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A Study Of Gross' Theory On Implementing Organizational Innovations: The Case Of Bilingual Education

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A STUDY OF GROSS' THEORY ON IMPLEMENTING ORGANIZATIONAL
INNOVATIONS: THE CASE OF BILINGUAL EDUCATION

A Dissertation Presented to the Graduate Faculty
of the University of the Pacific

In Partial Fulfillment of the Requirements for
the Degree Doctor of Education

by
Roger Tom
April 1981

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A STUDY OF GROSS' THEORY ON IMPLEMENTING
ORGANIZATIONAL INNOVATIONS: THE
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Abstract of Dissertation

Purpose. The purpose of this study was to test, modify and refine the theory developed by Gross and his associates on implementing organizational innovations by applying it to the attempt to implement a bilingual education project.

Procedures. Criteria were established for the selection of the school site. Once the site was selected, the data were collected through classroom observations, staff interviews, questionnaires, and available school documents. The data were analyzed with regard to their fit or lack of fit with elements of Gross' theory. Factors not accounted for in the theory were identified.

Findings. The findings of the study substantially supported Gross' theory on implementing organizational innovations, viz., that the extent to which an innovation is implemented depends on the degree to which members understand the innovation, members are capable of exhibiting the appropriate behaviors to implement it, members are committed to implementing it, organizational arrangements are compatible with it, and needed materials and resources are available. However, several factors were uncovered which were not accounted for in Gross' theory, viz., that some innovations are not satisfactorily implemented because they are not fully developed nor definable, that management may not be committed to implementing an innovation, and that management may not have full control over the conditions affecting the implementation process. Based on these findings, Gross' theory was expanded to include the following hypothesis: that the extent to which an innovation is implemented depends on the degree to which the innovation is developed and definable, management is committed to implementing the innovation, and management has control over the conditions affecting the implementation process.

Recommendations. Verification studies are needed to determine the limitations and generality of the expanded theory. Further research is needed to determine the relationship between the extent of the implementation of an innovation and the type of innovation being implemented, management's commitment to implementing the innovation, and management's control over the conditions affecting the implementation process.

DEDICATION

To my wife, Pauline, for her understanding
love and support, and

To our children, Jennifer and Karen.

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Chapter 1

INTRODUCTION

Planned educational change has been the means by which our nation's schools have attempted to meet new needs, and one of the major roles of the school administrator today is to plan educational changes that will help improve the schools.¹ The subject of planned change is a practical concern for school administrators and a scientific interest to students of planned organizational change.

Planned educational change in the United States has been supported by the fundamental American beliefs in equality, in material progress, in the democratic way of life, and in the importance of education.² The concern of the United States over military defense and social justice has provided much of the impetus for educational change in the past 25 years. For example, with the advent of Sputnik in 1957, the nation launched a massive effort to revise and improve the science, mathematics, and foreign language

¹James M. Lipham and James A. Hoeh, Jr., The Principalship: Foundations and Functions (New York: Harper and Row, Publishers, 1974), pp. 220-2.

²Everett M. Rogers, Diffusion of Innovations (New York: The Free Press, 1962), pp. 2-4.

curricula of the public schools.³ The civil rights movement of the 1950's and the "anti-poverty" efforts of the 1960's generated the development of new educational programs which attempted to address the special educational needs of disadvantaged children. More recently, the concern over public school accountability and educational practices has added to the interest in educational change and reform in the United States.

Even with the apparent interest and support for educational change in this country, many educational programs introduced into the schools fail.⁴ These failures result in a waste of limited financial and human resources.⁵ In order to minimize this kind of waste, there is a need to investigate why many new school programs fail. There are numerous theoretical explanations on the educational change process. However, at the time of this study, there was only one theory that dealt specifically with what happened to a new educational program once it had been introduced into a school. This theory, developed by Gross, Giaquinta, and Bernstein, thoroughly explicates that

³Richard O. Carlson, Adoption of Educational Innovations (Eugene, Oregon: The Center for the Advanced Study of Educational Administration, University of Oregon, 1967), pp. 2-3.

⁴Neal Gross, Joseph B. Giaquinta, and Marilyn Bernstein, Implementing Organizational Innovations: A Sociological Analysis of Planned Educational Change (New York: Basic Books, Inc., 1971), pp. 186-8.

⁵Ibid.

process. In brief, they theorized that the extent to which an organizational innovation is implemented depends on the degree to which five conditions were present during the implementation process, viz.,

- 1) that organizational members had a clear understanding of the innovation,
- 2) that organizational members possessed the capabilities to carry out the innovation,
- 3) that needed materials and resources were available,
- 4) that organizational arrangements were compatible with the implementation of the innovation, and
- 5) that organizational members were committed to implementing the innovation.

Gross and his associates developed their theory from an in-depth field study of the attempted implementation of an innovative educational program at Cambire Elementary School. They indicated that their investigation was only a beginning in the study of the implementation of innovations in organizations. They suggested that there was a need for more research to determine the usefulness of the theory for explaining the implementation of organizational innovations. One way to achieve this objective was to apply their theory to the implementation of a different type of educational innovation. One educational innovation that could be used for this purpose was bilingual education. Bilingual education was reintroduced into the public schools of the United States about twenty years ago to address the special educational needs of limited-English speaking students.

Purpose of the Study

The purpose of this study was to test, modify and refine the organizational change theory developed by Gross, Giacquinta, and Bernstein by applying the theory to the attempt to implement a bilingual education program. To accomplish the purpose of this study, the following research questions were addressed:

- 1) What is the relationship between the extent of bilingual education program implementation and the degree to which the five conditions were present during the implementation process?
- 2) What are the factors in the implementation of a bilingual education project that are not accounted for in Gross' theory on organizational change?
- 3) What is the extent to which school administrators have control over the five conditions identified in Gross' theory on organizational change in the implementation of a bilingual education project?

In this section, the purpose of the study was stated; in the next two sections, the definitions used in the study and the assumptions are presented.

Definitions

Adoption: the acceptance of an innovation.⁶

Attempted Implementation: the period after the initiation of an organizational innovation had been completed but prior to its complete implementation.

Bilingual Education: a system of instruction which uses two languages, one of which is English, as a means of instruction.⁷

⁶Carlson, op. cit., pp. 2-3.

⁷California Education Code, Division 6, Chapter 5.67.

Degree of Implementation: the extent to which at a given point in time, the organizational behavior of the members conforms to an organizational innovation.⁸

Diffusion: how widely an innovation spreads.⁹

Implementation: the period after initiation which focuses in on efforts to change the behavior of organizational members as specified by the innovation.¹⁰

Incorporation: the period when a change that is implemented becomes an enduring part of the organization.¹¹

Initiation: the period in which an innovation is selected and is introduced into an organization.¹²

Non-organizational Innovation: a technological innovation that can be adopted by persons on an individual basis.¹³

Organizational Change: behavioral change that involves a change in role performance, the authority structure, the division of labor, or the goals of an organization.¹⁴

Organizational Innovation: an idea about how the organizational behavior of members should be changed in order to resolve the problems of the organization or to improve its performance.¹⁵

Theory: a set of interrelated concepts, definitions, and propositions that present a systematic view of phenomena by specifying relationships among variables,

⁸Gross, op. cit., p. 16.

⁹Carlson, loc. cit.

¹⁰Gross, op. cit., p. 17.

¹¹Ibid.

¹²Rogers, op. cit., p. 19.

¹³Joseph B. Giacquinta, "The Process of Organizational Change in Schools," Review of Research in Education, ed. Fred N. Kerlinger (Itasca, Illinois: American Educational Research Association, 1973), p. 200.

¹⁴Gross, op. cit., p. 15.

¹⁵Ibid., p. 16.

with the purpose of explaining and predicting the phenomena.¹⁶

Assumptions

This study was conducted on the basis of the following assumptions:

- 1) that bilingual education as an organizational innovation could be subject to objective study and analysis,
- 2) that bilingual education at the time of this study was still in the implementation stage of development in the organizational change process, and
- 3) that California State Department of Education guidelines and standards were valid measures of the extent of bilingual education program implementation.

Methodology

This investigation was a field study. Kerlinger defines a field study as an ex post facto scientific inquiry aimed at discovering the relationships among variables in a real social structure.¹⁷ Among the more well known ex post facto studies in education are Piaget's studies of children's thinking processes, Coleman's studies of equal educational opportunities, and Gross' study of boards of education and superintendents.

¹⁶Fred N. Kerlinger, Foundations of Behavioral Research (2nd ed.; New York: Holt, Rinehart and Winston, Inc., 1964), p. 9.

¹⁷Ibid., p. 405.

In an ex post facto study, the investigator does not have control over the independent variables because the problem being studied may have already occurred or the variables may not be manipulable.¹⁸ As a consequence, generalizations are made about the relationships among the variables in ex post facto research without any direct manipulation of any of the variables. This lack of manipulation of variables is a basic difference between an ex post facto investigation and an experimental investigation.

