not serve; junior colleges filled a gap not met by existing colleges; "classrooms in the factories" are doing an immense adult education service which schools could not take on; "head start" programs serve young children the schools were unready to assist.⁴⁷

Implications from Preceding Research:

In terms of change, systems move from "temporary" to "permanent linking" systems through an on-going and continuing process of self-renewal. A self-renewing school system has the ability to adapt to its changing external and internal environment in such a manner as to strengthen itself and optimally fulfill its goal of providing quality education for children.

Recommendations for TECP:

- 2.32 Mechanisms for keeping up with internal concerns and external trends and resources.
- 2.33 Constant and widespread sensing of problems and of new possibilities.
- 2.34 A general climate of openness and interpersonal trust between the various people who make up the social systems at the various levels of operational functions.
- 2.35 A mechanism for establishing some order of priority so that each school can work on its more urgent problems.
- 2.36 Establishment of a research and development unit to serve each diocese.
- 2.37 Mechanisms for wide participation in the production of solution

proposals (superintendents, school boards, teachers, principals, administrators, consultants, supervisors involved).

2.38 Mechanisms for participation of eventual implementers in the decision making process.

FOOTNOTES

¹Robert Chin, "Some Ideas on Changing", Perspectives on Educational Change, (ed.) Richard I. Miller, (New York, Appleton-Century-Crafts, 1967), p. 326.

²Ronald Havelock, "The External Process: Roles, Organizations and Systems for Knowledge Linking", (ed.), Goodwin Watson, Concepts for Social Change, Cooperative Project for Educational Development, NTL Institute for Behavioral Sciences, NEA, Washington, D.C., 1969, p. 47.

³Ibid, p. 48.

⁴Robert Chin, *ibid*, p. 327.

⁵Ronald Havelock, *ibid*, p. 49.

⁶Ronald Lippitt, Jeanne Watson, and Bruce Westley, The Dynamics of Planned Change, (New York, Harcourt-Brace and Co., 1958), p. 10.

⁷Everett Rogers, Diffusion of Innovations, (New York, The Free Press, 1969), p. 255 ff.

⁸Ibid, p. 255.

⁹Charles C. Jung, "The Trainer Change-Agent Role Within the System", Change in School Systems, (ed.), G. Watson, Cooperative Project for Educational Development, National Training Laboratories, NEA, Washington, D.C., 1967, p. 89.

¹⁰Ibid, p. 90.

¹¹Ibid, pp. 98-99.

¹²Havelock, *ibid*, p. 54.

¹³ Peggy Lynne Miller, "Change Agent Strategies: A Study of the Michigan-Ohio Regional Educational Laboratory, 1968.

¹⁴ Jung, *ibid*, p. 102.

¹⁵ Jung, *ibid*, p. 103.

¹⁶ Ronald Havelock, Planning for Innovation through Dissemination and Utilization of Knowledge, A Final Report to the United States Department of Health, Education, and Welfare, Office of Education, Bureau of Research, 1969, p. 6-1.

¹⁷ Goldhammer

¹⁸ Goodwin Watson, "Toward a Conceptual Architecture of a Self-Renewing School Systems", Change in School Systems, Cooperative Project for Educational Development, National Training Laboratories, NEA, Washington, D.C., 1967, p. 109.

¹⁹ Paul Buchanan, "Crucial Issues in Organizational Development", Change in School Systems, (ed.) Goodwin Watson, Co-operative Project for Educational Development, National Training Laboratories, NEA, Washington, D.C., 1967, p. 65.

²⁰ Robert H. Guest, Organizational Change: A Study in Leadership, (Homewood, Illinois, R. D. Irwin, 1962).

Larry E. Greiner, Organization Change and Development, Doctoral Thesis, Cambridge, Massachusetts, Graduate School of Business Administration, Harvard University, 1965.

Elliott Jacques, The Changing Culture of a Factory, (London, Tavistock Publications, 1951).

Richard Beckhard, "An Organization Improvement Program in a Decentralized Organization", Journal of Applied Behavioral Science, January-March, 1966, Washington, D.C., National Training Laboratories, NEA.

²¹ Herbert Shepard and Robert Blake, "Changing Behavior through Cognitive Change", Human Organization, (Summer, 1962), pp. 88-94.

²² Ronald Havelock, "The External Process: Roles, Organizations and Systems for Knowledge Linking", *ibid*, p. 57.

²³ Ronald Lippitt, "Roles and Processes in Curriculum Development and Change", ASCD Seminar on Strategy for Curriculum Change, (ed.), Robert Lapeer, Washington, D.C., 1965, pp. 23-24.

²⁴ Mathew Miles, "Some Properties of Schools as Social Systems", (ed.) Goodwin Watson, Change in School Systems, Cooperative Project for Educational Development, National Training Laboratories, NEA, Washington, D.C., 1967, p. 22.

²⁵ Burton Clark, "Interorganizational Patterns in Education", Administrative Science Quarterly, Vol. 10, No. 2, September 1965, p. 236.

²⁶ David L. Clark, "Educational Research and Development: The Next Decade", Implications for Education, Designing Education for the Future, Eight State Project, No. 2, New York, Citation Press, 1967, p. 171.

²⁷ Charles Jung, Robert Fox, Ronald Lippitt, "An Orientation and Strategy for Working on Problems of Change in School Systems", ed. Goodwin Watson, Change in School Systems, Cooperative Project for Educational Development, NTL Institute for Behavioral Sciences, NEA, Washington, D.C., 1969, p. 78.

²⁸ Robert Fox and Ronald Lippitt, "The Innovation of Classroom Mental Health Practices", (ed.) Mathew Miles, Innovation in Education, (New York, Teachers College Press, Columbia University, 1964), p. 297.

²⁹ Jung, Fox and Lippitt, *ibid*, pp. 79-80.

³⁰ *Ibid*, p. 81.

³¹ Kenneth D. Benne, et al., The University in the American Future, (Lexington, University of Kentucky Press, 1966), p. 5.

³² Ralph B. Kimbrough, "Community Power Structure and Curriculum Change", Strategy for Curriculum Change, (ed.) Robert Lapeer, Association for Supervision and Curriculum Development, January, 1965, Washington, D.C., p. 55.

³³ *Ibid*, p. 56.

³⁴ Dorwin Cartwright, "Power: A Neglected Variable in Social Psychology", The Planning of Change, ed. Bennis, Benne, Chin (New York, Holt-Rinehart-Winston, 1966), p. 420.

³⁵Ralph Kimbrough, *ibid*, p. 56.

³⁶Ronald Havelock, *ibid*, pp. 6-40.

Goodwin Watson, *ibid*, p. 111.

Claude W. Fawcett, "Educational Personnel Policies and Practices", Implications for Education of Perspective Changes in Society, (ed.) Edgar Morphet, Eight-State Project, Designing Education for the Future, Citation Press, New York, 1967, p. 202.

Paul C. Buchanan, "The Concept of Organization Development, or Self-Renewal, as a Form of Planned Change", Concepts for Social Change, (ed.) Goodwin Watson, Cooperative Project for Educational Development, NTL Institute for Applied Behavioral Sciences, NEA, Washington, D.C., 1969, p. 8.

³⁷Jacob W. Getzels, "Administration as a Social Process", Bennis, Benne, Chin, The Planning of Change, (New York, Holt-Rinehart, Winston, 1967), p. 382.

³⁸Gordon L. Lippitt, "What We Know About Leadership", (ed.) Bennis, Benne, Chin, The Planning of Change, (New York, Holt-Rinehart-Winston, 1966), p. 433.

³⁹*Ibid*, p. 432.

⁴⁰*Ibid*, p. 434.

⁴¹Havelock, *ibid*, pp. 9-33, 9-34.

⁴²Mathew Miles, (ed.) Innovation in Education, (New York, Teachers College Publication, Columbia University, 1967), p. 452.

⁴³Havelock, *ibid*, pp. 9-35.

⁴⁴*Ibid*, pp. 9-36.

⁴⁵Watson, *ibid*, p. 106.

⁴⁶*Ibid*, p. 107.

⁴⁷*Ibid*, p. 108.

CHAPTER III

MODELS OF DIFFUSION

Introduction

The study of adoption and diffusion curves has contributed to the identification of a regular sequence of events in the process of adoption and diffusion. Rogers points out that dividing the process into such phases is

" . . . 1) consistent with the nature of the phenomena,
2) congruent with previous research findings, and 3)
potentially useful for practical application."¹

He traces the development of the concept of stages, citing in particular the work of Ryan, Gross, and Wilkening. Ryan and Gross distinguished between "awareness", "conviction", "acceptance" and "complete adoption" of hybrid seed corn.² Wilkening, one of the first to use the concept of stages in the process of adoption, described the process as "one composed of learning, deciding and acting over a period of time. The adoption of specific practice is not the result of a single decision to act but a series of actions and thought decisions."³

Rural sociologists, who have been responsible for most of the research and conceptualizations on adoption phases have more or less reached a consensus on a five step process which includes: 1) awareness, 2) interest, 3) evaluation, 4) trial and 5) adoption.⁴

In the field of education, the concept of stages of change was implied in the early work of Mort and his colleagues. According to

Mort, the process of innovation in education follows a "predictable pattern", including insight into a need, introduction of a way of meeting the need, diffusion and adoption.⁵

In recent years, educational research and theory have drawn from both the rural sociology and social psychology traditions: Miles,⁶ for example, bases his discussion of stages on the work of Rogers, while Lippitt, Watson and Westley⁷ derive the stages they describe from Lewin who sees change as a three step process: "unfreezing, moving and freezing of a level."⁸

Carlson developed his critique on educational diffusion research in what he termed "the current accepted definition of the diffusion process: the (1) acceptance, (2) over time, (3) of some specific item - an idea or practice, (4) by individuals, groups or other adopting units, linked to (5) specific channels of communication, (6) to a social structure, and (7) to a given system of values or culture." He maintains that there is no single study on the diffusion of an educational innovation which takes into account all of these elements.⁹

Since the research on the stages of change has involved many different types of innovations and a wide variety of adopting populations, it follows that different authors propose conceptualizations of the change process which contain different elements. Each model has its own merit, yet no single model can answer all needs.

Overview

Robert Chin's conceptual model contributes to an understanding of a system's approach to change.¹⁰

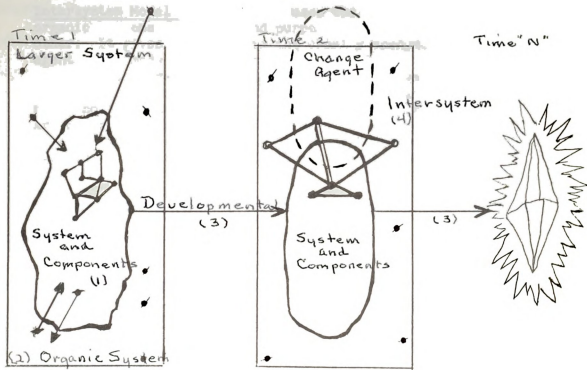


TABLE 5. Conceptual Models of Change and Changing. Note: The shape of the system, and its internal components is not exact; the shapes are purely representational in form.

Chin declares that these conceptual models are really models for studying phenomena in general and not just relevant to change. The four models indicated in the above figure are:

"Systems and Components Model. This model allows for change to come from components inside the system through invention and innovation. The basic question here is the internal fit and adjustment of the components to each other in their state of relative equilibrium.

Organic Systems Model. This model represents an open system. Interdependency, is an important property of the system's components. Stresses are not from within, but rather from inputs coming from outside the system.

Developmental Models. These are not bound by time. There are assumptions of direction of movement toward something or somewhere. At any one point in time, there are stages or phases which are replaced by other stages and phases. There are potentialities built into the system and there are forces that move the system from one stage to another and further on to its goal unless impeded by some obstacle.

Intersystem Models. This model uses the properties of two organic systems in direct and purposive contact with each other. It gives attention to the usually anonymous change agent. His mode of relationship to the client system, his actions, his strategies, and his valid knowledge about new technology, as well as his knowledge about diagnosing the here and now relationship of himself to the client system, are brought forth and conceptualized. In his relationship to the client system, the key phrase is "collaborative" process as defined by Lippitt, Miles, Bennis, Benne and Chin."¹¹

Richard Miller contrasted the traditional model for educational diffusion with his new model.¹²

CORRELATES OR ANTECEDENTS TO INNOVATIVENESS	INNOVATIVENESS OF SCHOOL SYSTEMS OR TEACHERS
1. Wealth 2. Cosmopolitanism 3. Communication Channels 4. etc.	1. Innovativeness in Adopting New Educational Ideas

TABLE 6. The Model for Educational Diffusion
Research Utilized by Most Past Researchers

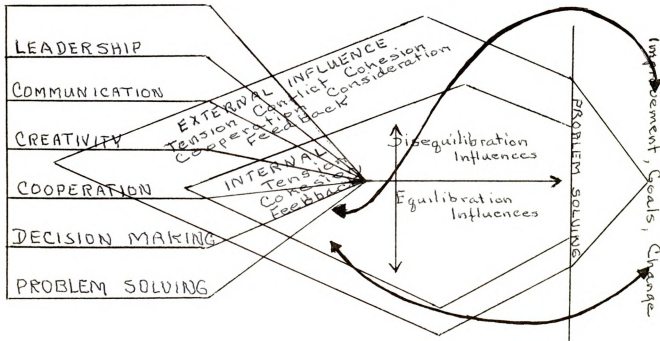
CORRELATES OR ANTECEDENTS TO INNOVATIVENESS	INNOVATIVENESS OF SCHOOL SYSTEMS OR TEACHERS	CONSEQUENCES OF INNOVATION
1. Wealth 2. Cosmopolitanism 3. Communication Channels 4. etc.	1. Innovativeness in Adopting New Educational Ideas	1. Increased School Quality 2. Greater Pupil Achievement 3. Dissatisfaction among School Staff 4. etc.

TABLE 7. A New Model for Change in Education

Miller states that "we need to know what improvement or deterioration in educational quality results when the motivation for adoption by a school system is financial inducement from an external source". He

predicts that if the answers were known, "the rate of adoption of educational innovations with high relative advantage would increase: correspondingly, those new ideas without sufficient relative advantage would be dropped from out promotional efforts."¹³

The next model, presented by the ASCD Commission on Supervision, illustrates six processes of change as critical to continuous system improvement: leadership, communication, creativity, cooperation, decision making, and problem solving. This model demonstrates how the members of the educational social system seek to improve (Table 8).¹⁴



Models of Change within Three Schools of Research

A review of the research on the stages of change involved in the diffusion process reveal common characteristics. Many descriptions of the change process include stages preceding diffusion and adoption. Others include stages of dissemination which go beyond the initial client system to other clients who have a similar need.

Havelock identifies three broad perspectives, three schools of thought which he terms: (1) The Social-Interaction Perspective, (2) The Research-Development and Diffusion Perspective, and (3) The Problem Solver Perspective. He outlines some of the major stages of each school in Table 9.¹⁵

Social Interaction Perspective

The Social Interaction or Community Adoption Process assumes that the innovation which is to be adopted is already in a developed form, suitable for use, readily available to the potential adopter.

Rogers' five-step process¹⁶ is the model which has been most used in studying adoption through the process of social-interaction. Lionberger describes this process as the "Community-Adoption Process".¹⁷

Havelock arranged the Table 10 showing the phases described by some of the authors who have studied adoption from this perspective.¹⁸

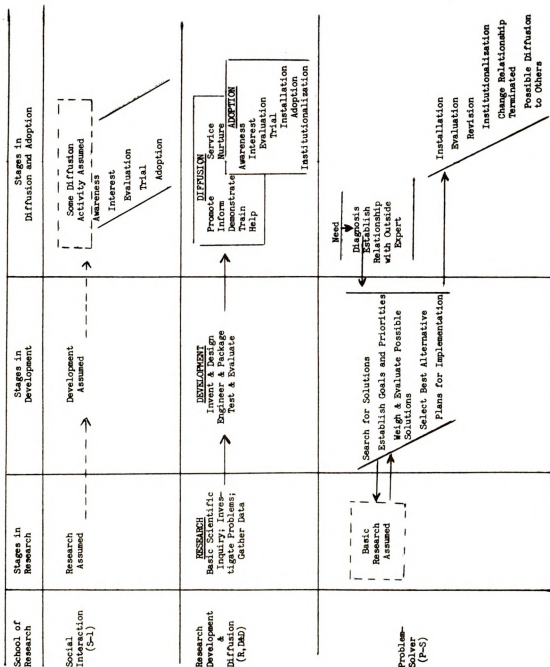


TABLE 9. Stages Typically Included in Models of Change Within Three Schools of Research

<u>Author</u>	<u>Field</u>	<u>Year</u>	<u>Phases</u>				
			1. Awareness	2. Interest	3. Evaluation	4. Trial	5. Adoption
Rogers Lionberger	Agric. Agric.	1962 1960					
Beal, Rogers & Bohlen	Agric.	1957	1. Awareness	2. Information	3. Application (Mental Trial, Decision to try)	4. Trial	5. Adoption
Wilkening	Agric.	1953	1. Awareness	2. Obtaining Information	3. Conviction and Trial		4. Adoption
Wilkening	Agric.	1962	1. Awareness	2. Interest or Information	3. Decision Making or Application	4. Trial	5. Acceptance or Adoption
Holmberg	Anthro.	1960	1. Availability of Information	2. Awareness 3. Interest	4. Trial	5. Evaluation	6. Adoption 7. Integration into Routine
Coleman, et al.	Med. Soc.	1966	1. Awareness	2. Interest	3. Evaluation (Ment. Trial)	4. Trial	5. Acceptance

TABLE 10. Social Interaction Change Models

The initial stage is one of awareness of the innovation. If adoption is to be initiated, the awareness will usually be followed by stages of interest and information seeking, evaluation (in terms of decision making), trial and adoption. The sequence may be terminated by rejection at any stage: for example, awareness may be followed by rejection in which case interest and information seeking may never take place. Similarly, interest and information seeking may result in the decision that the innovation is not useful or appropriate: evaluation may provide negative results, and trial on a limited basis may lead to rejection. For all of these studies the unit of adoption is the individual. Holmberg is concerned with the individual adoption of cultural change. Coleman studied the adoption of a new drug by physicians; and the rural sociologists consider the individual farmer (or farm family) as he adopts agricultural innovations.

Although the adopting unit is the individual in each of these studies, this phase model could just as logically be applied to groups or to entire social systems.

Rogers presents a paradigm of adoption by an individual:¹⁹

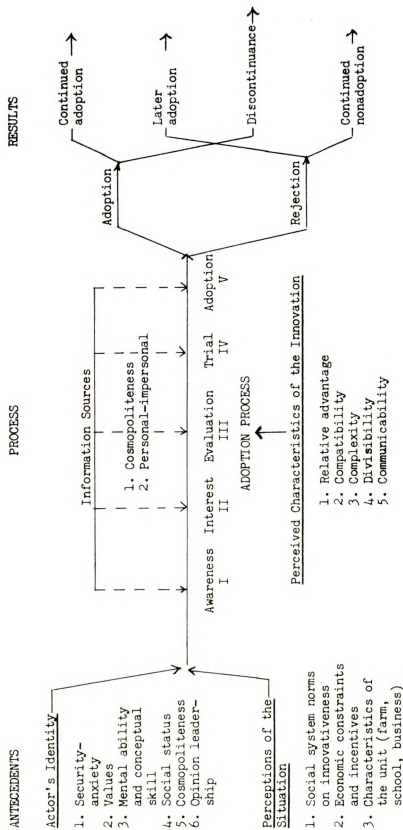


TABLE 11. Paradigm of the Adoption of an Innovation by an Individual within a Social System

It contains three major divisions: (1) antecedents, (2) process, (3) results. Antecedents are of two major types: (1) the actor's identity, and (2) his perceptions of the situation. Rogers sees identity, e.i., the individual's sense of security, his dominant values, is mental ability and conceptual skill, his social status, and his cosmopoliteness, affecting the adoption of innovation. The individual's perception of the situation, also, affects his adoption.²⁰

Information sources are important stimuli in the adoption process. The individual becomes aware mainly by impersonal and mass media sources.²¹

The results of the adoption process are adoption or rejection of the idea. Rogers cites two possibilities following the adoption of an innovation: it may be used continuously, or (2) rejected at a later date.²² Observations of the speed with which people in a given locality accept new ideas or practices from first adopters to near complete adoption and resulting cumulative patterns has led to important discoveries. Where practices have been successfully introduced, acceptance patterns have generally consisted of slow initial acceptance, followed by acceptance at an accelerated rate, and finally at a decreasing rate after most people have adopted the idea or practice. Havelock pictures the adoption curve in the following way:²³

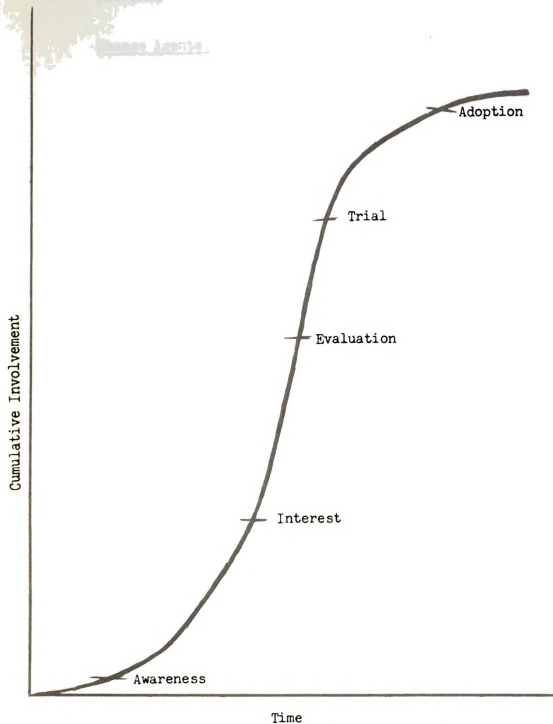


TABLE 12. Involvement of an Individual at Stages of the Adoption Process

Attempts to explain the rapidly accelerating portion of the curve, rather clearly demonstrate the multiplying effect of interpersonal patterns of communication and influences on the changes that occur.

Change Agents in Social-Interaction Model

Lionberger reports that placement of persons looked to for information and advice in the early adopter categories, and the differential manner in which early, late and intervening adopters make use of other persons as information sources about new ideas and practices lend additional support to the multiplying influences that people have on each other.²⁴

A significant development in diffusion research has been the introduction and the use of the role concept for studying the function of change agents in the individual and community adoption processes. It has been found that individuals in different adopter categories differ on the types of information sources to which they turn and in the roles which they play in the transmission of information.

Wilkening and Preiss made studies on the role of the county agent.²⁵ Studies on the subject matter specialist were done by Brown and Deekens.²⁶

Lionberger observes that role studies usually consider what the change agent thinks he is expected to do, what significant others think he ought to do, and what the agent actually does.²⁷

Opinion Leaders

Many terms have been employed to identify various roles in the adoption process. Among the best known of these are the "opinion leaders" and "followers". Lazarsfeld, et al, describe these change

agents. They depict the flow of communication as a "two-way-flow" or a two step process in which ideas are usually given to "opinion leaders" through mass media and then transmitted by "opinion leaders" to less active "followers".²⁸

An additional role which is often cited is that of the expert. In their study of communication regarding social affairs, Katz and Lazarsfeld found that opinion leaders are apt to seek information from the experts, while followers generally seek out people like themselves. They suggested that the opinion leader fills two roles: first as "follower" of a higher level opinion leader, the "expert", and then as leader for a group of less active followers who are more like himself.²⁹ This process is described by Merton as a "chain-of-influence", with people on the same social levels serving as links. He points out that top level "influentials" may have little direct effect on lower-level decision making.³⁰

Sources of Information

The major distinction as regards sources of information is that of personal vs impersonal sources; the former implies some type of personal relationship between sender and receiver; the latter refers primarily to the mass media. In general, the mass media serve to inform, and the personal contacts serve to legitimate information.

Citing Rogers, Bowers and Katz, the following generalizations were made by Havelock in terms of phases of adoption: "impersonal sources are most important during the 'awareness' phase; during the 'interest-information seeking' phase the receiver may turn to an expert, to the mass media, or to personal contacts as sources of information. Personal sources, however, assume greater importance at the 'evaluation', or

'mental trial' stage. Following an actual trial, the individual tends to rely on his own judgment regarding the value of the innovation."³¹

The Innovation

Measurement of the flow is the primary concern of the Social Interaction Perspective. There is a tendency for researchers to choose innovations which appear in the concrete, "diffusable" form, such as a type of fertilizer or a new medical drug. This preference stems from one of the most outstanding characteristics of the Social-Interaction school, namely, their empiric research orientation. If the innovation is a stable element which we can easily identify as a constant, the task of measuring its flow through a social system over time is made considerably easier. The primary concern of the Social Interaction theorists is the measurement of the flow; they study the pattern of flow and the effects of social structure and relationships and groupings on the fate of innovations.

Research

Havelock formulated the following six major points that can be derived from the theory and considerable quantity of empiric research on the Social-Interaction Tradition. They are the following:

1. Research has shown us what a complex and intricate set of human substructures and processes must be operative before diffusion will succeed.
2. Initial acceptance by a small group of key influentials ("opinion leaders") is a major factor in diffusion to the community as a whole. Their prestige, their status as exemplars and norm-setters, and the frequency of their interaction with other members are the key factors in gaining acceptance from the great majority.
3. "Face-to-face" impersonal contacts are of real importance. The "opinion leader" is an important force in societal diffusion because he has friendly contacts

with other members. He depends largely on "word-of-mouth" communication with local innovators and outside "experts" in formulating his inventory of new ideas and practices.

4. "A society which allows large numbers of individuals to maintain many diverse and overlapping reference group identifications will be a very innovative society". Theodore Newcomb, a social psychologist, distinguished the psychological group from the social group in a study of attitude stability and change. What he termed "reference group" identification plays a key role in diffusion. Innovators are likely to place themselves in a greater number and variety of such reference groups which allows them to see personal relevance and value in ideas and things which their neighbor would see as foreign.
5. There is research evidence to be able to say that the size of the adopting unit (e.g. a total school system) has been examined by the Social-Interaction Researchers. (Havelock documents this by listing a great many studies that have been completed regarding school systems and the Social-Interaction Process).
6. The Social-Interaction researchers have shown that different types of influence strategy (mass media, demonstration, contact with experts, informal contact with peers) are most effective at different stages. Armed with this knowledge the change strategist can plan out a synchronized multi-media program of influence.³²

Although there are over 1,000 empiric research studies on the Social-Interaction Process since 1943, there are notable gaps in the literature. The processes related to invention, research, and development have not been studied from the Social-Interaction Perspective. Little attention has been paid to the voluminous literature on the sociology and psychology of organizations, as such.

Lionberger lists some limitations in the diffusion research:

"... many changes in education are very complex and require the involvement of interlocking social systems. Where such is the case, the developing body of knowledge relating to implemented change in social systems has important implications. Although the diffusion processes of social change are closely related in reality, articulations of the two is research designs has not

been a common practice. Secondly, the individual adoption process assumes "rational" deliberate decisions in which information is assembled and evaluated, and decisions are made essentially on the basis of "sound" evidence. Not all decisions are of this nature".³³

Implications from Preceding Research

There are certain readiness factors from studies of the S-I diffusion process relating to the individual, that validate the need for on-going and meaningful renewal of the organization and system called school or school system. Implications are that

- 1) the actor brings "himself" to the process of change, e.i., his security or lack of it; values, mental ability and conceptual skill, social status, cosmopoliteness, self-identity.
- 2) the actor brings his "perceptions" to the process of change, e.i., how he views the social system in which he finds himself; its norms or innovativeness, economic constraints and incentives, and procedural characteristics of the school or system.

Further, implications are that change is a process; it is not an event. The stage between initiation and adoption is adaptation. This stage calls for collaborative involvement from leaders, followers; high-status positions, low-status positions; internal, external forces.

Further implications are that, in terms of results, there are some outcomes between adoption or rejection. They are continued adoption, later adoption, discontinued adoption.

Recommendations for TECP:

3.1 Antecedent activities:

- 1) realization of what a complex and intricate set of human sub-structures and processes must be operative before diffusion will succeed.

- 2) assessment of potential adopters and implementers (individuals) in terms of personal security, values, mental ability and conceptual skill, social status, cosmopoliteness.
- 3) assessment of the social system in terms of its norms or innovativeness, potential leadership within, need for external resource, economic constraints, traditional procedural patterns, need for adaptation.

3.2 Adaptation activities:

- 1) face-to-face impersonal contacts
- 2) recognition and development of key influentials within each group who communicates with local innovators and outside experts.
- 3) varied types of influence strategy: large group sessions, small group inter-action, mass media, demonstration, contact with experts.

3.3 Follow-through activities:

- 1) continued re-inforcement in all stages of adoptions; initial, on-going, final, and continued.
- 2) continued group cohesiveness in terms of total system membership through mechanisms conducive to openness, learning, two-way-communication, decision and acceptance.

FOOTNOTES

¹Everett M. Rogers, Diffusion of Innovations (New York, The Free Press, 1962), p. 79.

²Bryce Ryan and Neal Gross, "The Diffusion of Hybrid Seed Corn in Two Iowa Communities", Rural Sociology, March, 1943, Vol. 8, pp. 15-24.

³Eugene Wilkening, "The Communication of Ideas on Innovation in Agriculture", in E. Katz et al., Studies of Innovation and of Communication to the Public, Stanford University, School of Communications Research, 1962, pp. 16.

⁴Rogers, *ibid*, p. 81-86.

⁵Paul R. Mort, "Studies in Educational Innovation From the Institution of Administrative Research", Mathew B. Miles (ed.) Innovations in Education (New York, Bureau of Publications, Teachers College, Columbia University, 1964), p. 318.

⁶Mathew E. Miles, Studies of Innovation (New York, Bureau of Publications, Teachers College, Columbia University, 1964), p. 19.

⁷Ronald Lippitt, Jeanne Watson, Bruce Westley, The Dynamics of Planned Change (New York, Harcourt-Brace and Co., 1958).

⁸Kurt Lewin, "Quasi-Stationary Social Equilibria and the Problem of Permanent Change", ed. Bennis, Benne, Chin, The Planning of Change, Holt, Rinehart and Winston, 1966, p. 237.

⁹Richard O. Carlson, "Summary and Critique of Educational Diffusion Research", presented at the National Conference on the Diffusion of Educational Ideas, printed in Research Implications for Educational Diffusion, Michigan Department of Education, 1968, p. 15.

¹⁰Robert Chin, "Some Ideas on Changing", ed. Richard I. Miller, Perspectives on Educational Change (New York, Appleton-Century-Crafts, 1967), p. 337.

¹¹Ibid, p. 338-339.

¹²Richard I. Miller, (ed.) Perspectives on Educational Change (New York, Appleton-Century-Crofts, 1967), p. 378-379.

¹³Ibid, p. 381.

¹⁴William H. Lucio (ed.) Supervision: Perspectives and Propositions, Washington: Association of Supervision and Curriculum Development, 1967, p. 21.

¹⁵Ronald G. Havelock, et. al., Planning for Innovation, Center for Research on Utilization of Scientific Knowledge Institute for Social Research, University of Michigan, Ann Arbor, Michigan, July, 1969, p. 10-28.

¹⁶Everett M. Rogers, *ibid*, p. 81-86.

¹⁷Herbert F. Lionberger, "Diffusion of Innovations in Agricultural Research and in Schools", (ed.) Robert R. Leeper, Strategy for Curriculum Change, Association for Supervision and Curriculum Development, Washington, D.C., January 1965, p. 35.

¹⁸Ronald Havelock, *ibid*, p. 10-31.

¹⁹Everett Rogers, *ibid*, p. 305.

²⁰*ibid*, p. 307.

²¹*Ibid*, p. 307.

²²*ibid*, p. 307.

²³Ronald Havelock, *ibid*, p. 10-34.

²⁴Lionberger, *ibid*, p. 38.

²⁵Eugene A. Wilkening, The County Agent in Wisconsin Perceptions of Role Definitions as Viewed by Agents", Wisconsin Agricultural Experiment Station Research Bulletin, No. 203, Madison: September 1957.

Jack Preiss, "A Theory of Control: The Role of the County Agricultural Agent." Unpublished Doctoral Dissertation, Michigan State University, East Lansing, September, 1954.

²⁶Emory J. Brown and Albert Deekens, "Roles of the Extension Subject Matter Specialist." Paper presented at the annual meeting of the Rural Sociological Society, University of Maryland, August, 1957.

²⁷Herbert Lionberger, *ibid*, p. 37.

²⁸Elihu Katz and Paul Lazarsfeld, Personal Influence The Part Played by People in the Flow of Mass Communication (New York, The Free Press, 1955), p. 90.

²⁹*Ibid*, p. 94.

³⁰Merton.

³¹Havelock, *ibid*, p. 10-38.

³²*Ibid*, p. 10-41.

³³Lionberger, *ibid*, p. 37.

The Research, Development and Diffusion Perspective

This model looks at the process of change from the point of view of the originator of an innovation, and it begins with the formulation of a problem on the basis of a presumed need for the receiver. Like the Social-Interaction Perspective, the initiative in the R.D. and D. school is taken by the developer, not the receiver. It differs from the Social-Interaction Perspective in that it views the process of change at an earlier point in time. The focus is on the activity phases of the developer as he designs and develops a potential solution. Development is followed by dissemination of the solution to the receiver and promotion of adoption behavior in the receiver group.

Models which are included in R.D. and D. school begin the process of change with the identification of a problem, proceed through activities which are directed toward finding or producing a solution, and end with the diffusion of this solution to a target group. The initiative is taken by the researcher, the developer, and the disseminator.

No one particular model is considered the R.D. and D. model.

Havelock presents a graphic picture of the theorists since 1957 in the school of R.D. and D. researchers. The various authors stress the roles and activities that are related to each ones area of work and to his goals in that work:¹

The sequence of activities which some authors describe in the Research, Development and Dissemination process are research, development, diffusion and adoption, though it is clear from Table 13 that few authors specifically include all of these activities.

The following schematic continuum for change proposed by Guba and Clark is designed to bridge the gap between theory and practice:²

	FUNCTION	PURPOSE
R		
E		
S	1. Conducting Scientific Inquiry	1. To advance knowledge
E		
A	2. Investigating Educationally Oriented Problems	2. To advance knowledge about the social process field of education
R		
C	3. Gathering Operational and Planning Data	3. To provide a basis for long range planning
H		
D		
E	4. Gathering Operations and Planning Data	4. To identify operational problems
V		
E	5. Inventing Solutions to Operating Problems	5. To solve operational problems
L		
O	6. Engineering Packages and Programs for Operational Use	6. To operationalize solutions
P		
M		
E		
N	7. Testing and Evaluating Packages and Programs	7. To assess the effectiveness and efficiency of the packages and programs
T		
D		
I	8. Informing Target Systems About Packages and Programs	8. To make potential adopters aware of the existence of packages or programs
F		
U	9. Demonstrating the Effectiveness of the Packages and Programs	9. To convince the adopter of the efficacy of the packages or programs
S		
I		
O	10. Training Target Systems in the Use of the Packages and Programs	10. To develop a level of user competence with the packages or programs
N		
	11. Servicing and Nurturing Installed Innovations	11. To complete the institutionalization of the invention

100
1000000

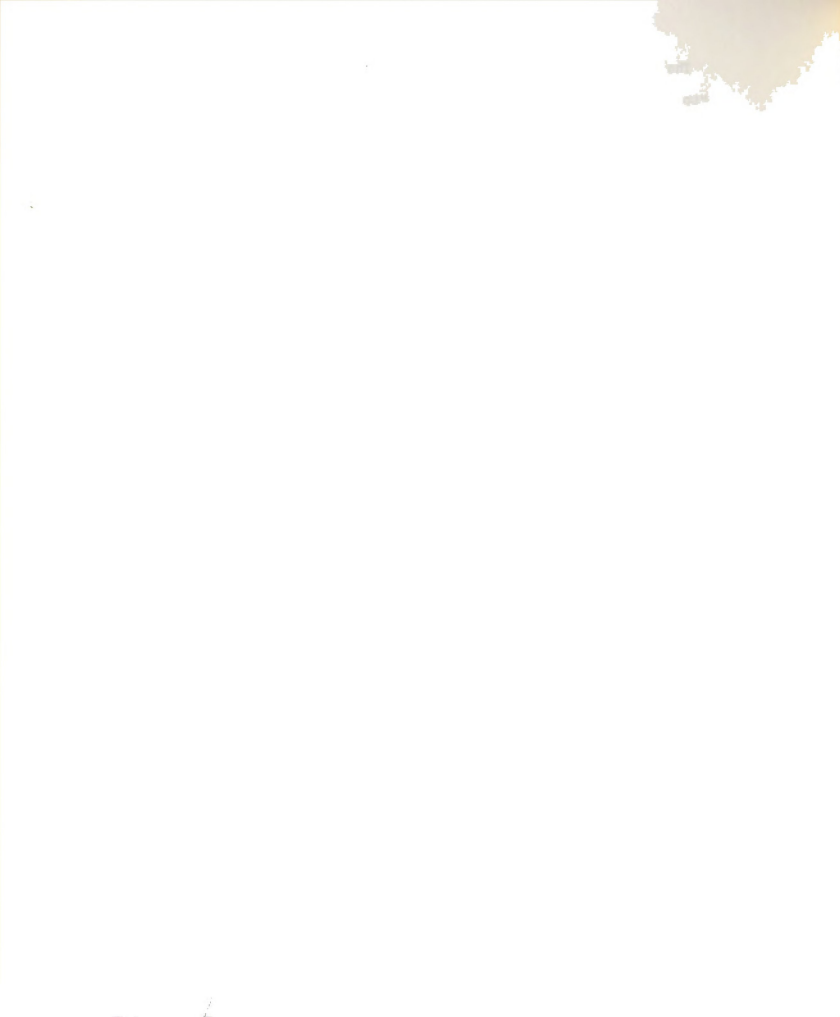
The first activity described is that of research. Its objective is "to advance or extend knowledge". It may be evaluated only in terms of its own validity, not in terms of whether or not it leads to invention or change. Its relationship to the change process is that "it may provide a basis for innovation if anyone else chooses to capitalize on the research and is clever enough to develop an application from it".³