Ex post facto research has both strengths and weaknesses. According to Kerlinger, the most important social scientific and educational research problems do not lend themselves to experimentation, although many of them do lend themselves to controlled inquiry of the ex post facto kind.¹⁹ For example, variables such as intelligence, aptitude, and home background are not manipulable, but yet they are important variables in educational research. The ex post facto research method allows for the scientific investigation of many problems in the social sciences and education in which the experimental method could not be used effectively.

A major weakness of ex post facto research is the inability to manipulate independent variables which may result in improper interpretation of the research data

¹⁸Ibid., p. 379.

¹⁹Ibid., pp. 391-92.

collected.²⁰ The danger of improper interpretation in ex post facto research stems from the plausibility of many explanations for the complex problems studied. Kerlinger suggests that this risk can be lessened by the use of carefully defined research hypotheses or research questions which will guide the investigation.²¹ As in experimental studies, it is possible to develop hypotheses or research questions, investigate the problem, and arrive at generalizations in ex post facto studies.

There are two basic reasons why the field study approach was selected for this investigation. First, there were important variables in the study that could not be manipulated, e.g., the teachers' commitment to implementing bilingual education, school policies and practices, and the attitudes of school administrators toward educational change and bilingual education. Kerlinger argues that the only appropriate research method to use when important variables are not manipulable is the field study approach.²² Second, Gross and his associates established the efficacy of this approach in their investigation that led to the development of a substantive theory for the study of organizational change. They found that the field study approach provided them with a strategic method for studying a complex organizational phenomenon. It permitted them to carry out in-depth observations of the attempts at organizational

²⁰Ibid. ²¹Ibid., p. 391. ²²Ibid., pp. 391-92.

change. And it provided them with a variety of data collection methods.²³

Significance of the Study

This study will provide the basis for testing and refinement of the organizational change theory developed by Gross and his associates on the implementation of innovations. The modified theory can be a useful tool for school administrators and other management personnel involved in the promotion and management of change in their organizations. Moreover, it can provide management personnel with insight into an important aspect of the organizational change process, viz., the implementation stage of incorporating an innovation into an organization.

Overview of the Study

This research report is organized into five chapters. In this chapter, the purpose of the study, the methodology employed, and the significance of the study are presented. In Chapter 2, the field study conducted by Gross and his associates and the organizational change theory that was developed are described, and the related literature is reviewed. In Chapter 3, the procedures for data collection, instrumentation, and the role of the field investigators are presented. In Chapter 4, background information and

²³Gross, op. cit., p. 45.

the data collected and analyzed are presented. In Chapter 5, theoretical implications of the findings, the restated theory, practical applications of the restated theory, and recommendations for further research are presented.

Chapter 2

THE THEORY AND RELATED LITERATURE

The purpose of this study was to test, modify and refine the organizational change theory developed by Gross, Giacquinta, and Bernstein. This was achieved by investigating the attempt to implement a bilingual education project. In order to place this study in proper perspective, it was necessary to understand the basic elements of Gross' theory, the related literature on organizational change, and the practice of bilingual education in the United States.

This chapter is divided into three sections. In the first section, there is a description of the field study conducted by Gross and his associates at Cambire Elementary School, the major findings of their study, and the theory proposed by the investigators based on their findings. In the second section, there is a review of the literature on organizational change together with a discussion of how it may tend to confirm or dispute the theory being proposed by Gross and his associates on implementing organizational innovations. And in the final section, there is an overview on bilingual education in the United States with regard to its practice prior to World War I, to its reintroduction in the public schools as a result of recent court decisions, and to some of the initial problems in implementation.

The Theory

This section is presented in two major parts. In the first part, there is a presentation of the study conducted by Gross and his associates, the major findings, and the theory that was developed. In the second part, the implications of the investigation are presented.

The Study and the Theory

Gross and his associates conducted an investigation on the attempted implementation of an innovation that was introduced in the Cambire Elementary School. The innovation required teachers to make a major change in their role in their classrooms. They were to discard the traditional role of being "directors of learning" and to take on the new role of being "facilitators of learning." In their new roles, the teachers were to help students to become responsible and independent learners by providing a classroom environment which would enable students to pursue their own interests, to proceed at their own pace and ability level, and to work independently.¹

The purpose of the investigation was to isolate factors which inhibited or facilitated the implementation of an organizational innovation that had been successfully initiated. Using the field study method, Gross and his associates collected data through formal and informal

¹Gross, op. cit., 11-15.

observations and staff questionnaires over a period of nine months. The major finding of the study was that a successfully initiated innovation may fail because of problems that remain unresolved during its attempted implementation.² The investigators believed that school management personnel had the responsibility of anticipating problems that may arise during the implementation of the innovation and of facilitating their resolution.

Gross and his associates cited two fundamental problems in the failure to implement the innovation at Cambire School. The first was the failure of school administrators to anticipate the various problems that the teachers were likely to encounter in their attempts to implement the innovation. The second was the failure of school administrators to establish feedback mechanisms to uncover the barriers that arose during the attempted implementation of the innovation. The investigators concluded that the role of management in the implementation process must be included in any organizational change theory that was to be developed.³

In developing a theory on the differential success of organizations to implement innovations, Gross and his associates formulated three major assumptions. The first assumption is that if members of an organization

²Ibid., pp. 190-1. ³Ibid., pp. 192-4.

are resistant to change, then overcoming this barrier will be a prerequisite for the implementation of any innovation. The second assumption is that the degree to which an innovation is implemented will depend on the degree to which the following five conditions were present during the attempted implementation period:

- 1) organizational members have a clear understanding of the innovation,
- 2) organizational members possess the capabilities needed to carry out the innovation,
- 3) the availability of materials and resources to implement the innovation,
- 4) the compatibility of existing organizational arrangements with the innovation, and
- 5) the extent to which organizational members are willing to expend the time and effort required to implement the innovation.

The third assumption is that the extent to which the above conditions are present during the attempted implementation process will be the responsibility of management personnel.⁴

Implications of the Study

From their investigation, Gross and his associates questioned a number of basic assumptions found in the organizational change literature. First, they challenged the assumption that initial resistance to change is a condition that exists among all organizational members. They maintained that many organizational members may welcome

⁴Ibid., pp. 202-3.

a proposed change because it may appear to offer a solution to existing irritating problems.⁵ Moreover, they asserted that this assumption ignores the fact that organizational members who may initially be receptive to an innovation may later develop resistance to it because they were blocked in their efforts to implement it.⁶ Second, they challenged the assumption usually found in evaluation studies that the innovation under consideration has in fact been implemented. They argued that many innovations initiated in schools have never been fully implemented, and hence, their merits could not be adequately evaluated.⁷

Gross and his associates believed that there was a need for further research on the implementation of organizational innovations. They saw a special need for replication studies so that the generality or limitations of their theory can be evaluated. Moreover, they indicated that further research was needed to determine

- 1) if different patterns of obstacles may emerge in efforts to implement different kinds of innovations,
- 2) if particular implementation strategies are more or less effective depending upon the magnitude of the behavioral change required of organizational members carrying out the innovation, and
- 3) if different explanations may be required to account for the successful implementation of different types of organizational innovations.⁸

⁵Ibid., p. 204.

⁶Ibid., pp. 196-8.

⁷Ibid., p. 204.

⁸Ibid., p. 205.

In this section, a brief description of the investigation conducted by Gross and his associates, their findings, and theory they developed were presented. In the next section, there will be a review of the related literature and a discussion of how it may tend to support or refute the theory developed by Gross and his associates.

Review of the Related Literature

In order to place this study in proper perspective, it was necessary to review the literature on planned organizational change and the treatment of the implementation of organizational innovations. In this review, the major models and theories on organizational change that contribute to the understanding of the implementation of organizational innovations are presented. Special attention is given to the major findings of Gross and his associates.

Overview of Change Studies

The systematic study of innovations and organizational change has progressed in definite stages and has provided insight into the various aspects of organizational change. In the early stages, the research into innovations and how they were diffused was conducted by anthropologists, rural sociologists, and medical sociologists.⁹ Educators were involved in this type of research about 40 years ago.¹⁰

⁹Rogers, op. cit., p. 39. ¹⁰Ibid.

In the later stages, these diffusion studies led to studies on the adoption rates of innovations. Subsequent studies concentrated on the characteristics of different types of innovations, of change strategies, and of organizational structures and their effects on the degree and rate of adoption and diffusion. The most recent studies have dealt with how innovations are implemented and incorporated in organizations.

The review of the literature is divided into five sections:

- 1) diffusion and adoption studies,
- 2) the attributes of innovations,
- 3) strategies of change,
- 4) the attributes of adapters, and
- 5) the attributes of organizational settings.

Adoption and Diffusion Studies

The earliest studies in education on organizational change and innovations focused on factors which influenced the speed and extent to which an innovation is diffused. Paul Mort, Donald Ross, and Richard Carlson are researchers who have conducted extensive studies in the area of diffusion and adoption of innovation in school systems. Everett Rogers has studied the adoption/diffusion process in a number of diverse fields including education.