The essential idea in the suggested "development" is invention. The significance of invention in the change process is that "it produces the innovation in its initial conceptualized form". The objective of design is "to order and to systematize the components of the invented solution into an innovation package suitable for institutional use". Guba stresses the significance of the combined developmental activities in the process of change, and he states "that it is this activity, and not research which is at the heart of change, for while research may make change possible, it is development that actually produces an innovation that may be adopted."⁴

The objective of dissemination is to create awareness, and of demonstration is to "afford an opportunity to examine and assess operating qualities of the invention, that is to build conviction."⁵

Clark and Guba see "adoption" as a final major part of the change process, et. the incorporation of the invention into a functioning system.⁶

Guba points out that the theory-to-practice change continuum was designed to bridge an existing gap between research and practice. A process of change has been proposed in an orderly way for defining the activities which may take place at each stage of the process. The possibility of breakdown in the process, the fact that every activity will not or perhaps should not be performed in every case or in the



order given is recognized. The roles and functions of individuals taking part in the process may be planned to provide continuity and to prevent gaps or overlapping of activities.⁷

The Research, Development and Dissemination program of Hopkins and Clark was developed in connection with estimating the supply and demand for research, development and diffusion personnel in the field of education, a need which arose from legislation (Elementary and Secondary Education Act). The authors are particularly concerned with defining the functions of individuals involved in these activities and with relating these functions to the institutional settings in which the individuals perform.⁸

Havelock found the models of Hopkins and Clark and of Guba and Clark agreeing closely on the activities which are to be carried out during the development and diffusion phases. He found, however, that because of the nature of the Hopkins and Clark study, the authors define a greater number of research functions than do Guba and Clark. A more significant difference, noted by Havelock, is that Hopkins and Clark do not take into consideration the activities of the receiver. This again is due to the nature of the project. The adopting groups were purposefully not considered in the estimates of personnel requirements.⁹

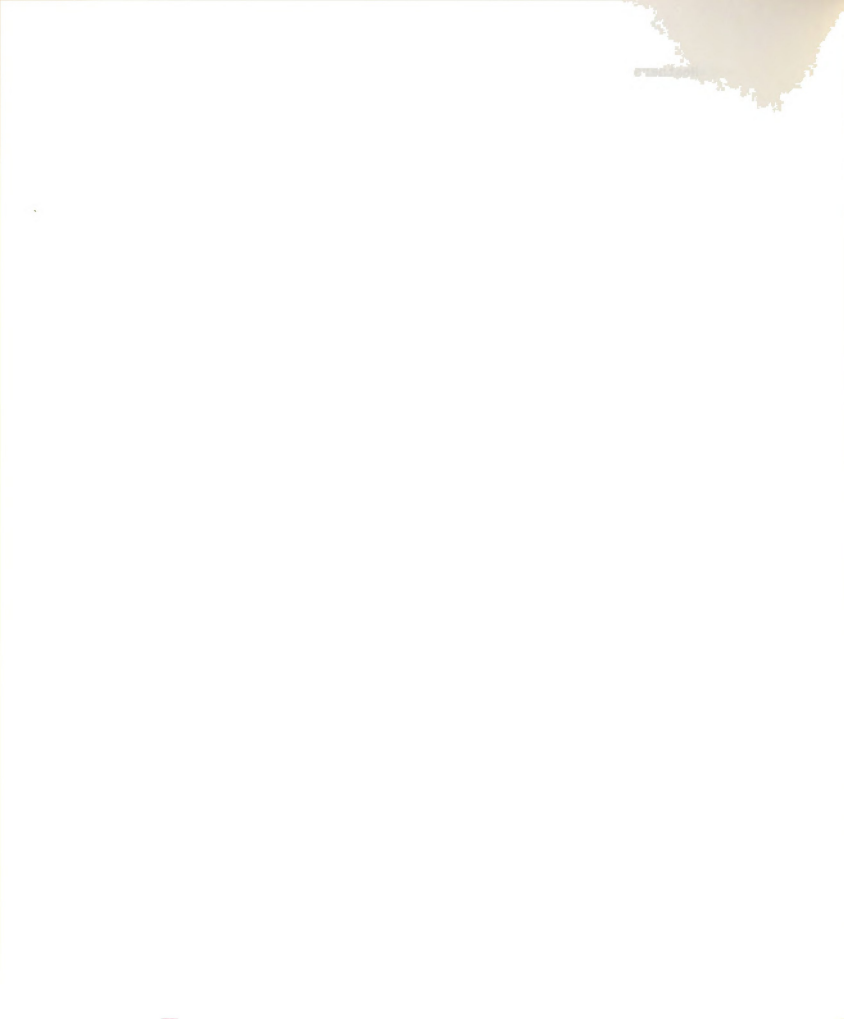
The three stages which Brickell suggests (See Table 13) are based on the results of a study of innovation in the New York State school system. These innovations called for a rearrangement of the structural elements of the schools rather than a simple change in a classroom practice. Brickell's stages are "the design, evaluation, and dissemination of innovations".¹⁰

Heathers is primarily concerned with strategies to bring about change in the elementary schools. As Table 13 shows, he outlines three phases, (1) task analysis, (2) development of design, (3) construction and testing of prototype models in field situations or in the laboratory, and (4) dissemination. The activities which he describes for each phase are very similar to Brickell's list of activities.¹¹

Havelock sees some difference in the conceptualizations of these two theorists. He speculates that both Heathers and Brickell would agree that some form of task analyses and goal specification must take place both within the local school system and within the system which develops the innovation.¹²

The key conclusion of Brickell's study was the recognition of three distinctly different, irreconcilable processes, namely, design, evaluation, and dissemination:

- Phase 1: Design. Program design is the translation of what is known about learning into programs for teaching. The ideal circumstances for the design of an improved instructional approach are artificial, enriched, and free.
- Phase 2: Evaluation. Program evaluation in the systematic testing of a new instructional approach to find what it will accomplish under what conditions. The ideal circumstances for the evaluation of a new instructional approach are controlled, closely observed, and unfree. At their best they provide conditions in which the forces can be controlled when possible, and kept under close surveillance when actual control is impossible. The freedom which is essential in searching for a good design is destructive in the making of a good evaluation.
- Phase 3: Dissemination. Program dissemination is the process of spreading innovations into schools. The ideal circumstances for the dissemination of a new approach through demonstration are those which are ordinary, unenriched, and normal. At their best, they are exactly like the everyday situations in the observer's own



school and community. Anything which the observer could label "abnormal" or "unrealistic" — such as the enriched conditions necessary for good design or the controlled conditions necessary for proper evaluation — is sufficient to rob the observed program of persuasive effect.¹³

Miles draws on Rogers in his conceptualizations of the stages following design, with a few slight variations. He feels that all comprehensive strategies include the chronological stages shown in Table 13, (1) design of innovation, (2) local awareness-interest, (3) local evaluation, and local trial.¹⁴

Miles presents a typology of change strategies in which he indicates that the change process may be initiated either by the target system itself or by systems in the environment of the target system, using either existing structures or new structures:¹⁵

		STAGES IN THE STRATEGY PRIOR TO ADOPTION BY TARGET SYSTEM			
INITIATOR OF STRATEGY		Design of Innovation	Local awareness interest	Local evaluation	Local trial
Target system (school, college, etc.)	Existing structure	1	2	3	4
	New structure	5	6	7	8
Systems in environ- ment of target system	Existing structure	9	10	11	12
	New structure	13	14	15	16

TABLE 14. A typology of change strategies

When strategies are initiated by the target system, using existing structures, several types of comprehensive strategy may be placed in the row (cells 1, 2, 3, 4). These include the curriculum councils, and committees extensively used in school systems to prepare and install innovative curriculum guides: local in-service training programs and staff meetings.¹⁶

The "target system" is defined by Miles as including the relevant portions of the local community. All of these comprehensive strategies involve attention to designing potential innovations, developing awareness and interest, enabling evaluation of the proposals, and encouraging or requiring trials -- which hopefully will lead to adoption. Miles observes that there is argument among authors for using strategies of this type. These arguments center around the importance of "local control" and of active involvement in decision-making of those who are affected by the decision.¹⁷

A partial strategy in the top row of the matrix is the deliberate creation of conflict around particular innovations at the local school district level. This strategy covers only cells 2 - 3. It seems to focus mainly on awareness-interest and evaluation, but does not usually lead to local tryout, especially where conflict is strong enough to be disabling to the participants.

Visits by local school system personnel to neighboring systems are also a partial strategy: they can be placed in cells 2 - 3 - 4. Brickell points out the importance of such visits in the decision to try out and adopt an innovation.¹⁸

Strategies initiated by the target system itself using new structures, do involve the creation of special structures to develop innovations and guide the progress of strategic attempts. Comprehensive

strategies in row 5 - 6 - 7 - 8 of the typology include especially appointed local curriculum committees, either at the school or college level; the creation of a council of administration and faculty for improvement of education, use of a local group to aid the local school district in matters of reorganization, teacher recruitment, improvement of materials, and community financial support.¹⁹

A partial strategy in this row of the matrix, covering only cells 6 - 7 is the community self-survey. Miles observes that it is designed to diagnose the state of community opinion in relation to the school program, thus aiding local awareness-interest in particular innovations, and evaluation of them.²⁰

Miles again refers to the argument for creating new structures within the target system which is "that the norms and procedures of the local system have become overfirm and resistant to change, and that an additional stimulus for change is therefore needed."²¹

Strategies Initiated by Systems in the Environment, Using Existing Structures.

One comprehensive strategy of this type has been used by the Fund for the Advancement of Education; it involves the provision of funds on a matching basis for management surveys in the institutions of higher education, operated either by consulting firms or by the institutions, themselves. Such a strategy (an innovation, itself) appears to have been useful in stimulating the local design of innovations, and in carrying them through to adoption.

Miles observes a concentration of single-cell strategies in cell 10 of this row. Many times organizations appear to act as if their sole function were to increase local awareness-interest in particular

innovations. He cites as an example the production of a book designed to disseminate images of an innovation as yet incompletely installed.²²

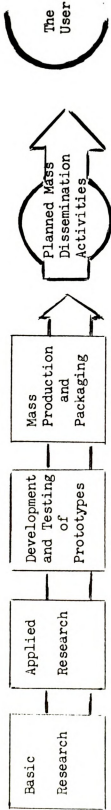
Some strategies are initiated by systems into the environment, using new structures. "There may be a growing tendency," states Miles, "to build new structures to carry innovative interprizes". He found more currently used strategies placeable in row 13 - 14 - 15 - 16 than in the other rows of the matrix.²³

Such a comprehensive strategy is that followed by national curriculum study groups. Miles cites the Physical Science Study Committee, the Biological Sciences Curriculum Study, and the School Mathematics Study Group. Initially, this strategy involves the convening of scholars from academic disciplines to agree on the basic concepts to be included in the new curriculum. This step is followed by the preparation of texts, materials and supporting devices based on the concepts; careful field testing and feedback on the adequacy of the materials; training of selected teachers in the use of the revised materials; and follow-up supervision for these teachers as they begin to use the materials.²⁴

Another comprehensive strategy is that of collaboration between a university and the schools in the immediate area surrounding it, for purposes of innovation design, dissemination, evaluation, and trial. Some of these cited by Miles as examples are: around the University of Pittsburg (The Regional Commission of Educational Co-ordination and the Co-ordinated Education Center), the University of Wisconsin (Wisconsin Improvement Program), the University of Chicago (the School Improvement Program), and Harvard University (the School and University Program for Research and Development).

Miles points out many examples of partial strategies in this row 13 - 14 - 15 - 16 of the matrix. Maria Montessori strategies, as well as John Dewey, actually cover only cells 13 - 14 - 15, leaving no provision for support or encouragement for actual trial in the target school system. Some plans include only 13 - 14, excluding plans for local evaluation and trial of resultant innovations.²⁵

In summary, the Research, Development and Dissemination perspective is pictured by Havelock in the following figure:²⁶



Major Points Stressed: Rational Process
 Planning Necessary
 Division of Labor
 High investment pays off in quality, quantity, long
 term benefit, and capacity to reach mass audience.

Spokesmen: Henry M. Brickell, David Clark, Egon Guba, Mathew Miles

TABLE 15. The Research, Development and Diffusion Perspective

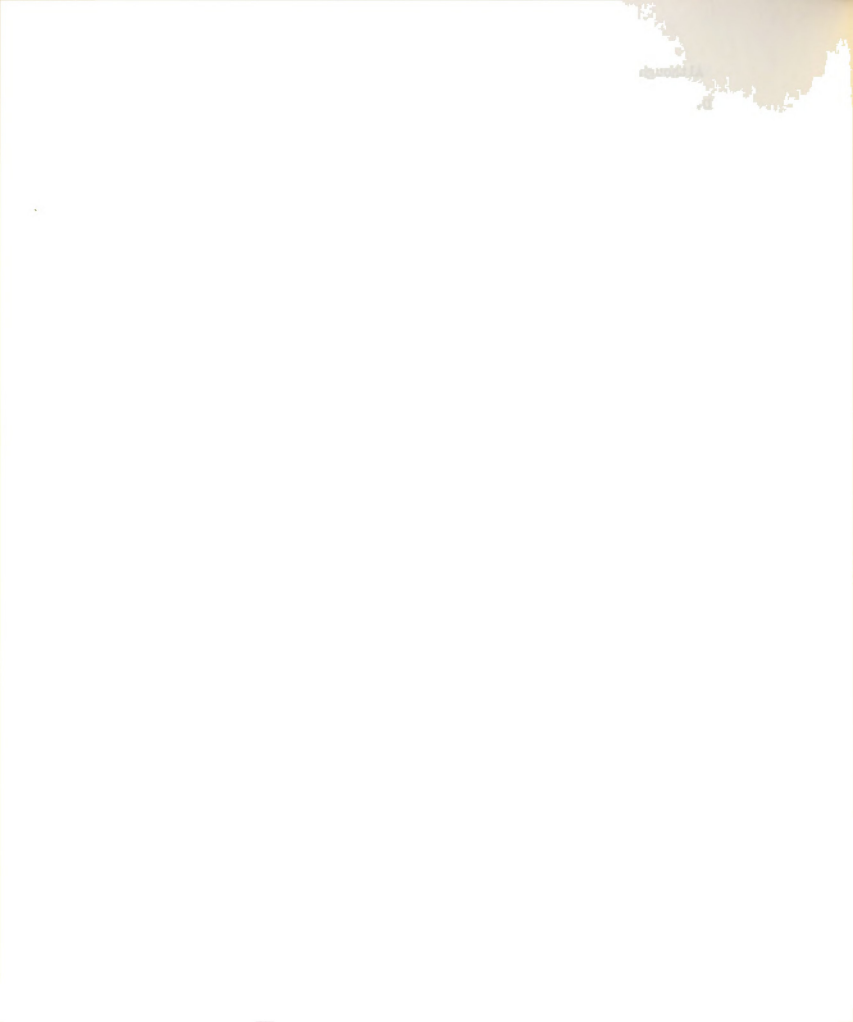
Although there are many variations in the specifics of the R.D. and D. models, Havelock notes five features which they all seem to have in common:²⁷

"First of all, the RD&D model suggests that D&U should be a rational process: there should be a rational sequence of activities which moves from research to development to packaging before dissemination takes place. Secondly, this model assumes that there has to be planning, and planning really on a massive scale. It is not enough that we simply have all these activities of research and development; they have to be coordinated; there has to be a relationship between them; and they have to make sense in a logical sequence that may go back years in the evolution of one particular message to be disseminated. Thirdly, there has to be a division of labor and a separation of roles and functions, an obvious prerequisite in all complex activities of modern society, but one that we sometimes slur over. Fourth, it assumes a more or less clearly defined target audience, a specified passive consumer, who will accept the innovation if it is delivered on the right channel, in the right way, and to assure this happening is scientific evaluation, evaluation at every stage of development and dissemination. Fifth, and finally, this perspective accepts the fact of high initial development cost prior to any dissemination activity, because it foresees an even higher gain in the long run, in terms of efficiency, quality, and capacity to reach a mass audience. These five features, (1) rational sequence, (2) planning, (3) division of labor, (4) defined audience, and (5) high investment for maximum pay-off, make "RD&D" a very useful and relevant paradigm for technical and social change."

Implications from preceding research

Implications from the R.D. and D. perspective are that development and utilization of knowledge should be carried off in a rational sequence:

- 1) moving from research to development to packaging before dissemination takes place
- 2) massive planning in view of people, traditions, and internal and external relationships
- 3) division of labor and a separation of roles
- 4) defined audience - a specified passive consumer who will accept the innovation if it is delivered on the right channel, in the right way, and at the right time



- 5) program design-testing and evaluating packages and programs to assess the effectiveness and efficiency of both.

Recommendations for TECP:

3.4 Antecedent activities:

These activities which include research, development of packages, models for dissemination and diffusion have already been accomplished by TECP summer team.

3.5 Adaptation activities:

- 1) informing the school systems about packages and programs
- 2) demonstrating the effectiveness of the packages and programs
- 3) training target systems in the use of the packages and programs

3.6 Follow-through activities:

- 1) servicing and nurturing installed innovations through the director of TECP and a team from the summer TECP membership.

FOOTNOTES

¹Ronald G. Havelock, et. al, Planning for Innovation, Center for Research on Utilization of Scientific Knowledge Institute for Social Research, University of Michigan, Ann Arbor, Michigan, July, 1969, p. 10-40.

²David L. Clark and Egon G. Guba, "Effecting Change in Institutions of Higher Education", (Address to International Intervisitation Project of the University Council for Educational Administration, October, 1966), p. 3.

³Havelock, *ibid*, p. 10-41.

⁴Egon Guba, "The Change Continuum and Its Relation to the Illinois Plan for Program Development for Gifted Children", Paper delivered to a Conference on Educational Change, Urbana, Illinois, March, 1966, p. 3. (Cited by Havelock, *ibid*, p. 10-39).

⁵*Ibid*, p. 6.

⁶Clark and Guba, *ibid*, p. 5.

⁷*Ibid*, p. 8.

⁸John E. Hopkins, et. al., "Exemplars of Emerging Roles", Conference Paper No. 3, Conference on Emerging Roles in Educational Research, Development and Diffusion, Bloomington, Indiana; Indiana University, December, 1966. (Cited by Havelock, *ibid*, p. 10-43.)

⁹Havelock, *ibid*, p. 10-43.

¹⁰H. M. Brickell, "State Organization for Educational Change: A Case Study and a Proposal", (ed.) Mathew Miles, Innovations in Education, New York, Bureau of Publications, Teachers College, Columbia University, 1964, pp. 511-512.

¹¹Glen Heathers, "Influencing Change at the Elementary Level", (ed.) R. Miller, Perspectives on Educational Change (New York, Appleton-Century, Crofts, 1966), pp. 38-41.

¹²Havelock, *ibid*, pp. 10-48.

¹³Brickell, *ibid*, pp. 519-521.

¹⁴Mathew Miles, Innovations in Education (New York, Teachers College Press, Columbia University, 1967), p. 20.

¹⁵*Ibid*, p. 20.

¹⁶*Ibid*, p. 21.

¹⁷*Ibid*, p. 21.

¹⁸*Ibid*, p. 493.

¹⁹*Ibid*, p. 22.

²⁰*Ibid*, p. 22.

²¹*Ibid*, p. 23.

²²*Ibid*, p. 24.

²³*Ibid*, p. 26.

²⁴*Ibid*, p. 26.

²⁵*Ibid*, p. 28.

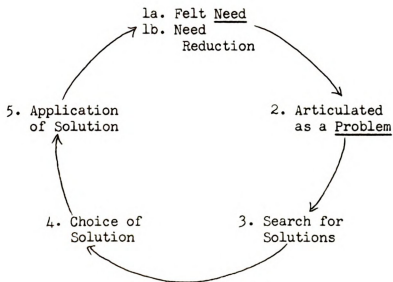
²⁶Havelock, *ibid*, p. 11-6.

²⁷*Ibid*, p. 11-5.

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THE PROBLEM-SOLVER PERSPECTIVE

This third perspective rests on the primary assumption that knowledge utilization is only a part of a problem solving process inside the user which begins with a need, and ends with the satisfaction of that need. This process is depicted by Havelock as a cycle composed of five stages:



Successive stages in this model generally follow the psychological theory of need reduction through problem-solving similar to the one posed earlier in this chapter in discussions of the D&U process inside the individual person. The process can be depicted as a cycle composed of five stages beginning with "1a" and concluding with "1b". The fifth stage (application of a solution) leads to a reduction of the original need "1b" if the solution is right. If it is not right then presumably stage "1a" is reinitiated and the cycle is repeated until a solution which is truly need-reducing is discovered.

TABLE 16. The Need Reduction Cycle

He indicates that this model is a general one and could apply to a process inside a single person, or inside a group, an organization, a community, or society as a whole. The problem solvers may also be outside specialists (change-agents, resource persons, etc.) but they will act in a two-way reciprocal and collaborative manner if they are to be effective.

Problem-Solver Models

Lippitt, Watson and Westley present a model containing phases of planned change. They studied four types of dynamic systems in society at which organized problem-solving efforts and change continually go on: the individual personality, the face-to-face group, the organization, and the community.²

These researchers expand Kurt Lewin's three change process phases (unfreezing, moving, and freezing) to five general phases:

1. Development of a need for change (unfreezing)
2. Establishment of a change relationship
3. Working toward change (moving)
4. Generalization and stabilization of change (freezing)
5. Achieving a terminal relationship³

The moving or working toward change took on three dimensions: the clarification or diagnosis of the client system's problem; the examination of alternative routes and goals, and establishing goals and intentions of action; the transformation of intentions into actual change efforts.⁴

Lippitt, et al. discussed the difficulties involved in communicating needs, the significance of first impressions, and the importance of building trust and understanding between the change agent and the client

system. They state, in fact, that "the success or failure of most any change project depends upon the quality and workability of the relationship between the change agent and the client system, and many aspects of this relationship are established very early in helping the relationship."⁵

In developing a need for change, Lippitt observed three ways that it could occur:

1. a change agent locates a source of difficulty and offers help
2. a third party brings the client and the change-agent together
3. the client system itself seeks help from an outside source

The researchers found the third to be the most common way for the change process to begin.⁶

Lippitt, et. al. suggests that during the moving phase "anxieties can be eased by providing ways for the client to test innovations before they are permanently adopted." The active work of changing is called the "keystone of the whole change process". At this point, the authors stress the importance of feedback on the results of the change efforts. They found that without adequate feedback, the client system would be apt to abandon the attempted change, even though it may be proceeding well.⁷

The authors found that "many systems possess an inherent momentum which tends to perpetuate a change once it has attained a certain state of equilibrium". This makes the process of institutionalizing or stabilizing change likely to occur.⁸

Regarding the termination of the relationship, it was found that it occurred at various points in the change process. The authors observed that the most successful change was likely to result if the relationship lasted until the change had become stabilized. Sometimes the problem

of the dependency of the client system on the change agent at this point needs to be resolved. They suggest that this problem can be eased if the agent continues to be available for consultantship. It will have been necessary, in any event, for the client to have learned the techniques of problem-solving and how to apply them independently.⁹

Finally, Lippitt et., concluded that "the relationship between the change-agent and the client system, the channel through which all the agent's knowledge and influence must pass, is the most important single aspect of the change process."¹⁰

Strategy for Planning Self-Renewal

Miles and Lake work with the Cooperative Project for Educational Development which was mentioned earlier and which acts as a change-agent team. Its purpose is not to attempt to install specific innovations in a school, but "to formulate, apply, evaluate, and disseminate some variations of a basic strategy of planned change in collaboration with several school systems".¹¹

The authors state that "the basic approach to be tested is a problem-solving process undertaken collaboratively by members of the school system and the COPED staff". The initial focus of the process is on the superintendent and his cabinet.¹²

All members of the school who will be affected by the change will become involved in the planning of change by participation in "temporary systems" before the change is actually introduced.

As with Lippitt, Watson and Westley, the role of the change-agent is prime. The change plan is mapped out in detail before entry into the client system and the change-agent takes further steps after the change



plan has been institutionalized and the change-agent relationship has been terminated.

There are three factors that Miles considers important to the problem-solver: self-study emphasis, increase in motivation for change, and the problem-solving focus, increased collaboration, change-supportive climate, and change-supportive structures.¹⁴

Problem-Solving in a Self-Renewing System

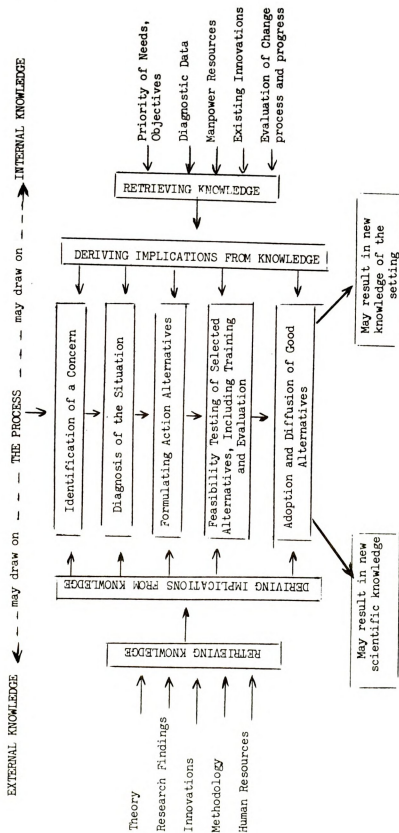
While Miles and Lake propose a problem-solving approach to initiate a program of self-renewal in a school system through self-study and collaborative involvement, Watson presents a number of steps which might enable a school system to remain self-renewing. He begins with "a constant and widespread sensing of problems and of new possibilities" and setting up mechanisms to keep up with "internal concerns and external trends and resources" as well as structures for continuing activities at each stage of the process.¹⁵

Strategies for Utilization of Knowledge

Jung and Lippitt propose problem-solving strategy designed both to show specific problems and to utilize scientific knowledge. They see it taking place in such a way as to contribute to an orderly and creative process of planned education".¹⁶

They suggest techniques for linking expert resources to the client system and utilizing these resources. These techniques are the retrieval of relevant knowledge and the extracting of implications from that knowledge.¹⁷

Their process of planned change is shown in the following table found in Havelock's report to the U.S. Office of Education and plotted by Lippitt:¹⁸



*Adapted by Ronald Lippitt, March, 1969 from "The Study of Change as a Concept" by Charles Jung and Ronald Lippitt. Reprinted from *THEORY INTO PRACTICE*, Vol. V, No. 1, February, 1966.

TABLE 17. Research Utilization Problem-Solving Model*

Other Strategies

Mackenzie's model consists of seven phases: 1) criticism; 2) proposals for change; 3) development and clarification of proposals; 4) evaluation, review and reformulation of proposals; 5) comparison of proposals; 6) action on proposals; and 7) the implementation of decisions.

His plan takes into consideration the participants, power and processes of change as shown in Table 18.¹⁹

In 1967, Thelen presented a six phase theoretical plan to the COPED project (described earlier):

1. Decide on variables crucial to increasing adaptiveness to the change.
2. Construct a force-field analysis: interviewing participants (principal and change-agent), participant-observation experiences of researchers, instruments and questionnaires to be used.
3. Decide on "what needs to be done";
Decide on a "where to begin-first action target";
Set up communications with change-agent.
4. Make first action explicit.
5. Consider conditions, define roles, and act.
6. Revise force-field, decide on next target, and repeat.²⁰

Thelen's model does not end with stabilization of the client system. He describes the system as being in a state of "quasi-stationary equilibrium" when there has been a "semi-permanent change in the force-field". Each new innovation must become an integral part of the system, but the system itself does not remain static.²¹

In summary, the authors of the problem-solver perspective base their models on the Kurt Lewin "process of unfreezing, moving and freezing. Havelock presents an overview of a number of researchers and the phases implementing the Lewin theory:²²

CULTURAL CONTEXT

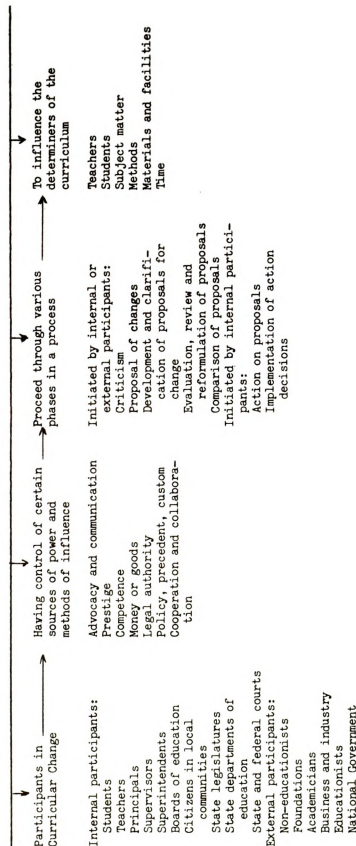


TABLE 16. Participants in curricular change, sources of their power, and phases in the process of change of the determiners of the curriculum

Author, Bibliography	Field, Year	1. Unfreezing	2. Moving	3. Pretesting	4. Generalization & Change Relationship	5. Transferring Intentional Change Efforts	6. Generalization & Change Relationship	7. Transferring Intentional Change Efforts	8. Generalization & Change Relationship
Levin	Social Change	1. Develop a need for change	2. Establish Change Relationship	3. Diagnose	4. Examine Alternative Routes	5. Establish Goals & Intentional Change Efforts	6. Establish Goals & Intentional Change Efforts	7. Establish Goals & Intentional Change Efforts	8. Establish Goals & Intentional Change Efforts
Lippitt & Schriesheim 1958	Social Change	1. Develop a need for change	2. Establish Change Relationship	3. Diagnose	4. Examine Alternative Routes	5. Establish Goals & Intentional Change Efforts	6. Establish Goals & Intentional Change Efforts	7. Establish Goals & Intentional Change Efforts	8. Establish Goals & Intentional Change Efforts
Worm & Williams 1960	Individual Change	1. Establish a need for change	2. Establish Change Relationship	3. Diagnose	4. Examine Alternative Routes	5. Establish Goals & Intentional Change Efforts	6. Establish Goals & Intentional Change Efforts	7. Establish Goals & Intentional Change Efforts	8. Establish Goals & Intentional Change Efforts
Thelen 1967	Individual Change	1. Decide on variables	2. Establish Change Relationship	3. Diagnose	4. Examine Alternative Routes	5. Establish Goals & Intentional Change Efforts	6. Establish Goals & Intentional Change Efforts	7. Establish Goals & Intentional Change Efforts	8. Establish Goals & Intentional Change Efforts
Wilson 1965	Social Change	1. Develop a need for change	2. Establish Change Relationship	3. Diagnose	4. Examine Alternative Routes	5. Establish Goals & Intentional Change Efforts	6. Establish Goals & Intentional Change Efforts	7. Establish Goals & Intentional Change Efforts	8. Establish Goals & Intentional Change Efforts
McKenzie 1964	Individual Change	1. Develop a need for change	2. Establish Change Relationship	3. Diagnose	4. Examine Alternative Routes	5. Establish Goals & Intentional Change Efforts	6. Establish Goals & Intentional Change Efforts	7. Establish Goals & Intentional Change Efforts	8. Establish Goals & Intentional Change Efforts
Miles & Lake 1967	Individual Change	1. Develop a need for change	2. Establish Change Relationship	3. Diagnose	4. Examine Alternative Routes	5. Establish Goals & Intentional Change Efforts	6. Establish Goals & Intentional Change Efforts	7. Establish Goals & Intentional Change Efforts	8. Establish Goals & Intentional Change Efforts
Wilson 1967	Individual Change	1. Develop a need for change	2. Establish Change Relationship	3. Diagnose	4. Examine Alternative Routes	5. Establish Goals & Intentional Change Efforts	6. Establish Goals & Intentional Change Efforts	7. Establish Goals & Intentional Change Efforts	8. Establish Goals & Intentional Change Efforts
Jung & Lippitt 1967	Individual Change	1. Develop a need for change	2. Establish Change Relationship	3. Diagnose	4. Examine Alternative Routes	5. Establish Goals & Intentional Change Efforts	6. Establish Goals & Intentional Change Efforts	7. Establish Goals & Intentional Change Efforts	8. Establish Goals & Intentional Change Efforts
Jacob 1964	Individual Change	1. Develop a need for change	2. Establish Change Relationship	3. Diagnose	4. Examine Alternative Routes	5. Establish Goals & Intentional Change Efforts	6. Establish Goals & Intentional Change Efforts	7. Establish Goals & Intentional Change Efforts	8. Establish Goals & Intentional Change Efforts

TABLE 39. Problem-Solver Change Models

Implications from preceding research

In viewing the "problem-solver" research, implications are that ultimately, there are three elements in the diffusion process: participants, power, and process:

Participants include collaboratively, all persons to be affected by the new educative program in a change-supportive climate and working in change-supportive structures.

Power includes participants having control collaboratively of certain factors such as finance, policy, planning and decision making.

Process consists of a number of factors: identification of concern, diagnosis of the situation, the formulation of action, alternatives, testing them for feasibility, training, evaluation, and adoption and diffusion of accepted alternatives.

The "Problem-Solver" process phases fall into four categories (basic research assumed):

1. search for solutions
2. selection of best alternative
3. implementation
4. evaluation, revision, institutionalization

Recommendations for TECP

3.7 Antecedent Activities:

- 1) Clarification of expectations of the parties involved (the superintendents and members of the focal group, the board, other members of the system, and the TECP staff regarding the purposes of the program, the probable time schedule, the amount of effort (time and dollars) likely to be required, role relations and responsibilities of TECP staff and organization members (diocesan and local), methods of collecting data for diagnosis and assessment, and use to be made of data (including publication).

3.8 Adaptation Activities:

- 1) An orientation meeting with teams from dioceses which are potential participants in the program, the superintendent being a member of the team in each case.

- 2) Circulation of the TECP manual to prospective participant dioceses describing change strategy (antecedent activities, adaptation activities, and follow-through activities), and annotated bibliographies.
 - 3) One-day orientation meeting of superintendents from each of the dioceses, each bringing along one to three other system members, to discuss the project, make firm commitments to participate, and plan any further legitimization required with boards of education.
 - 4) Meeting with local principals and in-building curriculum leaders for the same purposes stated above.
 - 5) Local work - a series of visits to each system (diocese) by TECP to make progress checks, decisions for local and inter-school in-service, personal and group development programs.
 - 6) Summer workshops beginning with human growth and development centers and continuing with local staff team study and program planning, setting alternatives.
 - 7) Testing and trial of alternates.
- 3.9 Follow-through Activities:
- 1) Local decision - determine alternates to be implemented (total collaborative endeavor).
 - 2) Local implementation.
 - 3) Local evaluation.
 - 4) Feedback to TECP.
 - 5) TECP over-all evaluation and feedback.

FOOTNOTES

¹Ronald Havelock, Planning for Innovation, A Final Report to the U. S. Department of Health, Education, and Welfare, Office of Education, Bureau of Research, 1969, p. 2-41.

²Ronald Lippitt, Jeanne Watson and Bruce Westley, Dynamics of Planned Change (New York, Harcourt, Brace & Co., 1958), p. 130.

³Ibid, p. 130.

⁴Ibid, p. 139.

⁵Ibid, pp. 135-136.

⁶Ibid, pp. 131-133.

⁷Ibid, p. 139.

⁸Ibid, p. 140.

⁹Ibid, p. 141.

¹⁰Ibid, p. 143.

¹¹Mathew Miles and Dale Lake, "Self-Renewal in School System: A Strategy for Planned Change", (ed.) G. Watson, Concepts for Social Change, Washington, D.C., NTL Institute for Applied Behavioral Science, 1967, p. 81.

¹²Ibid, p. 81.

¹³Ibid, pp. 83-84.

¹⁴Ibid, p. 86.

¹⁵Goodwin Watson, (ed.) Change in School Systems, Cooperative Project for Educational Development, National Training Laboratories, NEA, Washington, D.C., 1967, p. 111.

¹⁶Charles C. Jung, Robert Fox and Ronald Lippitt, "An Orientation and Strategy for Working on Problems of Change in School Systems", (ed.) G. Watson, Change in School Systems, Cooperative Project for Educational Development, National Training Laboratories, NEA, Washington, D.C., 1969, p. 79.

¹⁷Ibid, p. 79.

¹⁸Ronald Havelock, *ibid*, p. 10-63.

¹⁹Gordon N. MacKenzie, "Curricular Change: participants, power and processes", (ed.) Mathew Miles, Innovations in Education, (New York, Teachers College Press, Columbia University, 1967), p. 401.

²⁰Herbert A. Thelen, "Concepts for Collaborative Action - Inquiry", (ed.) G. Watson, Concepts for Social Change, Cooperative Project for Educational Development, NTL Institute for Applied Behavioral Science, NEA, Washington, D.C., 1969, pp. 45-56.

²¹Ibid, p. 42.

²²Havelock, *ibid*, p. 10-56.

CHAPTER IV

THE DEVELOPMENT OF A THEORETICAL MODEL FOR DIFFUSING THE TRI-ETHNIC CURRICULUM PROJECT

This chapter presents a model for the diffusion and implementation of the Tri-Ethnic Curriculum Project. It is based on a synthesis of the recommendations made and upon implications described in preceding chapters. The model conforms to theories developed from three perspective models: the Social-interaction perspective; the Research, Development and Diffusion perspective; and the Problem-solving perspective.