Mort. Among the most extensive research studies on educational change have been those conducted by Mort and his associates at the University of Columbia Teachers College.¹¹

¹¹Rogers, op. cit., p. 39.

Since 1930, they have conducted approximately 200 studies. In their studies of state school systems, Mort and his associates determined that the ability of a school system to innovate is dependent upon its ability to adapt to new needs and its ability to invent better ways to meet old needs.¹² From the approximately 200 studies, Mort concluded that the single factor that has the greatest impact on the adaptability of school systems and hence on their ability to innovate is the local initiative to finance and control education.¹³ That is, the level of school finance determines the ability of a school system to take on new practices. The rate of adoption of educational innovations is dependent upon the ability of communities to tax and control, and upon the fact that school systems must be large enough to fund not only essential services, but to fund schools to innovate as well.¹⁴

Generalizing from their studies, Mort and his associates have found that even though different innovations were adopted at different rates, the diffusion time curve was consistent among them, and they were adopted and diffused in definite stages. There are six stages in the model that

¹²Paul R. Mort and Francis G. Cornell, Adaptability of Public School Systems (New York: Bureau of Publication, Teachers College, Columbia University, 1938), p. ix.

¹³*Ibid.*, p. iii.

¹⁴Paul R. Mort and Donald Ross, Principles of School Administration (New York: McGraw Hill Book Co., 1957), pp. 202-7.

Mort developed, viz.,

- 1) the recognition of a need,
- 2) the refinement of the definition of the need, and invention of ways to meet it,
- 3) the introduction of an acceptable innovation,
- 4) the end of experimentation and testing,
- 5) rapid adoption of the innovation by schools, and
- 6) the full diffusion of the innovation.¹⁵

Mort's model of the adoption/diffusion process gives a time and space dimension to the understanding of educational change. That is, it suggests that educational change occurs over a period of time and that it spreads geographically.

Mort's assertion that the level of school finance as being the single most important factor in the ability of school districts to innovate has been questioned by other researchers. They suggest that his assertion does not take into account other important factors that may have an impact upon the adoption process. For example, Carlson, based on his studies of the actions of school superintendents and the adoption of innovations, suggests that the rate of adoption is dependent upon three important factors that Mort had not included in his model, viz.,

- 1) the characteristics of the adopting unit,
- 2) the way that the adopting unit is joined to communications channels, and

¹⁵Ibid., p. 182.

- 3) the position of the adopting unit in the social structure of similar adopting units.¹⁶

Carlson suggests that the explanation offered by Mort on how school systems innovate is too narrow and weak.¹⁷ Moreover, contrary to Mort's assertion that school finance is the most important factor in the ability of schools to innovate, Giacquinta in his review of the literature on educational change, contends that school change depends not on a single factor, but upon multiple factors.¹⁸ Some of these factors include the diffusion strategies used and the characteristics of the adapters and of the school social structure.

Even though some investigators may disagree with Mort on the notion that school finance as being the most important factor in the educational change process, this assertion supports in part Gross' contention that the availability of necessary materials and resources is one of the five conditions required in the successful implementation of any organizational innovation. However, there is a difference in how Mort and Gross view the role of financial support in the educational change process. Mort sees the level of financial support as the single most important factor in the ability of schools to innovate; whereas, Gross sees it as one of several conditions necessary for the successful implementation of an innovation. Nevertheless,

¹⁶Carlson, op. cit., pp. 5-6. ¹⁷Ibid., pp. 9-10.

¹⁸Giacquinta, op. cit., pp. 178-9.

both researchers agree on the importance of resources in the educational change process.

Rogers. Rogers who has conducted research in the adoption/diffusion of innovations in a number of different fields, has developed a model of the adoption process that has been frequently cited in the educational literature as being useful for analyzing the introduction of innovations in schools. The model consists of five stages that an individual goes through in the process of adopting an innovation, viz., awareness, interest, trial, evaluation, and adoption. If the innovation is eventually rejected, the sixth stage of the model would be discontinuance.¹⁹

Though Rogers' model has been used to explain the adoption and diffusion of simple technological innovations like hybrid corn seeds and audiovisual equipment, some researchers suggest that the model is inadequate to explain the adoption of complex organizational innovations.²⁰ An organizational innovation is one which requires the simultaneous efforts and cooperation of members of an organization to implement. Examples of organizational innovations in education would be programs like continuous progress education and bilingual education that have been newly introduced into a school. In Roger's model, the major

¹⁹Rogers, op. cit., pp. 81-9.

²⁰Gross, op. cit., pp. 21-2.

assumption is that an individual is free to decide whether or not to adopt an innovation. In most organizations, schools included, the decision to adopt a new program is made by management personnel; non-management personnel is given the responsibility for implementing it. For example, the decision to adopt a new educational program is often made by the central administration of a school district or by the school site administrator, and the teachers are given the responsibility for implementing the program in their classrooms. Rogers' adoption model is useful for explaining the adoption of simple technological innovations, but it is not adequate for explaining the adoption of complex organizational innovations.

The adoption of innovations involves a change of behavior on the part of the adapters involved. Katz and Kahn have classified these kinds of changes by their determinants, viz., behavior that is determined largely by structured roles in a social system and behavior that is determined more directly by personality needs and values.²¹ The former classification tends to fit the type of behavioral change that takes place during the adoption of a complex organizational innovation; whereas, the latter classification tends to fit the type of behavioral change that takes place

²¹D. Katz and R. L. Kahn, The Social Psychology of Organizations (New York: Wiley, 1966), pp. 390-1.

during the adoption of a simple technological innovation. The behavioral change categories developed by Katz and Kahn provide added insight into what may be involved in the adoption of simple technological innovations as compared with the adoption of complex organizational innovations.

Attributes of Innovations

Giacquinta, in his review of the literature on organizational change, suggests that there is a basis for the tentative proposition that the extent and speed that change occurs in schools depends in part on the nature of the innovation introduced.²² Rogers in his survey of 506 diffusion studies in anthropology, rural sociology, medical sociology, and education has isolated five properties of innovations that affect their rate of adoption, viz.,

- 1) the relative advantage of the innovation,
- 2) the compatibility of the innovation with values of the adapters,
- 3) the complexity of the innovation,
- 4) the divisibility of the innovation, i.e., the possibility for trial on a limited basis, and
- 5) the communicability of the innovation, i.e., the visibility of the advantages of the innovation.²³

The studies reviewed by Rogers dealt with the diffusion of technological innovations like the use of a hybrid seed

²²Giacquinta, op. cit., p. 179.

²³Rogers, op. cit., pp. 124-33.

among farmers, the use of a new medicine by doctors, and the use of new audiovisual equipment by teachers.

The compatibility of the innovation with the values of the adapters has been verified by other researchers as an important factor in the way that an innovation is adopted. Zaltman suggests that resistance to a proposed change would be reduced if the nature of the innovation were consistent with the adapters' social, cultural, and emotional orientations.²⁴ He further suggests that resistance to an innovation is related to its compatibility with the basic norms and values of the group and with the cultural and technical setting of the school.²⁵ Similarly, Zander suggests that one of the major inhibitors of change is when the established institutions of the group are ignored when the change is made.²⁶ There is some agreement with Rogers that the compatibility of an innovation with the values of the adapters is an important factor in the speed and extent to which an innovation is diffused.

²⁴Gerald Zaltman, Robert Duncan, and Jonny Holbek, Innovations and Organizations (New York: John Wiley and Sons, 1973), p. 68.

²⁵Gerald Zaltman, David F. Florio, and Linda A. Sikorski, Dynamic Educational Change (New York: The Free Press, 1977), p. 43.

²⁶Alvin Zander, "Resistance to Change - Its Analysis and Prevention," The Planning of Change, eds. Warren Bennis, Kenneth Benne, Robert Chin, and Kenneth Corey (New York: Holt, Reinhart and Winston, 1961), p. 544.

There is also some agreement among several investigators that the complexity of an innovation is related to the speed and extent that it is adopted and diffused. Orlosky and Smith found that the more effort and training that it takes to implement an innovation, the less likely that it is to succeed.²⁷ Gross suggests that there is a qualitative difference between the change process of adopting a simple technological innovation and the change process of adopting a complex organizational innovation.²⁸ The former requires only the action of one individual; whereas, the latter requires the collective action of members of an organization.

In addition to the attributes of an innovation, there is some evidence that the type of innovation also has an affect on its adoption and diffusion. Orlosky and Smith studied the different types of educational innovations that have been introduced over a period of 75 years. They suggest that there are eleven factors that are related to the type of change being proposed and its probable success or failure. The factors are listed below:

- 1) It is easier to change curriculum or administration in a school than to change methods of instruction.

²⁷Donald Orlosky and B. Othanel Smith, "Educational Change: Its Origins and Characteristics," Phi Delta Kappan, 52 (March 1972), 412-13.

²⁸Gross, op. cit., p. 15.