SUMMARY OF IMPLICATIONS FROM RESEARCH

The diffusion model has been produced through the logical derivation of a set of representative implications to which several elements from areas considered in earlier chapters are interrelated. It may be helpful to cite the key threads that seem to filter through from these implications and which formed the basis for recommendations throughout the review of literature and research:

1. Since educational changes are generally very complex, there are some basic factors in setting diffusion programs:
 - A. The involvement of a collaborative team within the changing institution
 - B. A degree of division of labor, co-ordination, and collaboration throughout the social system
 - C. Collaborative interaction making solutions more relevant, valid and effective

(Basis for recommendations 2.01 through 2.04)

2. Viewing intrapersonal and group membership as a whole, certain broad implications are apparent:

- A. Effective linkage requires that the giver and receiver both have a sense of security, of trust in themselves
- B. Beyond that and building on that, they must have a sense of trust in each other
- C. The adoption of a social practice must be compatible with the values, attitudes and behavioral skills of the potential adopter -- if not, change in these complex intra-personal belief systems and behavioral patterns is required for meaningful change
- D. Changes in behavior, attitudes and values are often mediated by interpersonal relations and are of varying depth and performance
- E. The patterns of interaction which take place within the structures of the system play a meaningful role in forming the attitudes of participants
- F. There is a correlation between the team support and "belongingness" of the individual to the group, its cohesiveness, and the teachers' degree of change orientation

(Basis for recommendations 2.05 through 2.12)

3. Even when there is an atmosphere of acceptance and mutual understanding, the task of communication is not completed. The development of skills of action problem-solving at all levels of the system; operations concerned with diagnosis; planning of change; feasibility and testing of change plans; evaluation of results; and the modification and spread of such models are essential elements of the diffusion process related to change in a school system.

(Basis for recommendations 2.16 through 2.19)

4. Resistance to change is a normal and healthy thing and, if dealt with competently, it can be an asset to the decision-making process and to internalizing change endeavors.

(Basis for recommendations 2.12 through 2.15)

5. The organizational role for change in school systems is vital and pervasive. Implications are that in promoting instructional improvement within organizations, the collaborative effort of school administrators, teachers and outside resource people, i.e., the teacher-principal, consultant, change-agent team, provides a more vigorous and productive leadership arrangement than does reliance on any one of these roles along.

Cooperative change-agent teams offer meaningful contributions. These teams are committed to joint inquiry, to collaborative action once there is recognition of need and request for help from the practitioner, and to promoting interdependence among universities and school systems as a means to improving education.

(Basis for recommendations 2.20 through 2.25)

6. "Temporary Systems" such as conferences, workshops, seminars, action-research projects, human relations labs, problem-solving sessions, etc., are important as vehicles through which interaction and exchange can be carried on in a changing system. Micro-labs, demonstrations, pilot studies, and simulated activities are other experiences included in "temporary systems".

The "temporary system" is not an isolated workshop, nor is it a series of unrelated experiences. It is a process designed for specific resultant changes in persons, groups and organizations.

(Basis for recommendations 2.26 through 2.31)

7. In terms of change, school systems might move from "temporary systems" to "permanent linking" systems through an on-going and continuing process of self-renewal. A self-renewing school system has the ability to adapt to its changing external and internal

environment in such a manner as to strengthen itself and optimally fulfill its goal of providing timely education for children.

(Basis for recommendations 2.32 through 2.38)

Diffusion Phases of the Model

The model is constructed using three phases which were extracted from the common elements found in the literature and which appeared appropriate for the development of a theoretical model. They are:

- 1) Antecedent activities
- 2) Adaptation activities
- 3) Follow-through activities

Phasing the Implementation of the Tri-Ethnic Curriculum Project

Antecedent Activities:

- (1) Realization in preparing Phase I (Teacher Awareness Program) of human sub-structures and processes must be operative before diffusion will succeed;
- (2) Assessment of potential adopters and implementers (local school administrators and faculty) in terms of personal security, values, mental ability and conceptual skill, social status, cosmopolitaness;
- (3) Assessment of the schools within the diocese in terms of innovativeness, potential leadership within, need for TECP Resource Team, economic restraints, traditional procedural patterns, need for adaptation as local situations differ;
- (4) Clarification of expectations for the parties involved (Superintendent, Diocesan Curriculum Staff, local Administrators, Teachers and Boards);
- (5) Clarification of role relations and responsibilities of TECP Staff and diocesan and local members of the changing system.



Adaptation Activities:

- (1) An orientation meeting with teams from dioceses which are potential participants in the program, the superintendent being a member of the team in each case;
- (2) Circulation of the TECP manual to prospective participating dioceses describing change strategies (antecedent activities, adaptation activities, and follow-through activities), and annotated bibliographies;
- (3) One day orientation meetings of superintendents and diocesan curriculum staffs from each diocese to discuss the teacher-awareness program (TECP, Phase I), make firm commitments to participate, and plan any further legitimation required with boards of education;
- (4) Meetings with local principals and in-building curriculum leaders for the same purposes stated above;
- (5) Local follow-through strategy: large group sessions; small group interaction; mass media; demonstration; contact with experts; action-research, etc.;
- (6) Summer workshops (Phase II and III) beginning with Human Growth and Development Centers and continuing with local staff team study, program planning and design, setting alternatives, testing and trial of alternates;

Follow-Through Activities:

- (1) Local decision-determined alternates to be implemented (total collaborative endeavor);
- (2) Local implementation of decisions;
- (3) Continued re-inforcement in all stages of implementation; initial, on-going, final and continued;
- (4) On-going programs of evaluation;
- (5) Continued group cohesiveness in terms of total system membership through mechanisms conducive to openness, learning, two-way-communication, decision and acceptance.

The Diffusion Model

Based on the above implications and the recommendations summarized in Appendix 2, a theoretical model for the diffusion and implementation of the Tri-Ethnic Curriculum Project was developed and is shown in Table 20. The diffusion model was developed by synthesizing factors

related to the three perspectives: the Social-Interaction Model; the Research, Development, and Diffusion Model; and the Problem-Solver Model.

Conclusions of the Study

Major conclusions of the study are as follows: the principal schools of thought promoted by the various authors can be grouped under three perspectives: social-interaction; problem-solving; research, development and dissemination. A synthesis of the three perspectives provides a "linkage model" utilizing the important factors of each. Knowledge utilization takes place through collaborative linking and interacting between resource system, (TECP) conveyor system (Diocesan and local curriculum coordinators) and the user system (persons, groups, and the changing organization). This type of collaborative interaction and communication builds relationships that make solutions more or less relevant, effective and lasting. Continual self-study and system renewal provides channels for effective and continuing transfer of knowledge: open communication and interaction provides opportunities of change orientation and action.

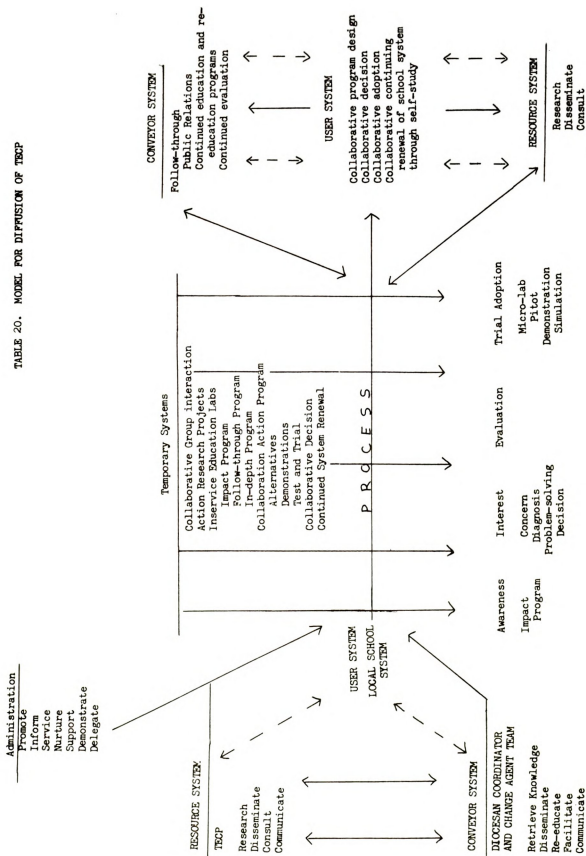
Suggestions for Further Research

Several areas requiring investigation have been suggested in describing the diffusion process and its implementation:

- (1) Comparative studies of linking organizations for role identifications and interrelationships supportive and effective for knowledge retrieval and utilization;
- (2) Comparative studies to research various forms of organization for inducing change and which are most effective (research and development centers, regional laboratories, university based centers);
- (3) A study of the results of the implementation of the theoretical diffusion model for the Tri-Ethnic Curriculum Project;
- (4) A study of micro-labs and simulated experiences as a means of innovation "trial-without-threat" to reduce resistance to change in individuals and groups of individuals.



TABLE 20. MODEL FOR DIFFUSION OF TEP



APPENDICES

APPENDIX 1

THE TRI-ETHNIC CURRICULUM PROJECT

Historical Background

In May, 1969, the Superintendents of the Catholic schools in Michigan decided that the study of black history should be made a basic component of the curriculum of each catholic school in the state. A committee for Black History and Culture was appointed to develop procedures for the implementation of such a curriculum. Since the work of this committee set the direction for the Tri-Ethnic Curriculum Project in terms of need and organizational procedures, the first part of this chapter will review its procedures, findings, and recommendations.

The Committee for Black History and Culture

The philosophy of education adopted by this committee was placed in direct parallel with the charge given to the college of bishops by Pope John in the 1962-65 ecumenical council. The documents coming from that council are especially noteworthy for their concern with the poor, for their insistence on unity of the human family and, therefore, on the wrongness of discrimination; for their repeated emphasis on the duty of Christians to promote a just and peaceful world, a duty which they must carry out in brotherly cooperation with all men of good will.



As a philosophical principal for the adoption of such an addition to the curriculum, these words of Pope John are pertinent:

"One of the salient features of the modern world is the growing interdependence of men one on the other, a development very largely promoted by modern technical advances. Nevertheless, brotherly dialogue among men does not reach its perfection on the level of technical progress, but on the deeper level of interpersonal relationships. These demand a mutual respect for the full spiritual dignity of the person".¹

To carry out this program utilizing this philosophy would necessitate the following procedures offered by the committee as recommendations:

1. Provide a year of consistent in-service training for teachers which would offer cultural enrichment, impart knowledge of black history, reveal racist attitudes, and provide techniques for integrating the curriculum.
2. Use the units on black history developed by Dr. Lewis Clingman and Jacob Robinson.
 - a) Provide an overview of black history to teachers;
 - b) Provide a base from which a program can be inaugurated whereby teachers at each grade level can extract some of the facts to be made part of the curriculum by using recommended supplementary material.
3. Compile a bibliography of materials with dissemination to each school along with the units.
4. Formulate diocesan resource committees to assess the current education programs, provide resource for re-vamping the programs, and assist in providing in-service training.
5. Re-analyze textbooks and employ as references the textbook evaluation of the State Board of Education and the Wayne State Curriculum Review.
6. Formulate sub-committees to assess books of school libraries and provide a list of those which reflect inaccurate stereotypes of black people.
7. Use black people with expertise in various areas as resource persons throughout the development of the program.

¹"Declaration on Christian Education". Second Vatican Council. October 28, 1965.



The superintendents voted on acceptance of these recommendations in their entirety. They further decided that the committee would continue for a full year as a standing committee for them; the standing committee should become the founding and supporting body for additional committees in charge of Mexican-American and Indian histories; and the standing committee would assume the additional responsibility of assisting in formulating and evaluating programs.

There were four primary areas of responsibility recommended for implementation by the Black History and Culture Committee.

PHASE I: Curriculum - Establishing guidelines for the development of the integrated approach.

- A) These guidelines should be established on the primary, intermediate, junior high, and high school levels.
- B) A basic core subject area should be chosen on each level and basic guides used in conjunction with the bases. Suggested core areas were: fine arts and language arts for the primary grades; social studies, language arts and fine arts could be the core for the middle grades; and for the junior and senior high, the history, literature and fine arts provide the core subjects.

Some of the major objectives of the guidelines would be:

- 1) to assist teachers with their instruction:

- By listing objectives for units of study.

- By recommending materials to fully enrich a unit of study allowing for conceptual growth.

- By providing techniques for developing change from teaching of facts to teaching of facts for the purpose of growing concepts, by putting facts together to see in a series of facts the growth and formation of a human people.

- By giving assistance in employing materials designed for this purpose.

- By considering variations in school districts by way of personnel and enrollment.

Basic to carrying out the objectives would be other committees serving within the curriculum development phase. The committees needed:

- 1) Fine Arts, which includes music, art, physical education (games and dances), and languages.
- 2) Language Arts, which includes poetry, folk tales, literature (fiction, biography) and creative writing (essay, poetry, comparative studies, and research papers).
- 3) Social Studies, which includes culture analysis (contemporary, community leaders, civil rights movement), geography, anthropology, and history.
- 4) Science
- 5) Religion, which includes religious belief, comparative studies, spirituals, etc.

PHASE II: In-service training would be essential in program development. A threefold program was recommended in order to ensure success of the curriculum implementation.

ATTITUDINAL GROWTH:

It was the belief of the committee that teachers must be assisted in uncovering hidden prejudices and provided insights into the subtleties of prejudice which are a part of their own make-up and of the curriculum materials used in the past.

CULTURAL ENRICHMENT:

Noted black people would be well used by the various committees. They could provide insights into the historical aspects, cultural patterns, and areas of black contributions, historically, to every American endeavor.

CURRICULUM TECHNIQUES:

Emphasis would continue to be placed on "how" to teach when using resource people, visual aids, guidelines, and supplementary materials in the integrated humanities approach.

PHASE III: Evaluation methods were recommended through which attitudinal and behavioral change of both staff and students could be objectively qualified. The ultimate criterion for the success of this program would be the development of truly Christian teachers and students who recognize the worth and dignity of all men. Expertly qualified people and materials would be needed to analyze the success of the initial efforts, so that revisions could be made and a truly worthwhile program established by the year 1970.

Clingman's Black History Units were disseminated to all the schools in Michigan along with other limited bibliography. The school year of 1969-70 brought teacher institutes over the State of Michigan. They were one day programs of intense experience resulting from presentations which demonstrated the real picture of Black History. Teachers were moved to some action and many outstandingly creative projects were implemented in schools over the state. An evaluation form was prepared and distributed to the schools in the five dioceses in Michigan to measure the impact and utilization of the materials and programs recommended by the committee. In almost every case, the programs did not become a permanent part of the existent curriculum in the individual schools but were crash programs that resulted from individual creative teachers and which may or may not have ever happened again.

Textbooks were studied for validity and reliability in the presentation of black history; recommendations and findings were reported to the five superintendents. Diocesan recommendations of social studies texts were revised. Additions were made.

This description of the procedures, findings and recommendations of the Superintendents' Committee are taken from a position paper presented to the Superintendents of the five dioceses in Michigan by Mrs. Jacqueline Warr who chaired the committee for Black History and Culture.

This position paper was also printed in the Bulletin from the National Catholic Education Association.²

The Inception of the Tri-Ethnic Curriculum Project

The bishops and superintendents of the five dioceses in Michigan were being pressured by Community groups representing the Spanish-speaking community and the community of American Indians. These educators, professionals, and non-professionals were insisting on a curriculum which would include broader concepts for anglo children through a developmental and sequential program that would enable them not only to understand but, also, to appreciate the past history and present plight of minority ethnic groups in our country. They insisted that through such an education, the perpetuation of contemporary problems could be obliterated in time.

The Committee for the Black History and Culture Program had been dissolved. This committee had made some meaningful and possible recommendations that might well be applied to the Tri-Ethnic minority groups. It was time to move into an action program.

The Tri-Ethnic Curriculum Project

The Tri-Ethnic Curriculum Project, which began its work in June, 1970, was under the general coordination of the five superintendents of the State of Michigan. A full time director of the Project was named. The Board of Directors of the Department for Education out of the Michigan Catholic Conference agreed to provide the sum of \$8,000 for the purpose of the professional development of materials and guidelines for the teaching of history and culture, including the status

²Warr, Jacqueline, "Black History and Culture", NCEA Bulletin, Vol. 65, No. 4, May, 1968, pp. 51-55.

and problems of Black, Spanish-speaking Americans, and American Indians. It was anticipated that this work would need continuous development over a period of two or three years, but also, that enough materials at minimal cost could be sold so that future projects in this area would be self-funding.

The full-time staff for the six weeks session, beginning July 1, 1970, consisted of a full-time director for the project, curriculum specialists for history and the humanities, and a full-time librarian. Consultants and curriculum resource people from the staffs of the diocesan offices of education, from the Lansing Public Schools, from Michigan State University and the University of Michigan, from Madonna College in Livonia, from Aquinas College in Grand Rapids, and from elementary and high schools over the State of Michigan were enlisted. This team included educators who were natives of the Tri-Ethnic groups along with anglo-educators:

Tri-Ethnic Curriculum Project Membership

Dr. Daniel Jacobson
Dir. Social Science Teaching Institute
Michigan State University

Mr. James McClafferty
U.S. Office of Education
Fort Worth, Texas

Dr. Robert Green
Office of Urban Affairs, Director
Michigan State University

Sister Theodora Harris, SSJ
Elementary Librarian
St. Clair Shores, Michigan

Sister Marie Florence Garcia, OP
St. John School
Essexville, Michigan

Mr. Eric Winston
Office of Urban Affairs, Library
Michigan State University

Sister Marjorie Crimmins, OP
Curriculum Consultant
Diocese of Grand Rapids

Sister Tereska, OP
St. Johns School
Saginaw, Michigan

Mr. Bill Helder
Director Social Studies Programs
Lansing Public Schools

Sister Dorena Gonzales, OP
St. Joseph School
Grand Rapids, Michigan

Sister Martinez, CSSF
Madonna College, Lonia

Mrs. Jacqueline Warr
Model Cities Program
Lansing, Michigan

Mr. John Winchester
Director of Indian Affairs
Michigan State University

Reverend Robert Lundsford
Diocese of Lansing

Sister Emilia Attencio, OP
Penacaso, New Mexico

Mr. James Falsey
Social Worker
Diocese of Saginaw

Sister Christine Davidson
Tri-Ethnic Curriculum Project
Project Director

The above group have completed a 150 page book containing a complete description of the TRI-ETHNIC CURRICULUM PROJECT. There are annotated guides and suggested strategies for implementing the project.

GOALS OF TRI-ETHNIC CURRICULUM PROJECT (TECP)

The overall goal of TECP is to promote instructional programs for all students in the diocesan schools based on curriculum materials and professional training which accurately reflect the contributions of each of the target cultures to world civilization.

Specific goals include the following:

- To promote Action programs in the five Dioceses with special emphasis on teacher training and motivation in tri-ethnic histories and cultures.
- To identify and classify available written and visual materials as well as human resources for continuing teacher in-service.
- To develop annotated bibliographical material identified according to instructional levels and subject matter.
- To disseminate activities to Superintendents, Diocesan Curriculum Staffs, Principals and Teachers.
- To provide a diffusion process involving administrators and teachers in meaningful interaction that will bring about the implementation of action programs.

The first phase is one of launching demonstration programs at the 8th grade level while at the same time initiating various orientation activities which will prepare all concerned staff to undertake the system-wide curriculum which can begin when the necessary training and other resources have been provided.

A second major step in ensuring focus on sound instructional programs, the goal of TECP, is the limitation of activities to those clearly connected to basic teacher and student behavior in the study or use of relevant instructional materials.