- 2) Curriculum and instructional change tend to originate within the school and not from external sources.
- 3) If the change requires extensive retraining of teachers, it is not likely to succeed.
- 4) Curriculum change that receives wide social support is likely to succeed.
- 5) Change in one school has little effect; a diffusion system is needed to spread it.
- 6) Attempts to change the administrative structure of the schools in any significant way are likely to fail.
- 7) Changes that extend the school system are likely to succeed.
- 8) Broad support helps to spread change.
- 9) Changes that require those in established positions to relinquish power are likely to fail.
- 10) The less people have to learn to make the change, the more probable is its success.
- 11) The more energy the change demands from the school staff, the less probable is its success.²⁹

Orlosky and Smith's findings were based on a conceptual analysis of the available research data; they support Gross' contention that different explanations may be required to account for the success or failure of different types of innovations.

Strategies of Change

A large number of studies on educational change is focused on how innovations are implemented in schools and on the speed and degree of their implementation. Giacquinta

²⁹ Orlosky and Smith, loc. cit.

suggests that there are basically two broad strategies detected in the literature on how educational innovations are implemented.³⁰ The first strategy emphasizes knowledge and understanding and maintains that organizational change in schools depends on the degree to which school personnel gain awareness and understanding of innovations. Giacquinta characterizes this strategy as the "show and tell" approach to organizational change which includes tactics and notions like change agents, delivery systems, demonstration projects, inservice training, knowledge utilization, linking roles, and target systems.³¹ The second strategy stresses commitment and maintains that the greater the commitment of school personnel to changing, the greater the change to be expected. Giacquinta characterized this strategy as the "lock arms, forward together" approach to organizational change which includes tactics such as problem solving, intraorganizational feedback, sensitivity training, and t-group experiences.³²

The two strategies identified above by Giacquinta tend to support elements of Gross' theory. The strategy emphasizing the knowledge and understanding of innovations supports Gross' assertion that communications is an important factor in the implementation process. More specifically,

³⁰Giacquinta, op. cit., p. 184.

³¹Ibid. ³²Ibid.

those implementing the innovation should have a clear understanding of the innovation, and those in management should establish feedback mechanisms to identify potential problems that may hinder the implementation process. The strategy that stresses commitment supports Gross' argument that the willingness of those implementing an innovation is an important factor in the success or failure of the innovation. A discussion on an example of each of the two broad strategies identified by Giacquinta is provided for a clearer understanding of their basic elements and differences.

Linkage Model. One of the strategies that focuses on knowledge and understanding in the organizational change process is Havelock's linkage model. The model is based upon a review of 4000 research studies which were categorized into three broad perspectives: the research, development and diffusion perspective; the social interaction perspective; and problem solving perspective.³³ The research, development and diffusion perspective emphasizes basic research and its practical development for the user and its dissemination. The social interaction perspective emphasizes the concept of diffusion, i.e., the flow of information from person to person and from system to system. The problem solving perspective emphasizes the need of the user, the articulation

³³Ronald G. Havelock, Planning for Innovation: A Comparative Study of the Literature on the Dissemination and Utilization of Scientific Knowledge (Ann Arbor, Michigan, University of Michigan, 1969), pp. 11-1 to 11-3.

of it as a problem, and then the search, selection, and the application of a solution. Havelock incorporated important elements of all three perspectives into his linkage model.

Havelock's basic assumption is that the dissemination and knowledge utilization process is an act of communication which includes the elements of a sender, a receiver, a message, and a medium. Linkage is defined as a series of two-way interaction processes which connect users with resource systems. Users are seen as receivers, and resource systems are seen as senders. Successful linkages are established when senders and receivers exchange messages in a way which the senders appreciate the receivers' internal needs and problem solving patterns; and in turn, the receivers appreciate the invention, solution formation, and evaluation processes of the senders. The collaborative interaction between the senders and receivers would result in a trusting relationship which would become a channel for the rapid, effective, and efficient transfer of information.³⁴

Havelock's assertion that successful linkages are needed in the process of organizational change supports Gross' notion that in the implementation process communications between management and teachers are important. Related to Havelock's idea of linkages is Gross' assertion

³⁴Havelock, op. cit., p. 11-4.

that needed in the implementation process are a clear understanding of the innovation by adapters and feedback mechanisms to uncover problems in the implementation process.³⁵

Participation. An example of the strategy that emphasizes commitment in the organization change process is the approach that focuses on the participation of users in the change process. There is much research on the participation of subordinates with their superiors in the process of organizational change. The concept has become so well accepted as a principle of organizational change that Havelock has characterized it as a "general law of change."³⁶ Efforts to demonstrate the effects of participation on the change process were started by Lewin and his associates in 1952.³⁷ They conducted a series of experiments on the impact of group discussion as opposed to lecture on changes in mothers' uses of certain foods. They found that women who participated in group discussions reported a greater use of the foods than those who heard the lectures. Since this pioneer study, there have been numerous other investigations on the impact of participation on the

³⁵Gross, op. cit., pp. 202-3.

³⁶Havelock, op. cit., p. 11-2.

³⁷Kurt Lewin, "Group Discussion and Social Change," Readings in Social Psychology, eds. G. Swanson, T. Newcomb, and E. Hartley (Rev. ed.; New York: Holt, Rinehart, and Winston, 1952).

organizational change process.

There is no agreement among writers on the amount of participation by subordinates that is necessary in the change process. Some maintain that participation is necessary throughout the entire change process, while others argue that participation is needed only after certain initial decisions have been made. Moreover, there is no agreement as to the specific impact of participation. Among some of the claims of writers include the notions that participation results in the reduction of resistance, that it leads to higher staff morale, and that it results in developing commitment.

Both Gross³⁸ and Giacquinta³⁹ have questioned the soundness of the basic procedures used in the studies on the effects of participation strategies. Giacquinta cites the study by Morse and Reimer as an example of the methodological weakness found among the studies on the effects of participation in the change process. This study, conducted in 1956, is one of the most cited studies on the positive effects of participation on organizational change.⁴⁰ Morse and Reimer investigated the relationship between the satisfaction and productivity of 200 industrial workers and

³⁸Gross, op. cit., p. 29.

³⁹Giacquinta, op. cit., p. 188.

⁴⁰Ibid., p. 187.

their participation in group decision making. Two treatments were introduced: in one group a program was initiated to increase management-directed decision making; and in the other group, an autonomy program was started which permitted subordinates to share in decision making about work methods and personnel procedures. Contrary to their prediction that productivity would increase in the autonomy group and decrease in the directed group, Morse and Reimer found that production increased in both groups with the greater increase in the directed group. The investigators did not take into account that management had dismissed a substantial number of workers in the directed group at the start of the experiment and redistributed the work, automatically increasing productivity. Whereas, in the autonomy group, the work force was reduced only when workers left voluntarily. It was this kind of methodological weakness that led Giacquinta to conclude that based on the research data available little can be said on the effects of participation strategies on the organizational change process.⁴¹ Even though there are questions about the actual effects of participation strategies, where there is evidence that they result in developing commitment on the part of subordinates supports Gross' contention that one of the conditions needed in the successful implementation of organizational innovations is the willingness of organizational members to expend

⁴¹Ibid. p. 188.

the time and effort to implement the innovation.

Attributes of Adapters

The attributes of adapters have been identified by investigators as being important in the organizational change process; however, different investigators have approached the subject from different perspectives. For example, Rogers has identified different types of adapters, their attributes, and the different strategies to use with each type to bring about change; whereas, Giacquinta has identified not different types of adapters, but rather he has identified attributes of adapters that would promote organizational change. Presented is a brief description of the findings of each of the investigators and a discussion on the attribute of resistance.

In his review of adoption/diffusion studies, Rogers has classified adapters according to when on the adoption time curve they decided to adopt an innovation. The different types of adapters are listed below:

- 1) Innovators: individuals who tend to be venture-some, to have many resources, to be cosmopolitan, and to have many friends and acquaintances beyond the local social system,
- 2) Early Adapters: individuals who tend to be opinion leaders, to be "localites," and to be role models for others in the social system,
- 3) Early Majority: individuals who tend to be deliberate in what they do, to adopt new ideas before the average members of the social system, and to have an important role in legitimizing the adoption of an innovation,

- 4) Late Majority: individuals who tend to be skeptical and need to be convinced, and who tend to need peer pressure to change,
- 5) Laggards: individuals who tend to be traditionalists and social isolates.⁴²

For each type of adapter, Rogers suggests a different type of strategy to accommodate the different attributes of the adapter.

Giacquinta in his review of the literature on educational change in schools approached the attributes of adapters from another perspective. He identified three attributes that tend to be important factors in the implementation of organizational innovations, viz.,

- 1) an understanding of the innovation,
- 2) an ability to exhibit the attitudes, values, and behavior appropriate to the implementation of the innovation, and
- 3) a willingness to make the necessary efforts to implement the innovation.⁴³

The three attributes are similar to three of the conditions that Gross had asserted to be important in the implementation of organizational innovations, viz., members' clear understanding of the innovation, members' ability to implement the innovation, and members' commitment to implement the innovation.⁴⁴ Both investigators have identified commitment as being important in the organizational change process. Some

⁴²Rogers, op. cit., pp. 162-71.

⁴³Giacquinta, op. cit., p. 189.

⁴⁴Gross, op. cit., pp. 202-3.

writers suggest that willingness and commitment are the opposite of resistance, i.e., the unwillingness and the lack of commitment to expend the necessary time and effort to implement the change.⁴⁵

Resistance is one attribute of adapters that has received much attention from writers on organizational change. One of the most cited studies on the resistance of adapters to change and how to overcome this resistance is the study by Coch and French.⁴⁶ In 1948, they investigated four work groups in a pajama factory in which the workers were told that they must increase their production if the company was to remain competitive. Three of the groups worked with the management and decided how they were going to increase their production levels, whereas, the fourth group was just directed by management to increase its productivity. The three groups which had worked with the management increased their production levels quickly, whereas, the directed group did not increase its production level, had a high worker turnover rate, and when interviewed the workers expressed hostility toward the management. French and Coch concluded from this study that resistance of organizational members prevents innovation and that their

⁴⁵Giacquinta, op. cit., p. 184.

⁴⁶L. Coch and J. French, Jr., "Overcoming Resistance to Change," Human Relations, 1, (1948), 512-32.

participation in decision making helps to overcome this resistance. In 1960, French and his associates conducted a similar study in a shoe factory, but they were unable to confirm their initial findings.⁴⁷ However, even with the inconclusive nature of the findings on the effects of resistance in the organizational change process, still many writers include the notion of resistance in their models and theories on organizational change.

Gross questions the notion that there is initial resistance to change in the organizational change process. He contends that even though organizational members may initially accept an innovation, they may eventually reject it because conditions hindering its implementation were not overcome.⁴⁸ He asserts that the overcoming-resistance-to-change theory is incomplete and simplistic because it ignores important factors in the organizational change process.⁴⁹ However, even though Gross does question the notion of the initial resistance of organizational members to change, he concedes that if an initial resistance does exist it must be overcome prior to implementing any organizational

⁴⁷J. French, J. Israel, and D. Dagfinn, "An Experiment on Participation in a Norwegian Factory," Human Relations, 13, (1960), 3-19.

⁴⁸Gross, op. cit., p. 38.

⁴⁹Neal Gross, "Theoretical and Policy Implications of Case Study Findings about Federal Efforts to Improve Public Schools," Annals of the American Academy of Political and Social Science, 434, (Nov. 1977), 77-87.

innovation.⁵⁰

Attributes of Organizations

Schools are considered by some social scientists as being social systems with different characteristics than from other social systems. Miles has identified five general features of schools which have distinguished them from other social systems because of their historical precedents, viz.,

- 1) schools are believed to be locally controlled;
- 2) they are compulsory for children up to a certain age;
- 3) they are isolated from other socializing institutions such as the family and the church;
- 4) they are linked vertically with other societal institutions such as colleges and state educational agencies;
- 5) and they are charged with the responsibility⁵¹ of bringing about desirable change in children.

Schools are different from other social institutions, and as we will discuss in the next section these differences have an effect on how change occurs in them.

Social scientists have suggested that the special features of schools have implications for what is changed and how change is brought about in schools. Sieber, in his review of the literature on educational change, has identified

⁵⁰Gross, Implementing Organizational Innovations, p. 38.

⁵¹Matthew B. Miles, "Some Properties of Schools as Social Systems," Change in School Systems, ed. Goodwin Watson (Washington, D.C.: National Training Laboratories, NEA, 1967), pp. 2-6.

four attributes of schools which he believes to be important in the change process:

- 1) Vulnerability: the school is vulnerable to the influence of its social environment in part because of the lack of consensus on educational goals and procedures. Because the school may have to defend itself from external attacks, excessive internal conformity may result and thus inhibiting any attempts at educational change.
- 2) Teachers' self image: Teachers may resist innovations proposed by the administration because they perceive them to be encroachments on their autonomy as professionals. Conversely, teachers may be insecure about their professional status and overcomply with regulations and thus minimizing the amount of educational innovation that would take place.
- 3) Diffuseness of educational goals: This has to do with the lack of clarity of school goals and a focus on long-range goals. The diffuseness of goals is due in part to the many constituents that the school serves. The lack of clarity of goals may result in teachers oversubscribing to current methods and thereby inhibiting any attempts at educational change.
- 4) Need for coordination and control: Because of the need for the coordination and control of a large number of students and staff members, any major organizational adjustment or attempt at educational change may be disruptive.⁵²

The four features of schools that Sieber described seem to suggest that schools by their very nature are conservative institutions in which there would be minimal educational

⁵²S. D. Sieber, "Organizational Influences on Innovative Roles," Knowledge Production and Utilization in Educational Administration, eds. T. L. Eidell and J. M. Kitchel (Eugene, Oregon: Center for the Advanced Study of Educational Administration, University of Oregon, 1968).

change. Rogers⁵³ and Miller⁵⁴ suggest that conservatism and traditionalism are important factors that tend to inhibit educational change and innovation. From another perspective, Ianni, in his study of the effects of governmental subsidies on educational innovation, observes that change in organizations can take place in either of two areas, viz., in their structures or in their value systems.⁵⁵ He suggests that schools have responded to changes, in almost all cases, through their traditional value systems. For significant educational change to occur, he believes that changing the structure of a school is not enough; a change must be made in its value system which he argues is at the heart of the problem. Further study is needed so that the effects of organizational value systems on organizational change can be better understood.

To this point, we have discussed the specific attributes of schools and their effects on educational change. Studies on the attributes of organizations in general and their impact on organizational change may have implications for schools and how change occur in them. Hage

⁵³Rogers, op. cit., p. 71.

⁵⁴Richard I. Miller, "An Overview of Educational Change," Perspectives on Educational Change, ed. Richard I. Miller (New York: Appleton-Century-Crofts, 1967), pp. 8-9.

⁵⁵Francis A. J. Ianni, ed., Conflict and Change in Education (Glenview, Illinois: Scott, Foresman and Co., 1975), p. 6.

and Aiken have analyzed seven organizational attributes and their impact on the rate of organizational change that may have relevance to educational change in schools. The seven attributes and their effects are listed below:

- 1) The greater the complexity of an organization the greater the rate of organizational change. That is, the larger the number of specialists the larger the number of sources for recognizing needs and developing new programs to meet these needs.
- 2) The greater the job satisfaction the greater the rate of organizational change. That is, the greater the morale among workers the greater is their commitment to the organization and their receptivity to new ideas that may improve the organization.
- 3) The greater the centralization of power the smaller the rate of organizational change. Those in power positions are less likely to experiment for fear of losing their power. Less participation in decision making results in fewer opportunities for identifying new areas where change is needed.
- 4) The greater the formalization of rules and regulations the smaller the rate of organizational change. Strict rules provide little latitude for considering alternative modes of operation.
- 5) The greater the emphasis on production the smaller the rate of organizational change. Innovation may result in disruptions and result in reduction in output.
- 6) The greater the stratification the smaller the rate of organizational change. Stratification decreases upward communications.
- 7) The greater the emphasis on efficiency the smaller the rate of organizational change. Innovations may involve unforeseen costs and delays.⁵⁶

⁵⁶J. Hage and M. Aiken, Social Change in Complex Organizations (New York: Random House, 1970).

In the context of schools and educational change, the observations by Hage and Aiken suggest several things. First, they seem to suggest that if schools had good staff morale and a variety of specialists, they would tend to have a greater potential for educational change. This would imply that high schools with their numerous departments and specialists would be more opened to educational change than elementary schools with their graded self-contained classes. Second, the observations seem to suggest also that in schools where there are little participation in decision making, strict adherence to rules and regulations and to line and staff relationships, and where efficiency and productivity are paramount goals would have a smaller potential for educational change. This would imply that schools such as some 3R schools which are established on the basis of strict rules and discipline, a limited but well defined curriculum, and a focus on academic achievement (efficiency and productivity) would tend to be less likely to be opened to change. There is a paucity of research on the attributes of schools and their effects on educational change; further study in this area would provide a better understanding of their impact. Presented in the next section is an overview of bilingual education in the United States as an educational innovation.

An Overview of Bilingual Education

Bilingual education in the United States is an educational innovation only in a relative sense in terms of it having been in the public schools at one time, discontinued, and reinstituted again. More specifically, prior to World War I, there were approximately one million students participating in bilingual education programs in the nation's public schools.⁵⁷ However, with the rise of nationalism and a conscious effort to unify the nation by "Americanizing" the immigrants who came to our shores, states enacted laws which required that English be the only language of instruction in the public schools.⁵⁸ This action by the states effectively eliminated bilingual education from the public schools for over three decades. It was not until the early 1960's when a large influx of Cuban refugees settled in Florida that bilingual education was reinstituted in a small number of public schools.⁵⁹ In the mid 1960's, liberalized immigration laws resulted in large numbers of limited-English speaking students being in the public schools.⁶⁰ Recognizing the special educational

⁵⁷T. Andersson, "Bilingual Elementary Schooling," Florida Foreign Language Reporter, 7, (1969), 37-8.