ORGANIZATION AND DEVELOPMENT

The first meeting of the entire team was set for July 1-2, 1970. The agenda included an overview of the project, a report of the work of the previous state committees, the presentation of a preliminary plan for study and reaction from the group, the organization of sub-teams and co-ordinators for each, assignments to co-ordinators, and probing of the philosophies of curriculum within the group membership.

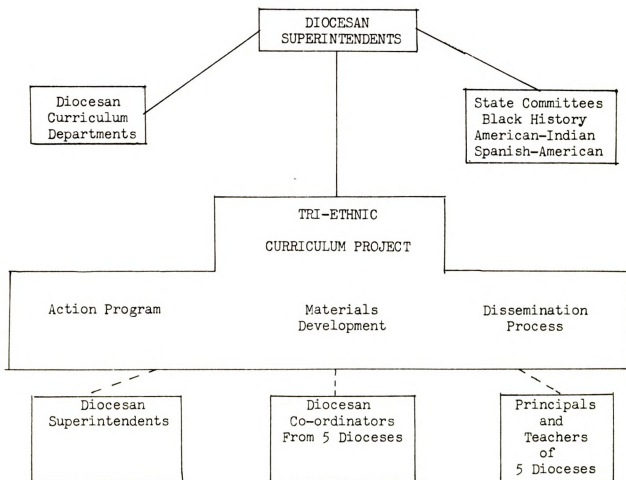
Three team co-ordinators were appointed: namely, Eric Winston, a black man, for the Black Program; John Winchester, a Potawamini Indian, for the Indian Program; and Sister Marie Florence Garcia, a Chicano, to work with Sister Marjorie Crimmins on the Program for Spanish-speaking Americans. These team co-ordinators were commissioned to draw from the membership-at-large, consultants and resource people for the development of an annotated bibliography of materials, identified according to instructional levels (Primary, Middle Elementary, Junior High, and Senior High). Also, to classify available written and visual materials for continuing teacher in-service programs. A time table was agreed upon to facilitate the completion of their work by August 15, 1970.

Dr. Daniel Jacobson and Mr. William Helder created and co-ordinated what later became the In-depth Action Program.

The team co-ordinators met on July 2nd to share ideas through discussion and to determine the best way to achieve the goals:

Organizational relationships were determined. The following chart was designed:

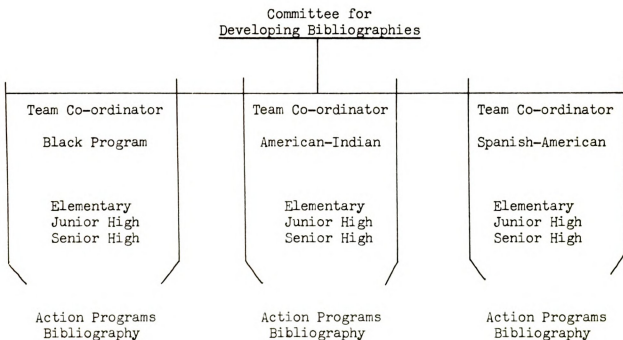
ORGANIZATIONAL RELATIONSHIPS



They identified their work of developing guides and bibliographies for future action programs. A tentative time table and how best to accomplish it was discussed:

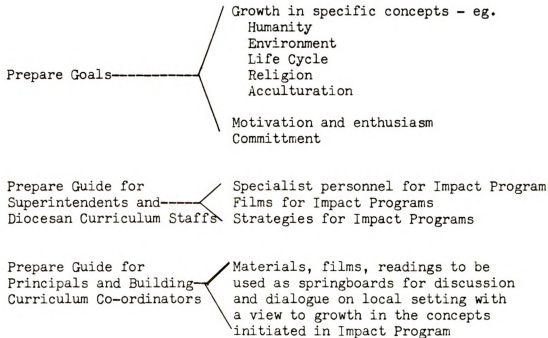
PROCEDURE CHART

PROJECT DIRECTOR

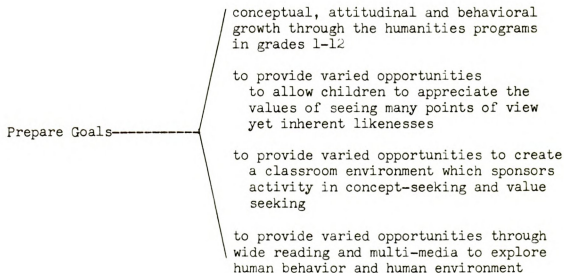


Team co-ordinators would select their own key people to render services in various ways in identifying and presenting the following bibliographies:

FOR TEACHER IN-SERVICE PROGRAMS



ANNOTATED AND SELECTIVE BIBLIOGRAPHY FOR TEACHERS TO BE USED BY STUDENTS



Select and annotate bibliography including multi-media, personnel, films, written materials, etc.

elementary list (grades 1-8) to be used, integrating the social studies with the art, music, religion, literature, drama and dance of the tri-ethnic groups

list to be used for enrichment in the minorities course in grade 8

list to be used for independent study and research for the High School as well as part of the formal program of history and culture for the Black, American-Indian and Spanish-American

A tentative time table was set which later was extended to mid-September:

July 9 - Completion of determined goals and one specimen for achieving each goal

July 16 - Completion of annotated guide for Superintendents and Diocesan Curriculum Staff

July 23 - Completion of Guide for Principals and in-building co-ordinators

July 30 - Completion of annotated bibliography for grade levels in social studies, literature, art, music, etc.

Mid-August - Presentation of materials to the five Dioceses - Superintendents and Curriculum Staff all meeting here in Lansing

The committees agreed that a uniform format would be used in presenting their materials to the Superintendents, Diocesan Curriculum Co-ordinators, Principals and Teachers.

PHILOSOPHY

At a meeting of the total TECP membership, Sister Marjorie Crimmins presented an outline for setting a philosophy. It included the following:

1. Concepts of Human Dignity: Self-awareness
2. America: Pluralism
3. Interdependence

As a result of discussion and group inter-action the outline took on a meaningful form. It was documented and accepted as a guide for

each committee in preparing the bibliographies for the teacher in-service program. Sister Marjorie Crimmins was commissioned to work with a group to refine the philosophy using all of the recommendations made by the total group. Mr. William Helder was named to work out the section on Inter-dependence. The final Philosophy for the Tri-Ethnic Experience for teachers follows:

PHILOSOPHY UNDERLYING TEACHER PROGRAM

HUMAN DIGNITY: SELF-AWARENESS

SACRED SCRIPTURE

Genesis	1:27	Creation
Eccles.	15:14	He Himself made man in the beginning and then left him free to make his own decisions.
Luke	10:27	You must love the Lord your God . . . and your neighbor as yourself.
1 Cor.	11:7	A man should certainly not cover his head since he is the image of God and reflects God's glory.

CONSTITUTION OF THE CHURCH IN THE MODERN WORLD, Second Vatican Council, December 7, 1965, chapter 1, "The Dignity of the Human Person".

STATEMENT ON THE NATIONAL RACE CRISIS, National conference of Catholic Bishops, April 25, 1968.

"We must recognize the fact that racist attitudes and consequent discrimination exists, not only in the hearts of men but in the fabric of their institutions. We must also commit our full energies to the task of eradicating the effects of racism on American society, so that all men can live with equal opportunity to fulfill the promise of their creation in the image and likeness of God. . . . We must build bridges of justice, compassion and understanding, and we must do so at once. . . .

BILL OF RIGHTS

PREAMBLE TO THE CONSTITUTION OF THE UNITED STATES

AMERICA: PLURALISM

STATEMENT ON NATIONAL RACE CRISIS, April 25, 1968

Education is a basic need in our society, yet the schooling available to the poor is pitifully inadequate. . . . Quality education for the poor and especially for minorities who are traditionally victims of discrimination, is a moral imperative if we are to give millions a realistic chance to achieve basic human dignity. Catholic school systems, at all levels, must redouble their efforts, in the face of changing social patterns and despite their own multiple problems, to meet the current social crisis. This crisis is of a magnitude and peril far transcending any which the church in America has previously confronted. . . .

AMERICAN PROBLEMS TODAY, "Minorities and Their Rights", Robert Rienow, 3rd edition, D. C. Heath and Company, Boston, Mass., 1965, p. 61.

CITIZENSHIP AND GOVERNMENT IN MODERN AMERICA, "Intergroup Relations Can be Improved", Bard/Moreland/Cline, Holt, Rinehart and Winston, Inc., New York, 1966, p. 385.

MODERN SOCIOLOGY, "Minority Groups", Koller and Cruse, Rinehart and Winston, Inc., 1965, p. 264
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INTERDEPENDENCE

SCRIPTURE

1 Corinthians 12: 14-15, 20-21, 26

For the body does not consist of one member but of many. If the foot should say, "Because I am not a hand, I do not belong to the body," That would not make it any less a part of the body.

As it is, there are many parts, yet one body. The eye cannot say to the hand, "I have no need of you."

If one member suffers, all suffer together; if one member is honored, all rejoice together.

DEVOTIONS XVII - John Donne

No man is an island, entire of itself; every man is a piece of the Continent, a part of the main; if a clod be washed away by the sea, Europe is the less, as well as if a promontory were, as well as if a Manor of thy friends or thine own were; any man's death diminishes me, because I am involved in Mankind; and therefore never send to know for whom the bell tolls; it tolls for thee.

DECLARATION ON CHRISTIAN EDUCATION, Second Vatican Council, October 28, 1965.

Since every man of whatever race, condition and age is endowed with the dignity of a person, he has an inalienable right to an education corresponding to his proper destiny and suited to his native talents, his sex, his cultural background and his ancestral heritage. At the same time, this education should pave the way to brotherly association with other peoples, so that genuine unity and peace on earth may be promoted.

TEACHER HANDBOOK FOR CONTRA COSTA SOCIAL STUDIES

Hilda Taba and James L. Hills
San Francisco State College, 1967

Basic concepts, writes Taba, are high level abstractions expressed as verbal cues. They encompass large amounts of specifics and are threads

1971
1972
1973

that occur and reoccur in connection with different content. Among Taba's basic concepts, the one most relevant for our purpose is interdependence. It is a concept selected for its power to organize vast amounts of information. A basic concept forms a hierarchy in the sense that it can be used on different levels of abstraction, complexity, order of the concept of interdependence as it concerns relationships of people to people.

INTERDEPENDENCE IN PEOPLE-to-PEOPLE RELATIONSHIPS

- 7th level between the governments of nations
- 6th level between levels of government
- 5th level between industries and government
- 4th level between industries and specialized workers
- 3rd level between specialized workers in services and community workers
- 2nd level between community workers and family members
- 1st level between family members

This hierarchial arrangement suggest that understandings of interdependence developed at the first level are included in the second, and each successive level of learning includes understandings of interdependence from the levels below it. In a sense, each level is a prerequisite to the next.

Setting the Goals

On July 16, 1970, the Tri-Ethnic Curriculum Project met to continue the discussion on the co-ordination of philosophy and objectives. The Guide for Superintendents and Curriculum Staffs was presented and discussed. Eric Winston, co-ordinator for the Black Experience, presented the goals for the teacher in-service program. These were further developed by the total group. It was decided that these goals would be related to the three experiences, e.i. the Black Experience, the American Indian Experience, and the Experience for the Spanish speaking American.

GOALS FOR THE TEACHER IN-SERVICE PROGRAM

The specific goals as stated below attempt to introduce the teacher of the minority ethnic groups Experience to some of the immediate goals of people of the tri-ethnic groups. If the teacher

is to be successful in understanding and relating to the Tri-Ethnic Experience he must know these goals and what motivates them

Not only do the goals represent the needs of all ethnic groups, they also stand as a base from which the exchange of ethnic experience and ideas can occur.

- A. IMPLEMENTATION OF THE THREE PHILOSOPHICAL PRINCIPLES DISCUSSED PREVIOUSLY.
- B. AWARENESS OF NEED AND THE DESIRE TO ACT - MOTIVATION

Statement on National Race Crisis, April 25, 1968.

The Gospel of Christ and the good of the nation must motivate us to encourage, support and identify with the efforts of the poor in their search for self-determination. It is chiefly through the attainment of control over one's personal and social destiny that destructive feelings of despair, frustration and helplessness can be eliminated. These efforts require the help--free from all spirit of paternalism or condescension--not only of organizations and institutions, but of each and every believer. . . .

We must show concern, we must give ground for hope. In the name of God, our Father--and we do not lightly invoke His name--let us prove to all men that we are truly aware that we are a single human family on the unity of which our best hope for our progress and our peace.

1. Combat Racism

To destroy those forces within our society which feed upon the fears of man, which put man against man because of ethnic and/or racial background.

2. Creation of Strong Academic Base

To endow every youngster of the tri-ethnic groups with a realization of the need to become scholarly proficient to combat the stereotyping forces within society.

3. Development of Functional Skills

To increase the number of Blacks, Indians, and Spanish-Americans who possess the tools necessary for constructive contributions in society.

4. Understanding Tri-Ethnic Experiences and History

To determine the nature of the experience of each of the three minority groups and role of history in it.



5. Control Over the Destiny of Black Americans, American Indians, and Spanish speaking Americans.

To exercise decisions when these people are effected.

C. OFFICE OF TEACHER

SUGGESTED GUIDELINES--A REPORT TO THE STATE (Michigan) SUP'T OF PUBLIC INSTRUCTION FROM THE STATE COMMITTEE ON EQUAL OPPORTUNITY, Publication 541, Dept. Public Instruction, No. 3, P. 5.

Specific in-service training programs should be developed to aid teachers in achieving a broad background and understanding of the role played by the various racial, ethnic, national and religious groups on the history and development of our nation. Developing positive attitudes in these areas will enable teachers to work more effectively in developing similar worthwhile attitudes on the part of their students.

The role of the teacher in the Tri-Ethnic Experience

1. Develop an awareness and understanding of Tri-Ethnic History and Cultures

The teacher must grasp, as much as possible, the meaning of tri-ethnic history and its importance to people of these minority groups in each case.

2. Knowledge of the black community, community of Spanish-speaking Americans, and American Indian Community

a. mores

b. organization of the community

c. the family

3. Develop insight into the needs of people of ethnic groups

What are the most pressing concerns of Blacks, Indians, Spanish-Americans and how may they be achieved.

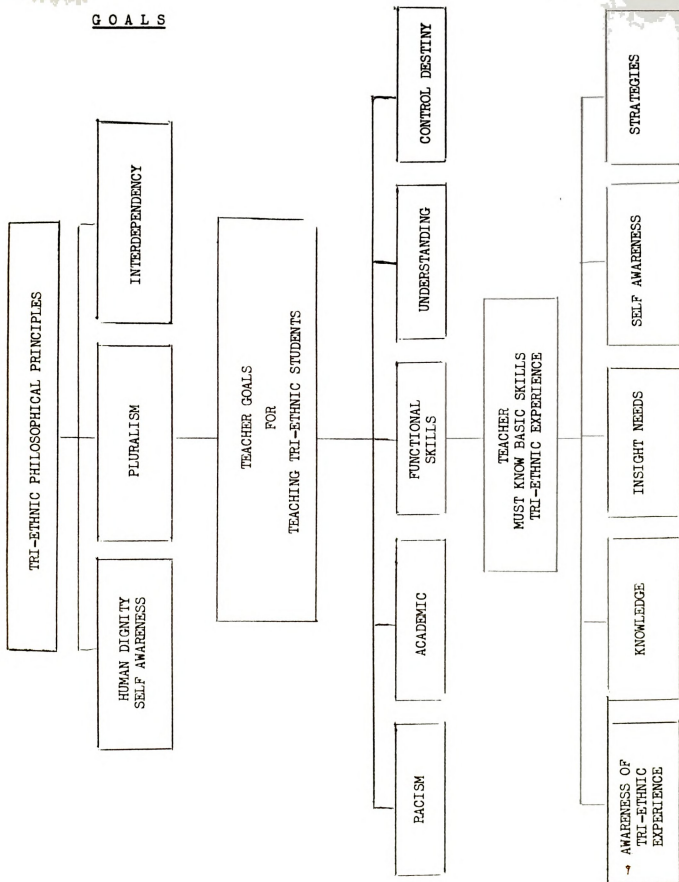
4. Self Awareness

The teacher looks into himself in an attempt to define his role in the overall objectives of the Tri-Ethnic Experience.

5. Development of teaching strategies specifically designed to further the Tri-Ethnic Experience

GOALS

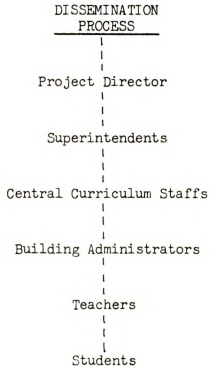
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At this point, the Tri-Ethnic Curriculum Project membership began to see some real plans for curriculum development. They focused their concern on a process of dissemination that would assure implementation of the project so that curriculum development and innovation would begin in the schools through teacher education and involvement.

Mr. James McClafferty worked with the director on a possible process for diffusing an action program. It was presented to the total membership for reaction and suggestions. It was then rewritten and the following plan of action and process of dissemination was agreed upon:



Responsibilities of the various members included in the dissemination process:

<u>Director</u>	Meetings and reports to Superintendents Meetings and reports to Diocesan Curriculum Staff
<u>Superintendents</u>	Selection and appointment of personnel to implement the Action Program in each Diocese
<u>Diocesan Curriculum Staff</u>	Plan and co-ordinate the Impact Program in each diocese Plan with principals and evaluate local Follow-Through Programs
<u>Building Principals</u>	Co-ordinate the Follow-Through Program locally in cooperation with Diocesan Staff Provide bibliographies for teachers at every level
<u>Teachers</u>	Participate in total action program, Impact and Follow-Through Utilize program and bibliography in teaching strategies Team for providing an integrated humanities program in the teaching of minority histories and cultures.

Curriculum co-ordinators were named for each diocese by the respective superintendents.

IMPLEMENTATION OF TRI-ETHNIC

The project was ready for presentation to the bishops who had funded it, the superintendents from the five dioceses in Michigan, the five diocesan curriculum staffs who would co-ordinate the project and the members of the Tri-Ethnic Curriculum Project.

The following agenda was accomplished:

Meeting of

THE TRI-ETHNIC CURRICULUM PROJECT

Monday, September 14, 1970

Michigan Catholic Conference Building

AGENDA

- 9:30 a.m. Coffee
- 10:00 Introduction of Participants
- Brief Overview of Project
Sister Christine Davidson, SSJ
Director of Tri-Ethnic Curriculum Project
- 10:30 Survey of the Guide
1. Philosophy of TECP
Sister Marjorie Crimmins, OP
Diocese of Grand Rapids
 2. Goals for TECP
Mr. Eric Winston
Center for Urban Affairs
Michigan State University
 3. Indian Experience
Mr. John Winchester
Center for Urban Affairs
Michigan State University
 4. Spanish-Speaking American Experience
Sister Marie Florence Garcia, OP
St. John School
Essexville, Michigan
 5. Black Experience
Mr. Eric Winston
- 12:00 Lunch
- 1:00 p.m. Action Program
- 1:20 Evaluation Program
Dr. Robert Green
Director, Center for Urban Affairs
Michigan State University

1:15 p.m. Demonstration of In-Depth Program for Teachers of
Grade 8 from the Five Dioceses
Dr. Daniel Jacobson
Director of Social Studies Department
Michigan State University

Mr. William Helder
Director of Social Studies
Lansing Public Schools

2:50 Open Discussion and Questions

3:30 Culmination
Reverend Wm. Meyers
Superintendent
Diocese of Lansing

THE ACTION PROGRAM

The Tri-Ethnic Curriculum Project recommended a Teacher in-service Program that begins with a day of Impact followed by a number of small group sessions for continued reaction, study, and growth.