⁵⁸E. G. Hartmann, The Movement to Americanize the Immigrant Language in the United States (New York: Columbia University Press, 1948), pp. 24-27.

⁵⁹California State Assembly, op. cit., p. 1

⁶⁰U.S. Commission on Civil Rights, op. cit., p. 12.

needs of these students, legislative and judicial branches of the federal and many state governments prescribed bilingual education as the appropriate remedy. Consequently, bilingual education programs were introduced for the first time in many public schools where there were limited-English speaking students. Presented in the next section is a brief historical summary of the laws and court decisions that led to the reintroduction of bilingual education in the nation's public schools.

Laws and Court Decisions. The actions of different governmental bodies and agencies contributed to the reintroduction of bilingual education in the public schools. In 1968, the United States Congress, recognizing the educational plight of many language minority students, enacted the Bilingual Education Act which provided funds for a number of different activities that would promote the development of bilingual education.⁶¹ In 1970, the Department of Health, Education and Welfare issued its May 25th memorandum to the nation's state school chiefs requiring that federally assisted school districts with more than 5% national origin minority group children to take affirmative steps to rectify the language deficiencies of limited-English speaking

⁶¹Bilingual Education Act, 20 U.S.C. 881b (1968).

students.⁶² During the early 1970's, there were many law suits filed on behalf of language minority students. The most notable and far reaching of these was the Lau v. Nichols case. In 1974, the United States Supreme Court unanimously ruled that the San Francisco school district had illegally discriminated against approximately 1800 Chinese American school children by denying them ". . . a meaningful opportunity to participate in the public education program."⁶³ In the same year, Congress passed the Equal Educational Opportunities Act of 1974 which required all school districts to take appropriate action to overcome the language barriers that impeded equal participation by students in their instructional programs.⁶⁴ From 1971 to 1975, the number of states that permitted school instruction in a language other than English increased from 12 to 24. The Lau Supreme Court decision and subsequent state and federal statutes have resulted in the growth in the number of bilingual education programs in the nation's public schools. However, the introduction of bilingual education in the public schools

⁶²J. Stanley Pottinger, Office of Civil Rights, Memorandum to School Districts with More than 5% National Origin Minority Group Children, May 25, 1970, 35 Fed. Reg. 11595.

⁶³Lau v. Nichols, 414 U.S. 563 (1974).

⁶⁴Equal Educational Opportunities Act, 20 U.S.C. 1701 (1974).

has not been without problems. Presented in the next part is a brief description of some of the initial problems that schools have encountered in attempting to implement bilingual education programs.

Initial Problems in Implementation. In 1977, a study conducted by the United States Office of Education indicated that the initial efforts in bilingual education had failed to achieve the intended purposes of the program. In addition to this finding, other governmental documents indicate that there are specific problems that interfere with the proper implementation of bilingual education in the public schools, viz.,

- 1) the lack of a commonly agreed upon definition of bilingual education,⁶⁵
- 2) the lack of adequately trained bilingual education teachers,⁶⁶
- 3) the lack of appropriate bilingual education instructional materials,⁶⁷
- 4) the lack of commitment to bilingual education on the part of state and local educational agencies,⁶⁸
- 5) and the lack of state codes that would require the use of regular school funds to ensure the

⁶⁵California State Department of Education, Staff Report, Education for Limited-English-Speaking and Non-English-Speaking Students, prepared for the California State Board of Education, November 1976, p. 35.

⁶⁶California State Assembly, op. cit., p. 63.

⁶⁷California State Dept. of Education, op. cit., p. 40.

⁶⁸California State Assembly, op. cit., pp. 57-8.

continuation of bilingual education when special 'phase-in' state and federal funds are withdrawn.⁶⁹

Only time and further study will determine if these initial problems will persist and prevent the eventual full implementation of bilingual education programs in the public schools.

Summary

In the first section of this chapter, the study conducted by Gross and his associates and the theory that was developed from that study on implementing organizational innovations were presented. The related literature was reviewed and the following conclusions are offered:

- 1) Research data support the idea that the findings from early studies on the adoption/diffusion of simple technological innovations have little value for explaining the implementation of more complex organizational innovations.
- 2) While a large number of studies has been conducted on the adoption/diffusion of innovations, little research has been done on the implementation of organizational innovations.
- 3) Current research supports Gross' major assumption that certain conditions are necessary for the successful implementation of organizational innovations.
- 4) There is some evidence that public schools are having initial problems in attempting to implement bilingual education programs.

In the next chapter, the procedures used in this field study are presented.

⁶⁹Ibid., p. 72.

Chapter 3

PROCEDURES

The purpose of this study was to test, modify and refine the organizational change theory developed by Gross, Giacquinta, and Bernstein. This was achieved by investigating the attempt to implement a bilingual education project at JFK Elementary School. In order to carry out the study, appropriate procedures and data collection instruments were developed. This chapter is organized into five sections: the selection of the school site, securing clearance from the school district and gaining entry into the bilingual education classrooms, the role of the field investigators, data collection procedures and analysis, and instrumentation.

Selection of the School Site

One of the major tasks of the investigation was to select an appropriate school site for the field study. It was important that the school selected had a bilingual education program that was well beyond the initial adoption stage of development; it must have a bilingual education program that was in the implementation stage of developments as defined by Gross and his associates. Using this criterion, it was decided to select a school site that met the following specifications:

- 1) It should be a school site where bilingual education had been introduced as a new program, but the program should have been in existence for at least 3 years.
- 2) It should be a school site where the bilingual education program has had a minimum of staff changeover in the last three years.
- 3) And it should be a school site where the bilingual education program has the basic elements that distinguishes it as a bilingual education program, viz., bilingual staff members, use of bilingual education methods and materials, and a student population that included limited-English speakers.

At the onset, it was decided that the San Francisco Unified School District (SFUSD) would be a district in which a school site meeting all of the selection criteria would most likely to be found. The school district had a history of being involved with bilingual education programs. For example, in 1969, it was among the first school districts to pilot bilingual education demonstration projects funded under Title VII of the Elementary Secondary Educationa Act (ESEA). Moreover, it was the plaintiff in the Supreme Court Lau v. Nichols case. As a consequence of the court decision and a court consent decree, the district was in the process of initiating a bilingual/bicultural education master plan. The school district also had a variety of bilingual education programs in grades K-12 which were funded locally and from state and federal sources as well. Hence, it was decided the SFUSD would be an appropriate school district to start the search for a school site for the proposed study. The next task was to identify a possible school for the

field study.

In September 1978, after an initial meeting with the SFUSD director of bilingual education, another meeting was arranged with the department's project heads and resource teachers to explain the proposed study and to solicit their help in identifying possible school sites for the investigation. At the meeting with the department staff, abstracts of the proposed study were distributed and the school site selection criteria were explained in detail. After a brief discussion, there was a general consensus that one of the demonstration projects funded under ESEA Title VII might be appropriate for the study. It was brought out during the discussion that these particular projects had been the first bilingual education programs started in the school district and that they had been the best funded and developed. Also it was pointed out that these projects in bilingual education had to meet explicit federal program guidelines. At the time, there were five ESEA Title VII bilingual education projects in the school district. A decision had to be made as to which project school would be the most suitable for the proposed study.

It was decided that the best approach in selecting the project school site would be to work from the school site selection criteria that was established and to apply them to each of the project schools. Basic information was collected on each of the projects from the applications for funding and continuation; additional information was secured

from individual project heads on the following items:

- 1) the number of years that the project had been continuously funded,
- 2) the scope of the project in terms of the number of classes and grade levels, and
- 3) the amount of project staff changeover in the past three years.

Based upon the information gathered and using the school site selection criteria, an elementary school, subsequently assigned the fictitious name of the John F. Kennedy (JFK) Elementary School, was tentatively selected for the proposed study. The JFK Elementary School had an ESEA Title VII bilingual education project that was started in 1969. The project had nine bilingual education classes in grades K-5, and it had a minimum of staff changeover in the last three years. The next task was to seek administrative approval to conduct the study at the JFK Elementary School.

Securing Clearance and Entry

The first task was to secure preliminary approval from the school site principal and bilingual education project manager to conduct the proposed study. In September 1978, meetings were held with the principal of the JFK Elementary School and the project manager of the bilingual education project to explain the proposed study, answer any questions that may arise, and to secure the site and project approval prior to approaching the central administration for clearance. Both the site principal and the project manager

were interested in the proposed study and agreed to cooperate in gaining central administration approval.

All research projects conducted in the SFUSD had to be reviewed and approved by the staff of the Research Department. In October 1978, an abstract of the proposed study and a letter requesting permission to do the study were sent to the central office administrator in charge of the Research Department. Verbal approval was given in December 1978 which was followed by a written letter of approval in January 1979.