IMPACT

The Impact Program should be at least one full day when all teachers in each diocese meet. Its goal is to incite teachers to a felt need for a greater and deeper understanding of the Contemporary problems of minority groups and the role of the Christian educator in bringing about change through correct knowledge, understanding and appreciation of the contributions of all cultures to world civilization.

This all-teacher program might consist of a panel of speakers from the Tri-Ethnic groups followed by a series of short films and discussions. The all-teacher Impact Program will be conducted out of the Central office in each diocese.

FOLLOW-THROUGH

In order to insure more lasting impressions and continued growth beyond a one day crash program, TECP recommended a follow-through

program to be implemented locally in each school. The principal will be responsible to the central diocesan staff for this program.

The central staffs will meet with all principals and local curriculum leaders to be sure that they understand the basic philosophy and goals of the in-service program. Local program administrators will then hold four to six sessions during the school year with their local faculties using films, books, etc., as a basis for discussion and growth. In the selection of books or films, those organizing the local sessions will always plan in the light of the goals. They will meet with the Central Staff periodically at which time a report of teacher response and reaction as well as action will be made.

Although the responsibility for the follow-through lies with the Principal, he/she will assign the project to a department head, the curriculum coordinator of the building, or a faculty member. Perhaps two or three principals will work their program jointly in a merged faculty project.

A sub-committee under the direction of Sister Tereska worked out a set of four strategies from which local groups could draw, or not, in planning their local follow-through sessions:

Suggested Guidelines for Principals and Co-ordinators of Follow-through Programs:

Four to six in-service meetings for school personnel will take place during the Fall of 1970. There are several alternatives from which to choose in the planning for these meetings. The alternatives listed below are not intended to be exhaustive:

1. Meetings within a given school using the faculty members as resource people. This might insure study on the part of each individual teacher.
2. Meetings within a given school using local people from minority groups as resource people. The faculty could be re-actors.



3. Meetings within a given school but with parent as well as teacher participation.
 - a. May involve evening scheduling.
 - b. Parents of children from minority groups as resource people.
 - c. Parents of children NOT of minority groups as re-actors.
 - d. Outside speakers--especially when teachers and parents have no experience with minority groups.
4. Several schools in an area combine for meetings.
 - a. Alternate meeting place.
 - b. Alternate use of personnel.
 - c. Involve parents of all children in these meetings.
 - d. Use the strongest of the resource people in the area who are knowledgeable of cultures of minority groups.

The Principal(s) and/or Building Co-ordinators are responsible for the scheduling of these meetings. Teachers and/or parents could be asked to share the responsibility and assist with the planning. Imagination, creativity, and serious study must go into this planning.

If a number of schools hold joint meetings, the preliminary planning should be done by the participating Principals and teachers so that there will be continuity and coherence in the meetings.

The concepts and goals as outlined in the curriculum study are the basis of all meetings. How these are to be attained becomes the responsibility of the Principal and faculty of each school.

An evaluation will be made by an evaluation team.

Guidelines for in-service training programs to aid teachers in achieving a broad background and understanding of the role played by the tri-ethnic groups in the history and development of our nation were prepared. Developing POSITIVE attitudes in these areas will enable teachers to work more effectively in developing similar worthwhile attitudes on the part of their students.

Below is a suggested format for the sessions:

- A. General Presentation
 - Using: a film
 - a panel
 - a speaker
- B. Small group discussions on the general presentation using discussion stimuli as a springboard.
- C. Reports of the small group discussions to the entire assembly.

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SESSION I Philosophy underlying the Teacher In-service Program

Elements of the Philosophy

1. Human Dignity - Self Awareness
2. Pluralism
3. Interdependency

Discussion Stimuli:

A. Human Dignity

Luke 10:27 "Love your neighbor as yourself."

This statement presumes an understanding and love of self—

1. importance of self image
2. need for understanding of ones cultural background
3. need for understanding ones psychological makeup

Bill of Rights "All men are created equal."

This statement stresses the importance of recognizing human dignity other than ones own.

B. America: Pluralistic Society

1. Define, contrast and evaluate: pluralism - assimilation
melting pot - cultural mosaic
American
2. With whose yardstick (standards) do we measure peoples?
3. How can people benefit from cultural and racial differences?
4. "The question is whether the USA will continue its policy of cultural genocide, mostly unwitting, towards its minority groups, or whether it will live up for the first time to its cherished ideal of pluralism by providing the conditions allowing this important community to enrich itself and the country through the renaissance of its rich cultural traditions." Jorge Lara-Braud
 - a. How has cultural genocide been committed?
 - b. Can pluralism exist in our society?

C. Interdependence

I Cor. 12:19, 20 "Now if they were all one member, where would the body be? But as it is, there are indeed many members yet but one body."

How have we been dependent on each ethnic group?

Possibilities: labor force
inventions and discoveries
new industries
language
others

Picture our nation without the Black, the Spanish-speaking, the Indians. What would be lacking?

SESSION II To Gain Knowledge of the Tri-Ethnic Culture and Historical Background

1. Who is a Black American?
2. Who is an Indian American?
3. Who is a Mexican American?
4. To whom does this land belong by right of first ownership?
5. Historically speaking, how are stereotypes created?
6. What are the stereotype concepts of each ethnic group?

SESSION III Emphasis on Knowledge of Contributions to the Making of this Nation

1. Discuss the major contributions of each group.
2. What are the cultural values of each group?
3. Have our historical accounts been adequate?
4. How have we been impoverished by this neglect of historical authenticity?

SESSION IV Teacher Insights into the Contemporary Tri-Ethnic Experience

1. Discuss the nature and meaning of the Indian Movement.
Discuss the nature and meaning of the Black Movement.
Discuss the nature and meaning of the Chicano Movement.
2. Is there a lesson to be learned from these movements?
3. Exploitation . . . a reality? in the past? at present? and the future?
4. Is there a need for change?
5. Can a teacher be instrumental in changing society?
Attitudinal Change: in teacher, in student, in society

On October 5 and 6, 1970, the diocese of Lansing held a Principals' Workshop at the DeWitt Retreat House to acquaint principals with the project and their role in its implementation. The agenda was as follows:

PRINCIPALS' WORKSHOP
Diocese of Lansing
DEWITT RETREAT HOUSE

October 5 & 6, 1970

MONDAY, October 5 Chairman, Daniel Jacobson, Ph.D.

8:00 - 9:30

REGISTRATION
(Coffee and Doughnuts)



9:30	WELCOME	Rev. William F. Meyers
9:45	GOALS AND OBJECTIVES OF SCHOOL DEPARTMENT FOR 1970-1971 William J. Blackburn	
10:00 - 10:15	OVERVIEW OF TRI-ETHNIC CURRICULUM PROJECT	
10:15 - 11:30	MOTIVATIONAL SESSIONS re: TECP Vatican II Document on Human Dignity Discussion Sessions with Representatives from TECP Committee Audiovisual Presentations, etc.	
11:30	MASS	
12:30	LUNCH	
2:00 - 4:30	HOW WILL THE PRINCIPAL IMPLEMENT THE TRI-ETHNIC PROGRAM	
	REVIEW OF IMPLEMENTATION PLAN: Demonstration Models Follow-up In-service for Teachers Bibliography of Materials	
5:30	DINNER	
7:00 - 8:30	EVENING SESSION: State Aid Status Work Session on NCEA Forms Special Interest Discussions	
8:30 - 9:30	SOCIAL HOUR	

TUESDAY, October 6

8:00 - 9:00	BREAKFAST
9:00 - 9:45	IMPLEMENTATION OF EVALUATION PROGRAM Filmstrips and Records Discussion Groups
9:45 - 10:00	COFFEE BREAK
10:00 - 11:15	CONTINUATION OF ABOVE
11:15	MASS
12:15	DINNER
1:30 - 2:30	HOW DOES THE PRINCIPAL BRING ABOUT IMPROVEMENT AND CHANGE
2:30 - 2:45	BREAK

2:45 - 3:45 THE KEY TO SUCCESS
 3:45 SCRIPTURE SERVICE
 Adjournment

IN-DEPTH

Dr. Daniel Jacobson and Mr. William Helder prepared a plan for in-service and implementation of a course in Minority Histories and Cultures related to the Tri-Ethnic groups. The course will be taught by a select group during the second semester.

The central diocesan staffs will select five or six eighth grade teachers who will attend five training sessions in Lansing during the first semester. These sessions will consist of a half-day skills orientation and half-day content. The following is an agenda for this phase of the in-service program:

FROM: William Helder
 SUBJECT: Outline for Tri-Ethnic In-service Training (Skills)
 Five sessions - 2 hours 15 minutes each

Session I

- a) Introduction to Concept Development Strategy.
- b) Introduction to Resolution of Conflict Strategy.
- c) Assign Concept Development task for next session.
- d) Fair planning if time permits.

Session 2

- a) Pair, drawn by lot, will demonstrate concept development task with group.
- b) Introduction to Interpretation of Data strategy.
- c) Review of Inquiry Method using materials developed by Dr. Barry Beyer for "Project Africa."

Session 3

- a) Two pairs, drawn by lot, will present a summary of their application of the inquiry method.
- b) Introduction to Exploration of Feelings and Analysis of Values Strategies.

Session 4

- a) Pair, drawn by lot, will demonstrate either Feelings of Values task.
- b) Introduction to Application of Generalizations Strategy

Session 5

- a) Pair, drawn by lot, will demonstrate Application of Generalizations task.
- b) Review Historical Method
- c) Review of strategies - Application to materials development as time permits.

FROM: Daniel Jacobson

SUBJECT: Outline for Tri-Ethnic In-service Training (Content)

Five Sessions - 2½ hours each

Session 1

- a) Minority groups in America - an overview
- b) Cultural assimilation and cultural diversity
- c) The tri-ethnic concept
- d) American Indians in time and place

Session 2

- a) The American Indians
 - 1. The Food Areas of North America
 - 2. Gatherers, hunters, fishermen, farmers
 - 3. Culture contacts
 - a. with other Indians
 - b. with Europeans
 - c. with Americans
 - 4. The reservation system
 - 5. Present-day problems

Session 3

- a) The Spanish-Americans
 - 1. Old world roots
 - 2. Early Spanish-American culture
 - 3. Culture contacts and culture change
 - 4. The migrant worker
 - 5. Present-day problems

Session 4

- a) The Black Americans
 - 1. Roots in Africa
 - 2. Slavery
 - 3. Culture in the American South
 - 4. Culture contacts and culture change
 - 5. The struggle for civil rights
 - 6. Present-day problems

Session 5

- a) Comparing American minority cultures
 - 1. Common culture threads
 - 2. Unique culture threads
 - 3. The reaction to culture change
 - 4. Common present-day problems
 - 5. Unique present-day problems

- b) Minority groups in America - where do we go from here?

Textbooks for Tri-Ethnic In-service Training (Content)American Indians:

Alvin M. Josephy Jr., The Indian Heritage of America, Alfred A. Knopf, Inc., New York, 1968.

Daniel Jacobson, The First Americans, Ginn and Company, Boston, 1969.

Spanish Americans:

Carey McWilliams, The Mexicans in America, Teachers College, Columbia University, New York, 1969.

Julian Nava, Mexican Americans: Past, Present, and Future, American Book Company, Cincinnati, 1969.

Black Americans:

John H. Franklin, From Slavery to Freedom: A History of Negro Americans, 3rd Ed., Alfred A. Knopf, Inc., New York, 1967.

James A. Banks, March Toward Freedom: A History of Black Americans, Fearndon Pub., Palo Alto, California, 1970.

Supplementary Texts:American Indians:

Vine Deloria, Jr., Custer Died for Your Sins, An Indian Manifesto, The Macmillan Co., New York, 1969.

Peter Farb, Man's Rise to Civilization as Shown by the Indians of North America from Primeval Times to the Coming of the Industrial State, E. P. Dutton & Co., Inc., New York, 1968.

William T. Hagen, American Indians, University of Chicago Press, Chicago, 1961.

Daniel Jacobson, Great Indian Tribes, Hammond, Inc., Maplewood, N. J., 1970.

Stan Steiner, The New Indians, Harper & Row, New York, 1968.

Spanish Americans:

Stan Steiner, LaRaza: The Mexican Americans, Harper & Row, New York, 1969.

Black Americans:

See references in Tri-Ethnic Curriculum Project, The Black Experience, Part III.

These eighth grade teachers will be prepared to teach a course in Minority Histories and Cultures during the second semester. They have committed themselves to hold training sessions and give demonstrations for other Junior High teachers in their respective dioceses.

It was essential that these teachers be selected for their commitment to the education of children and their understanding of the educational needs in today's world and in the future. They are well able to speak to adult audiences and are natural leaders.

Diocesan Curriculum Staff members also attend the training sessions.

The in-service program for these eighth grade teachers commenced in October and was completed in February. The in-service days were held on the third Thursday of each month.

TEACHER ACTION

The action program to be implemented through teacher in-service programs for this year will not be separate from the teachers' action program in working with students. A bibliography has been selected and annotated for the various grade levels. It includes books, films, film strips, tapes and recordings representing the total Tri-Ethnic experience. As teachers grow through study and discussion during the year, action programs will begin in their classrooms, not only in the social studies classes, but in the religion, literature, science and

fine arts as well. Hopefully, team teaching will bring about a real program of growth for children of all age levels integrating the curriculum and thereby broadening student perspective of all peoples.

Attitudes are caught more often than taught. As teachers develop deeper attitudes toward the real meaning of human dignity, pluralism and interdependence--as they grow in self-awareness, teacher identity, knowledge and awareness of Tri-Ethnic Experience, understanding and real commitment, so must the students with whom they will work each day.

EVALUATION

Continuing evaluation of the entire program for the year is of prime importance. Overall evaluation will be made and reported to the five dioceses by TECP. Visitations will be made by this group but TECP will depend on Diocesan Curriculum coordinators for local evaluation which will be forthcoming through each local administrator.

BIBLIOGRAPHIES AND GUIDES

TECP has provided a Guide for use by Diocesan Superintendents and Staffs for a one-day orientation program for all teachers. Purpose is to initiate the development of certain concepts essential to the education of the children of the tri-ethnic groups and of children not of the tri-ethnic groups, and to provide an understanding of the contributions of the tri-ethnic cultures to American life.

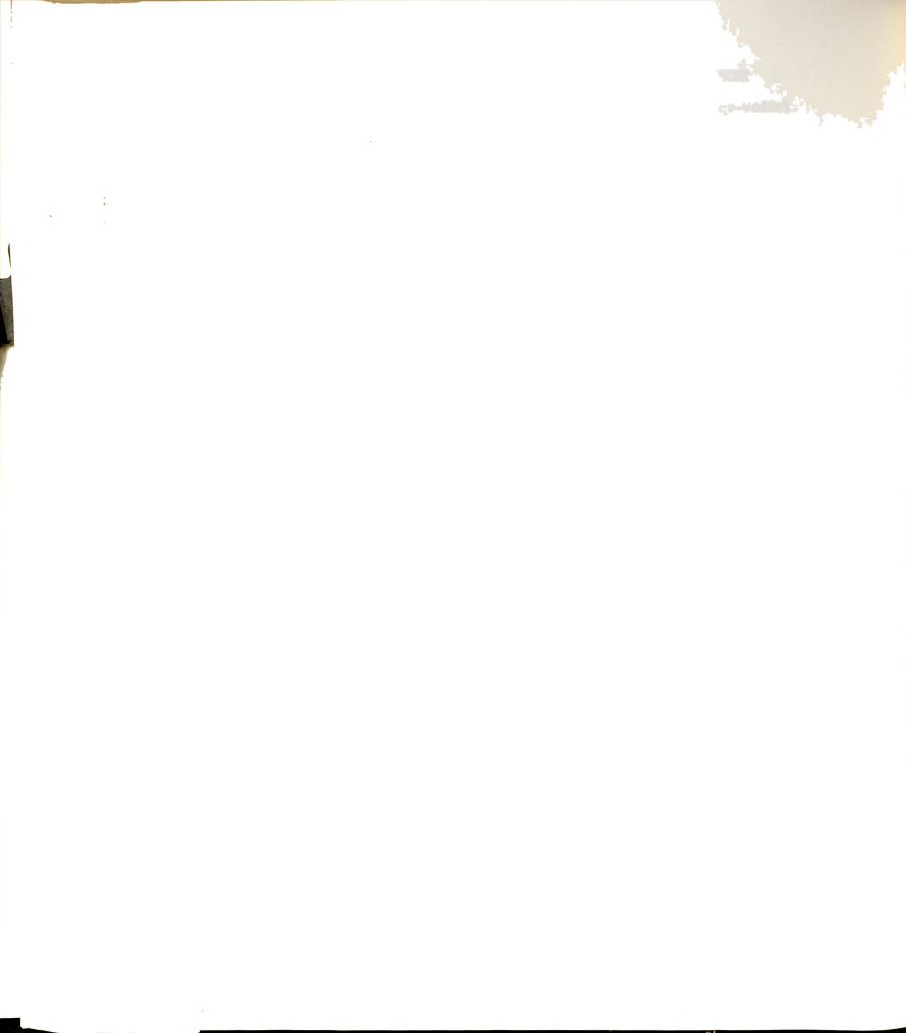
A second Guide has been prepared for Principals and Building Curriculum Coordinators. It consists of materials, films, and readings to be used as springboards for discussion and dialogue in local settings with a view to growth in concepts initiated in the Impact Program. It is recommended that the follow-through programs be continued by Diocesan Curriculum Staffs through their Building Principals.



TECP has prepared and will provide an intensive workshop and a follow-up program for selected 8th grade Social Studies teachers from each diocese who will begin teaching minority cultures units in their schools in Spring, 1971. This core group will provide demonstrations in teaching the course on minority groups, hold workshops in each diocese, and disseminate materials.

TECP has selected, graded, and annotated lists of readings and media for teachers and students. This third bibliography has a four-fold goal:

- conceptual, attitudinal and behavioral growth through the humanities programs in grades 1-12
- to provide varied opportunities for children to appreciate the value of seeing many points of view, yet inherent likenesses
- to provide varied opportunities for creating classroom environment which sponsors activity in concept-seeking and value-seeking
- to provide varied opportunities through wide reading and multi-media to explore human behavior and human environment



APPENDIX 2

SUMMARY OF THE RECOMMENDATIONS FOR THE TRI-ETHNIC CURRICULUM PROJECT DERIVED FROM IMPLICATIONS THROUGHOUT THE REVIEW OF LITERATURE AND RESEARCH

Summary of Recommendations for TECP:

Since the model has been produced through the logical derivation of a set of representative implications and techniques on which the appropriate elements of several areas considered in the earlier chapters are interrelated, it may be helpful to collate the recommendations cited in the earlier chapters.

- 2.01. Collaborative involvement of all members of the social system: superintendent, diocesan curriculum staff, local administrators, building curriculum co-ordinators, teachers, students, school boards and parents.
- 2.02. Determination of process and roles for disseminating the Tri-Ethnic Curriculum Project throughout the system:
 - (1) Utilizing a team approach to the knowledge flow and linkage process;
 - (2) Taking cognizance of the tasks for which collaboration efforts make contribution;
- 2.03. Recognition of a need and planning for a functioning system of knowledge-linking on the part of administration:
 - (1) An institution which includes and supports roles of various linkers;
 - (2) Need to recruit candidates to serve in these roles;
 - (3) The need to train recruits to fill these roles;
- 2.04. Appointment and training of a socialization agent to accept and support the development of personalized initiative and identity;

- 2.05. Enhancement of the principal's image as a credible source of information (measured in terms of competence, trustworthiness and dynamism) through:
 - (1) Training for administrators providing knowledge of relevant relationships and structures, of social forces and factors promoting and impeding various possible changes;
 - (2) Wholehearted support and concern from top officials of the system (general superintendents, deputy superintendents, curriculum consultants);
- 2.06. On going provision of opportunities for teachers to participate meaningfully in school decisions which may affect them.
- 2.07. Collaboration of administrators joining with teachers in diagnostic efforts leading them to agree on the basic problem and to feel its importance.
- 2.08. Emphasis on the social-structural aspects of local staff and faculty in each case, i.e., between administration and teachers and between teachers themselves.
- 2.09. Provision of an opportunity for large group presentation initiating awareness and interest; also, allowing for initial catharsis and reaction.
- 2.10. A training program for small group facilitators; include skills in identifying potential barriers to total system interaction; skills enabling them to understand and deal with resistance.
- 2.11. Small group interaction sessions held to promote recognition of the importance of self-esteem, self-identity maintenance, group identity maintenance, and group acceptance.
- 2.12. Provision of face-to-face transmission of Tri-Ethnic Program through varied and sufficient small group sessions and feedback opportunity.
- 2.13. Emphasis on the social-structural aspects of the institution in order to lessen potential resistance to change, focusing on:
 - (1) Collaborative involvement in program adaptivity to needs and situations in each local case (administrators, teachers, board members, and community leaders);
 - (2) The values and ideals which have long been acknowledged by participants;
 - (3) A non-threatening atmosphere assuring autonomy, support and security to potential adopters;
 - (4) Diagnostic efforts leading participants to agree on the basic problem and to feel its importance;

- (5) Assurance that the adoption will be by consensual group decision;
 - (6) Open two-way communication;
 - (7) Consistent feedback on perceptions of the project and further clarification when needed;
 - (8) Collaborative acceptance, support, trust and confidence in relations with one another;
 - (9) Consistent openness to revision and reconsideration when experience indicates need for changes.
- 2.14. Human relations training sessions as a part of the design for Phase I of TECP to ensure:
- (1) Some breakthroughs in confronting the problems of resistance to facing racial issues;
 - (2) Changes in the rejection of some teachers of the relevance of the research provided by TECP;
 - (3) Lowered resistance to sharing of problems and sharing need for help;
 - (4) An increase in readiness to perceive their own racial attitudes.
- 2.15. New developmental efforts at providing teachers and administrators with micro-experiences of what it might be like to adopt Tri-Ethnic programs, what might take place and predicted outcomes, without the threat of uncertainty of consequences that comes with final commitment.
- 2.16. Appointment of one individual or a team in each area whose role is designated as primary change-agent for the system.
- 2.17. Definition of position for the change-agent: a trainer role under the assumption that training to develop active behavioral skills is an especially important part of the learning necessary to increase the potential for planned, purposeful change.
- 2.18. Definition of core responsibilities of trainer change-agent:
- (1) to link outside curriculum resources to the classroom teacher;
 - (2) to give leadership to defining educational objectives;
 - (3) to co-ordinate the process of developing curriculum;
 - (4) to facilitate and support programs of in-service education;
 - (5) to develop the support system which must surround and help the teacher; support through colleagues, administrators, parents.
- 2.19. Definition of functions for trainer change-agents:

- (1) Staff: Helping staff identify needs; using interpersonal and group leadership skills, maintaining involvement of central administrators;
 - (2) School staff and resource center (TECP): Introducing knowledge resources and designing experience in their use;
 - (3) School faculty and school administration: Helping staff identify needs, developing problem-solving skills and skills of communication -- listening and expressing; identifying and coping with barriers to interaction in self and others; developing interdependence between administrators and staff;
 - (4) School staff and pupils: Developing problem-solving skills of diagnosing classroom situations, planning changes to meet concerns, implementing plans, evaluating results of change efforts; developing interpersonal skills of communicating, identifying and coping with barriers to interaction; developing interdependence with peers and pupils.
- 2.20. Determination of the TECP staff on-going role: to provide diagnostic insights and concepts relating to the process of change and to supply consulting help as the process proceeds.
- 2.21. Agreement of the research function of TECP:
- (1) Basic research responsibilities relating to improving understanding of the nature of learning and conditions for it;
 - (2) Development of materials, practices, processes and institutions designed to offer research related to improved instructional practices;
 - (3) Initiation and support of a range of activities from demonstration to dissemination to in-service programs, in order to facilitate implementation in operational settings once alternatives have been decided on collaboratively.
- 2.22. Involve collaboratively all members of the system: superintendent, diocesan curriculum co-ordinator, local administrators, building curriculum co-ordinators, teachers, students, school boards, and parents.
- 2.23. Dissemination of materials designed by TECP to promote growth and development at all levels of the school system in such processes as increased problem-solving effectiveness, greater potential for action and interaction, and greater capacity for adaptation and change.



- 2.24. Determination of process for disseminating the Tri-Ethnic Curriculum Project and commitment to follow through at each level: Responsibilities of the various members included in the dissemination process:

<u>TECP Director</u>	Meetings and reports to Superintendents Meetings and reports to Diocesan Curriculum Staff
<u>Superintendents</u>	Selection and appointment of personnel to promote the Action Program in each Diocese
<u>Diocesan Curriculum Staff</u>	Plan and co-ordinate the Impact Program in each diocese Plan with principals and evaluate local Follow-Through Programs
<u>Building Principals</u>	Co-ordinate the Follow-Through Program locally in cooperation with Diocesan Staff Provide bibliographies for teachers at every level
<u>Teachers</u>	Participate in total action program, Impact and Follow-Through Team for developing an integrated humanities program in the teaching of minority histories and cultures.

- 2.25. Recognition that validity of objectives for TECP increases when such objectives are specified by a team made up of researchers (TECP), educators and social psychologists, collaborating so as to maximize their appropriate roles:

- (1) Basic and applied researchers to identify content and processes;
- (2) Educators to determine teachability, and methods for teaching and to relate TECP education objectives to broader objectives; to see the program in the context of total curriculum goals;
- (3) Psychologists to relate content, process and method selected to the appropriateness of age and grade placement.

- 2.26. Establishment of "Impact Program" to begin dissemination, initiating the Tri-Ethnic Curriculum Project.

- 2.27. Adoption of a "Follow-Through Program" consisting of a series of sessions, the members of each local school staff using the data from the "Impact Program" as a springboard to examine their own current attitudes, work on problems shown in the data, and improve their own problem-solving effectiveness as a team.

- 2.28. Initiation of and sustaining work procedures which are technically sound.
- 2.29. Procedure by local system through steps like the following:
 - (1) Problem sensing or identification -- attitudinal change and growth through study and interaction in the topic of minority groups;
 - (2) Diagnosis: reasons or causes for the problem, identification of forces favoring or blocking movement toward commitment to innovative program (TECP).
- 2.30. Increased collaboration resulting in:
 - (1) A more thorough understanding and use of valid data;
 - (2) Decisions made more and more on the basis of knowledge and competence and less and less because someone with formal authority says so;
 - (3) Shared decision making.
- 2.31. Adoption of shared decision making in view of these gains:
 - (1) Decisions are of higher quality, since more relevant information goes into them;
 - (2) People are more committed to carrying them out.
- 2.32. Mechanisms for keeping up with internal concerns and external trends and resources.
- 2.33. Constant and widespread sensing of problems and of new possibilities.
- 2.34. A general climate of openness and interpersonal trust between the various people who make up the social systems at the various levels of operational functions.
- 2.35. A mechanism for establishing some order of priority so that each school can work on its more urgent problems.
- 2.36. Establishment of a research and development unit to serve each diocese.
- 2.37. Mechanisms for wide participation in the production of solution proposals (superintendents, school boards, teachers, principals, administrators, consultants, supervisors involved).
- 2.38. Mechanisms for participation of eventual implementers in the decision making process.

Social-Interaction Model



3.01. Antecedent activities:

- (1) Realization of what a complex and intricate set of human sub-structures and processes must be operative before diffusion will succeed;
- (2) Assessment of potential adopters and implementers (individuals) in terms of personal security, values, mental ability and conceptual skill, social status, cosmopoliteness;
- (3) Assessment of the social system in terms of its norms or innovativeness, potential leadership within, need for external resource, economic constraints, traditional procedural patterns, need for adaptation.

3.02. Adaptation activities:

- (1) Face-to-face impersonal contacts;
- (2) Recognition and development of key influentials within each group who communicate with local innovators and outside experts;
- (3) Varied types of influence strategy: large group sessions, small group inter-action, mass media, demonstration, contact with experts.

3.03. Follow-through activities:

- (1) Continued re-inforcement in all stages of adoption; initial, on-going, final, and continued;
- (2) Continued group cohesiveness in terms of total system membership through mechanisms conducive to openness, learning, two-way-communication, decision and acceptance.

Research, Development, Dissemination Model

Antecedent activities:

- (1) Research
- (2) Design

3.04. Adaptation activities:

- (1) Informing the school systems about programs;
- (2) Demonstrating the effectiveness of programs;
- (3) Training target system in the use of the programs.

3.05. Follow-through activities:

- (1) Servicing and nurturing installed innovations.

Problem-Solver Model

3.06. Antecedent Activities:

- (1) Clarification of expectations of the parties involved (the superintendents and members of the focal group, the board, other members of the system, and the TECP staff regarding the purposes of the program), the probable time schedule, the amount of effort (time and dollars) likely to be required, role relations and responsibilities of TECP staff and organization members (diocesan and local), methods of collecting data for diagnosis and assessment, and use to be made of data (including publication).

3.07. Adaptation Activities:

- (1) An orientation meeting with teams from dioceses which are potential participants in the program, the superintendent being a member of the team in each case;
- (2) Circulation of the TECP manual to prospective participant dioceses describing change strategy (antecedent activities, adaptation activities, and follow-through activities), and annotated bibliographies;
- (3) One-day orientation meeting of superintendents from each of the dioceses, each bringing along one to three other system members, to discuss the project, make firm commitments to participate, and plan any further legitimation required with boards of education;
- (4) Meeting with local principals and in-building curriculum leaders for the same purposes stated above;
- (5) Local work - a series of visits to each system (diocese) by TECP to make progress checks, decisions for local and inter-school in-service, personal and group development programs;
- (6) Summer workshops beginning with human growth and development centers and continuing with local staff team study and program planning, setting alternatives;
- (7) Testing and trial of alternates.

3.08. Follow-through Activities:

- (1) Local decision - determine alternates to be implemented (total collaborative endeavor);

- (2) Local implementation;
- (3) Local evaluation;
- (4) Feedback to TECP;
- (5) TECP over-all evaluation and feedback.



BIBLIOGRAPHY

BIBLIOGRAPHY

Books

- Benne, Kenneth; Bennis, Warren; and Chin, Robert. The Planning of Change. 2nd ed. New York: Holt, Rinehart - Winston, Inc. 1968.
- Benne, Kenneth D., et. al. The University in the American Future. Lexington, Kentucky: University of Kentucky Press. 1966.
- Benne, Kenneth D. and Muntyan, Bosidar. Human Relations in Curriculum Change. New York: The Dryden Press, 1951.
- Carlson, Richard O.; Gallagher, Art; Miles, Mathew; Pellegrin, Ronald and Rogers, Everett. Change Processes in the Public Schools. Oregon: Center for Advanced Study of Educational Administration, University of Oregon. 1965.
- Cohen, David. The Development of an Australian Science Curriculum Model. (Unpublished Doctoral Dissertation), East Lansing: Michigan State University. 1964.
- Gardner, John W. Self-Renewal: The Individual and the Innovative Society. New York: Harper and Row, 1963.
- Guba, Egon and Bidwell, Charles. Administrative Relationships. Chicago: The Midwest Administration Center, University of Chicago, September. 1957.
- Guest, Robert H. Organizational Change: The Effect of Successful Leadership. Illinois: The Dorsey Press, Inc., 1962.
- Hoffer, Eric. The Ordeal of Change. New York: Harper and Row Publishers Inc., 1952.
- Jones, Howard L. ed. Curriculum Development in a Changing World. New York: School of Education, Syracuse University. 1969.
- Kimbrough, Ralph B. "Community Power and Structure". ASCD Seminar on Strategies for Curriculum Change. Washington, D.C.: 1965.
- Lewin, Kurt. Resolving Social Conflicts. New York: Harper and Brothers Publishers. 1945.
- Lin, Nan; Leu, Donald; Rogers, Everett; and Schwartz, Donald. The Diffusion of an Innovation in Three Michigan High Schools: Institution Building through Change. Michigan: Department of Communication, Michigan State University. 1966.



- Lucio, William, ed. The Supervisor: New Demands and New Dimensions. Washington, D.C.: Association for Supervision and Curriculum Development, NEA. 1969.
- Lewin, Kurt.
- Lin, Nan (ed.) Research Implications for Educational Diffusion. Michigan: State Department of Education. 1968.
- Lippitt, Ronald; Watson, Jeanne; and Westley, Bruce. The Dynamics of Planned Change. New York: Harcourt-Brace and Co. 1958.
- Merton, Robert K. Social Theory and Structure. Glencoe, Illinois: The Free Press. 1957.
- Miel, Alice, Changing the Curriculum: A Social Process. New York: D. Appleton-Century Co. Inc., 1946.
- Miles, Mathew, ed. Innovations in Education. New York: Bureau of Publications, Teachers College, Columbia University. 1964.
- Miller, Richard I., ed. Perspectives on Educational Change. New York: Appleton-Century-Crofts. 1967.
- Miller, Peggy Lynne, Change Agent Strategies: A Study of the Michigan-Ohio Regional Educational Laboratory. (Unpublished Doctoral Dissertation). East Lansing: Michigan State University. 1970.
- Morphet, Edgar L., and Ryan, Charles O., eds. Planning and Effecting Needed Changes in Education. Denver: Publishers Press, Inc., 1967.
- Rogers, Everett M. Diffusion of Innovations. New York: The Free Press of Glencoe. 1962.
- Swanson, Guy; Newcomb, Theodore and Hartley, Eugene, ed. Readings in Social Psychology. New York: Henry Holt and Co. 1952.
- Unruh, Glenys and Leeper, Robert. Influences in Curriculum Change. Washington, D.C.: Association for Supervision and Curriculum Development. NEA. 1968.
- Watson, Goodwin, ed. Change in School Systems. Washington, D.C.: National Training Laboratories. NEA. 1967.
- _____. Concepts for Social Change. Washington, D.C.: NTL Institute for Applied Behavioral Science, NEA. 2nd. printing, 1969.

Periodicals

- Allport, Gordon. "Perception and Public Health". Health Education Monograph. 2. 1958.

- Back, Kurt, et. al., "Manner of Original Presentation and Subsequent Communication", Psychological Reports. 3, 1957.
- Beckhard, Richard. "An Organization Improvement Program in a Decentralized Organization", Journal of Applied Behavioral Science. January-March, 1966.
- Clark, Burton, "Interorganizational Patterns in Education", Administrative Science Quarterly. 10 - 2. 1965.
- Kelman, Robert C., "Compliance, Identification, and Internalization: Three Processes of Attitude Change". Journal of Conflict Resolution. 2. 1958.
- Lionberger, Herbert F., "The Diffusion of Farm and Home Information as an Area of Sociological Research", Rural Sociology. 17. 1952.
- Ryan, Bryce and Gross, Neal, "The Diffusion of Hybrid Seed Corn in Two Iowa Communities", Rural Sociology. 8, 1943.
- Shepard, Herbert and Blake, Robert, "Changing Behavior through Cognitive Change", Human Organization. Summer, 1962.
- Winick, Charles, "The Diffusion of an Innovation Among Physicians in a Large City", Sociometry. 24, 1961.

Bulletins, Reports, Seminars

- Brickell, Henry M. Organizing New York State for Educational Change. Albany: Commissioner of Education, New York State Education Department, 1961.
- Carlson, Richard O., "Summary and Critique of Educational Diffusion Research", presented at the National Conference on the Diffusion of Educational Ideas, printed in Research Implications for Educational Diffusion, Michigan Department of Education, 1968.
- Clark, David and Guba, Egon, "Effecting Change in Institutions of Higher Education", Address to the International Intervisitation Project of the University Council for Educational Administration, October, 1966.
- Flanders, Ned A. Helping Teachers Change Their Behavior. Ann Arbor: School of Education, University of Michigan, April, 1963.
- Goldhammer, Keith and Farner, Frank. The Jackson County Story. Eugene: Education Center, University of Oregon.
- Havelock, Ronald, Planning for Innovation through Dissemination and Utilization of Knowledge, Final Report to the United States Department of Health, Education and Welfare, United States Office of Education, 1969.

1945, 1946
1947, 1948
1949, 1950

- Havelock, Ronald, "The External Process: Roles, Organizations and Systems for Knowledge Linking", presented at the National Conference on the Diffusion of Educational Ideas, printed in Research Implications for Educational Diffusion, Michigan Department of Education, 1968.
- Katz, Elihu and Menzel, Herbert, "On the Flow of Scientific Information in the Medical Profession", Mimeographed report from Bureau of Applied Social Research, Columbia University, 1954.
- Leeper, Robert, ed. Strategy for Curriculum Change. Papers for the ASCD Seminar on Strategy for Curriculum Change. New Orleans: January, 1965. Washington, D.C.: Association for Supervision and Curriculum Development, 1965.
- Leeper, Robert, ed. Curriculum Change: Direction and Process. Addresses at the 21st ASCD Conference, San Francisco: March 13-17, 1966. Washington, D.C.: Association for Supervision and Curriculum Development, 1966.
- Lionberger, Herbert F., "The Diffusion of Innovations in Agricultural Research and in Schools", ASCD Seminar on Strategies for Curriculum Change, Washington, D.C.: 1965.
- Lippitt, Ronald, "Roles and Processes in Curriculum Development and Change", ASCD Seminar on Strategy for Curriculum Change, Washington, D.C.: 1965.
- Peggegrin, Ronald J., "An Analysis of Sources and Processes of Innovation in Education," University of Oregon, Center for Advanced Study of Educational Administration. Eugene, Oregon: 1966.



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