In December 1978, after verbal approval was given by the central office administration for the study, a meeting was held with the project teachers at JFK Elementary School. The objectives of the meeting were to explain the study and the role of the field investigators, to address any concerns or questions that the teachers may have, and to solicit their cooperation in the study. Because of the possible sensitive nature of the study, the teachers were assured that their identities and those of the school and the project would be kept anonymous in the research report. The teachers were told that if they decided to participate in the study, it was important that they be candid in the interview with the field investigator and in completing the questionnaire. They were also asked to proceed with their daily classroom program with no special efforts to accommodate the field investigators who would be observing in their classrooms.

The teachers were given a form to complete to indicate whether or not they would participate in the study. They were also provided the telephone number of the senior field investigator should they have any questions or concerns. For the remainder of the meeting, the role of the field investigators was explained in terms of what they will be doing while they were at JFK Elementary School.

Role of the Field Investigators

Conducting the study were two field investigators both of whom had extensive experience and training in the field of bilingual education. During the field work stage of the study, the investigators observed twice in each of the participating project classrooms. Once in the classrooms, they attempted to be as unobtrusive as possible, not participating in any of the classroom activities nor intentionally interacting with any of the students. The senior field investigator conducted the one-hour interview with each of the participating project teachers. The primary role of the field investigators was to be non-participant classroom observers.

Data Collection and Analysis

There were three phases in the data collection activities. In the first phase, data were collected on the description of the school setting and on the history of the bilingual education project. In the second phase, the project

classes were observed to gather data on the nature and extent of bilingual education program implementation. And in the last phase, the school site and project staff members were interviewed to collect data on their perceptions of the effort to implement the bilingual education project at JFK Elementary School. The first two phases of the data collection took place in January 1979, and the last phase occurred in February and March 1979.

Phase One

Information on the school setting and the bilingual education came from two primary sources, viz., from interviews with the school principal and project manager and from documents available at the school site. More specifically, the documents used were the school's Consolidated Application for state funding and the bilingual education project's applications for ESEA Title VII funding and continuation.

Phase Two

Data on the nature and extent of bilingual education program implementation were collected through classroom observations. Teachers in the study were told that the two field investigators would be in and out of their classrooms over a two weeks period during the month of January 1979. Each observation was approximately one hour in duration. In order to minimize bias and to gather as much information as possible, each class was observed four times with each of the two field investigators observing twice at different times

during the school day over the two weeks period.

Phase Three

Staff interviews were held after school in the teacher's room and in the case of the principal and the project manager in their respective offices. The teacher interview sessions lasted approximately one hour each; the sessions with the principal and project manager took approximately two hours each. At the end of each teacher interview, the teacher was given the "Teacher Self-Administered Questionnaire" to complete.

Instrumentation

A variety of instruments were used to collect data for the field study. Two of the instruments used were adapted from those used in Gross' field study on the attempted implementation of an individualized program at Cambire School. The instruments were modified to provide for the smaller scope of this investigation and for specificity to the implementation of a bilingual education program. The instrument used to collect data on the implementation of bilingual education in the classrooms was the "Program Quality Review Instrument" used by the California State Department of Education to review and evaluate state funded bilingual education projects. The interview schedule used with the site principal and project manager consisted of questions selected from the "Teacher Interview Schedule." The three instruments used to collect data for

the investigation were the "Teacher Interview Schedule", the "Teacher Self-Administered Questionnaire", and the "Bilingual Education Program Quality Review Instrument".

Teacher Interview Schedule. The interview schedule consisted of questions covering such topics as the teacher's understanding and feelings about bilingual education and the attempt to implement it at the school, what the teacher did during the implementation process, and the teacher's feelings about those who were involved in the implementation process. At the beginning of the interview session, the interviewer made a series of introductory comments on the interview session that was to take place. During the interview session, transitional remarks were made by the interviewer when a shift in topics was made. At the end of the interview session, the interviewer made appropriate concluding statements and allowed for questions and additional comments from the interviewee. (See Appendix A.)

Bilingual Program Quality Review Instrument. The program quality review instrument consisted of six parts. Part I contained the operational definitions to be used with the instrument. Part II provided space to enter program data relative to the number and kind of students served by the project, the sources of funding, and the number of teachers and aides in the program and their certification or credentialing in bilingual education. Parts III through VI consisted of "Items of Essential Program Quality" which

covered the areas of primary language instruction, English-as-a-second-language instruction, multicultural and math instruction, and bilingual staff development. The instrument was used to collect data in each of the classrooms observed by the field investigators. (See Appendix B.)

Teacher Questionnaire. This questionnaire consisted of questions in two areas, viz., the teacher's teaching experience, training, and credentialing and the teacher's feelings about his/her working conditions. The questionnaire was completed by each of the participating project teachers at the end of the interview session with the senior field investigator. (See Appendix C.)

Data Analysis

The data collected in this study was analyzed by addressing the research questions stated in Chapter 1 in the following manner:

- 1) Criteria for determining the fit or the lack of fit between the data collected and elements of Gross' theory were established and specified.
- 2) The collected data were discussed as fitting or failing to fit the elements of the theory.
- 3) And the implications of the findings for modifying the theory were suggested and discussed.

Conditions of Implementation. Criteria were developed for determining the degree of bilingual education implementation through the use of the "Program Quality

Review Instrument". By observing each project classroom, it was possible to determine if each of the items of essential program quality were either present or absent. The degree of bilingual education program implementation was expressed in terms of the percentage of the time that the items were present in the project classrooms.

Criteria for determining the extent to which the five conditions specified in Gross' theory were present in the implementation of bilingual education were established through the use of the "Teacher Interview Schedule". Through a series of questions, it was possible to determine if each of the conditions was present or absent during the implementation process. The extent to which the conditions were present was expressed in terms of the number of classrooms in which they were present during the implementation process.

Once established, the criteria were used to determine the fit or lack of fit between the data collected and the elements of Gross' theory. The implications of the analysis for the modification and refinement of the theory were suggested and discussed.

Management. Criteria for determining where the responsibility should rest for assuring that the five conditions specified in Gross' theory were present during the implementation process were established through the use of five interview questions that were used with the project

teachers, the school principal, and the project manager. Through the five questions, it was possible to determine where the interviewee believed the primary responsibility should rest for each of the five conditions. The responses were categorized and the data analyzed in terms of their fit or lack of fit with the elements of Gross' theory. Implications for the modification and refinement of the theory were suggested and discussed.

Summary

In this chapter, the procedures used in securing clearance and entrance to the school site were described. Moreover, the role of the field investigators, the data collection procedures, instrumentation, and data analysis procedures were described. In the next chapter, the data collected will be presented and analyzed.

Chapter 4

DATA PRESENTATION AND FINDINGS

The purpose of this study was to test, modify and refine the organizational change theory developed by Gross, Giacquinta, and Bernstein. This was achieved by investigating the attempt to implement a bilingual education project at JFK Elementary School. Once the procedures were established for gathering the data and the data collection was completed, the data and findings were presented.

This chapter is organized into two major sections. In the first section, background information pertinent to the study on the San Francisco school district, the JFK Elementary School, and the bilingual education project are presented. In the second section, the data collected on the extent of bilingual education program implementation, the conditions which affected the implementation process, and the role of the school administrators in the implementation process are presented. Through these data, the usefulness of the theory developed by Gross and his associates for explaining the implementation of a bilingual education project was determined. Moreover, the implications of the findings for modifying and refining the organizational change theory were discussed with regard to a possible restatement of the theory.

Background Information

At the time of this study, the San Francisco school district was under several legal mandates to provide bilingual education for its limited- and non-English speaking students. The most important of these was the Lau v. Nichols Supreme Court decision in the 1974 and the resulting Lau v. Hopp court consent decree in 1976. The court consent decree required the school district to develop and implement a kindergarten-12th grade bilingual bicultural education program for students whose home language was either Spanish, Cantonese, or Tagalog.

The second most important legal mandate requiring the school district to provide bilingual education for its limited- and non-English speaking students was the California Chacon-Moscone Bilingual-Bicultural Education Act of 1976. The act required school districts to provide a program of bilingual bicultural education in elementary schools in which there were ten or more limited- and/or non-English speaking students in the same grade level who spoke the same native language. As a direct result of these and other legal mandates, the school district was required to establish and maintain bilingual education programs for its limited- and non-English speaking students. The bilingual education project at JFK Elementary School served as one of the school district's centers for staff training and curriculum development.

The JFK Program

From the time that the JFK Elementary School was built to the time of this study, there had been students in the school who spoke little or no English when they were first enrolled. The number of these students initially was small when compared with the total school population. However, this was changed beginning in 1965 when immigration laws were liberalized to allow more immigrants into the United States. The number of students at JFK Elementary School who spoke little or no English increased dramatically, and special programs were established to address the educational needs of these students.

In 1965, when the first large numbers of non- and limited-English speaking students arrived at JFK Elementary School, the students were placed in regular classrooms and were pulled out one period a day for remedial reading instruction. In 1966, English-as-a-second-language classes were established for the limited- and non-English speaking students. In these classes, the students were pulled out of their regular classes one period a day for special instruction to develop their aural/oral English skills and to teach them English reading. In 1967, self-contained English-as-a-second-language classes were established in which non- and limited-English speaking students stayed for a year of intensive English language training. After a year, the students were placed in regular classes in

which they were pulled out one period a day for special instruction to continue the development of their English aural/oral skills. In 1969, in addition to the English-as-a-second-language classes, a pilot bilingual education demonstration project was established at JFK Elementary School.

The pilot bilingual education demonstration project at JFK Elementary School was one of the first programs of its kind to be established in the United States. The mission of the project was to develop a bilingual education program model that could be replicated in other schools with similar educational needs. The demonstration project had four components: 1) staff development, 2) curriculum development and dissemination, 3) bilingual education instruction, and 4) parent education and involvement. The program was designed to be implemented a grade level at a time each year until the scope of the program covered grades kindergarten to the 12th.

In 1969, the first year of the project, two first grade classes were established. Each class had one third English speaking students and two thirds non- and limited-English speaking students. Of the two first grade classes, one class was designated the English language class, and the other class was designated the bilingual instructional class. In the English language class, the students were taught English speaking, reading, writing, and spelling in addition to physical education. In the bilingual

instructional class, the students were taught social studies and mathematics bilingually in addition to language instruction in the native language of the limited-English speaking students. The non- and limited-English speaking students in the program spoke the same native language.

In the 1978-79 school year, when this study was conducted, the bilingual education project at JFK Elementary School had nine project classes. There were two classes at each level in grades 1, 2, and 3 and one class at each level in grades kindergarten, 4, and 5.

From the start of the project to the time of this study, there had been several changes in principals and in project managers. The school principal who was at JFK Elementary School at the start of the project was transferred to another school in 1977, eight years after the project was introduced. The principal who succeeded him had been at the school for two years when this study was conducted in 1979. Since the inception of the project at JFK Elementary School, four different managers were involved with the project.

Measures of Program Implementation

A research question of this study addressed the subject of the relationship between the extent of bilingual education implementation and the degree to which the five conditions specified in Gross' theory were present during implementation. Data on the extent to which the bilingual

education project was implemented at JFK Elementary School are presented in this section. The data on the degree to which the five conditions specified in Gross' theory were present during the implementation process will be presented in the next section.

The extent to which the bilingual education project was implemented at JFK Elementary School was measured through the use of the State Department of Education Bilingual Program Quality Review Instrument (PQRI). The PQRI was used to determine if the items of essential program quality were present. There were four major components of the bilingual education project that were assessed, viz., primary language instruction, English-as-a-second-language instruction, multicultural and mathematics instruction, and bilingual staff development. The extent of bilingual education program implementation was expressed in terms of the percentage that the items of essential program quality were present in the project classes. For purposes of this study, the project classes were categorized by grade level; each grade level represented a program unit. Since there were six grade levels, there were six program units. Each program unit consisted of the four program components assessed by the PQRI, viz., primary language instruction, multicultural and mathematics instruction, English-as-a-second-language instruction, and bilingual staff development.

Primary Language Instruction

As assessed by the PQRI, an effective bilingual education program would include the essential elements of a primary language instructional program. A primary language program is an instructional program designed for non- and limited-English speaking students to help them to develop aural, oral and reading skills in their native tongue. In this area, the essential program elements would include primary language assessment instruments, a primary language skills continuum, written lesson plans for primary language instruction, and primary language instructional materials.

In this study, the PQRI was used to determine the extent of bilingual education program implementation at JFK Elementary School. The data collected in the area of primary language instruction are presented in Table 4-1. In this area, the 13 items of essential program quality were present 39 percent of the time in the project's six instructional program units. Lacking in every program unit were the essential program elements of an aural/oral primary language program and supplemental reading materials in the primary language. Moreover, non- and limited-English speaking students did not spend the same amount of time in primary language instruction as did English-speaking students in English language instruction; they spent less time. However, there was a well-developed primary language

Table 4-1

The Extent of Bilingual Program Implementation:
Primary Language Instruction

Items of Essential Program Quality	Program Units					
	1	2	3	4	5	6
1. Primary aural/oral language assessment instruments and results in the classroom.						
2. Primary language instruction: K-3 daily, 4-6 twice weekly.						
3. Primary language continuum.						
4. Teacher can cite 3 examples of primary language skills in lessons which are a part of the continuum.						
5. Primary language reading continuum.	x	x	x	x	x	x
6. Written evidence of at least 20 minutes of primary language reading daily.	x		x	x	x	x
7. Primary language reading lesson conducted only in the primary language.	x	x	x	x	x	x
8. Primary language reading assessment instruments have at least 3 topics which are in the primary language reading continuum.	x	x	x	x	x	x
9. Monthly assessment of primary language reading skills.	x	x	x	x	x	
10. Two primary language reading books in at least 5 of 7 areas.						
11. Supplemental primary language reading materials.						
12. Same amount of time for LES/NES pupils in primary language reading as for FES pupils in English reading.						
13. At least 3 classroom structures for accommodating different sizes of groups of LES/NES pupils for primary language reading.				x		x

*Note: The "x" indicates the presence of the item in the program unit as measured by the PQRI.

reading program in every instructional program unit with the exception of one. In the area of primary language instruction with the items of essential program quality evident in the program units 39 percent of the time, the extent of program implementation in this area was considered to be incomplete.

English-as-a-Second-Language Instruction

As assessed by the PQRI, an effective bilingual education program would include the essential elements of an English-as-a-second-language (ESL) instructional program. An ESL program is an instructional program designed to help non- and limited-English speaking students to develop English language skills. In this area, the essential program elements would include the pre- and post-testing of students in English oral language proficiency, the use of ESL teaching techniques and lesson plans, and student ESL progress profiles.

The data collected in this study on the ESL instructional program are presented in Table 4-2. The nine items of essential program quality in this area were present 65 percent of the time in the instructional program units. Implemented in every program unit were the following program elements: pre- and post-testing of students in English oral language proficiency (Program Unit 1 excepted), ESL teaching techniques, written ESL lesson plans, ESL

Table 4-2

The Extent of Bilingual Program Implementation:
English as a Second Language Instruction

Items of Essential Program Quality	Program Units					
	1	2	3	4	5	6
1. 95% of LES/NES pupils pre- and post-tested in English oral language proficiency.		x	x	x	x	x
2. Evidence of at least 3 ESL techniques used from the Program Quality Review Instrument inventory.	x	x	x	x	x	x
3. Observation of at least 3 ESL techniques used by the teacher.	x	x	x	x	x	x
4. Teacher has written daily ESL lessons.	x	x	x	x	x	x
5. Display of class, group, or individual ESL progress profile.	x	x	x	x	x	x
6. Written criteria for introduction of English reading to LES/NES pupils.						
7. LES/NES pupils placed in English reading based on criteria.						
8. ESL groups do not exceed 7 pupils.						
9. ESL instruction based on diagnosed needs per student profiles.	x	x	x	x	x	x

*Note: The "x" indicates the presence of the item in the program unit as measured by the PQRI.

student progress profiles, and ESL instruction based on diagnosed student needs. However, absent in every program unit were written criteria for the introduction of English reading to non- and limited-English speaking students. Moreover, in every program unit, the ESL groups exceeded the seven-pupil limit indicated on the PQRI. In the area of ESL instruction with the items of essential program quality present in the program units 65 percent of the time, the extent of program implementation in this area was more complete than the other two instructional areas assessed.

Multicultural Education and Mathematics Instruction

As assessed by the PQRI, an effective bilingual education program would include the essential elements of an instructional program in multicultural education and mathematics in which one of the recognized bilingual education instructional methods was used. In this area, the essential program elements would include the use of community resources and recognized bilingual education delivery approaches. Moreover, it would include the ability of teachers in the program to state the intent of the multicultural education component and to give two examples of multicultural education classroom activities.

The data collected in this study on the multicultural education and mathematics instructional programs are presented in Table 4-3. The eight items of essential

Table 4-3

The Extent of Bilingual Program Implementation:
Multicultural Education and Mathematics

Items of Essential Program Quality	Program Units					
	1	2	3	4	5	6
1. Evidence of at least 2 units of the multicultural curriculum which have been implemented.						
2. Evidence of at least 2 examples of multicultural materials in the primary language in the form of books, films, etc.		x				
3. Evidence of one example of using resources in the LES/NES community.	x	x	x	x		x
4. Use of one of the recognized bilingual lesson delivery approaches during the math and multicultural lessons.	x					x
5. Teacher can give 2 statements of the intent of the multicultural component.	x	x	x	x	x	x
6. Teacher can give 2 examples of classroom activities in the multicultural component.	x	x	x	x	x	x
7. Each LES/NES pupil has his own primary language math textbook.						
8. Teacher has a math manual in the primary language.						

*Note: The "x" indicates the presence of the item in the program unit as measured by the PQRI.

program quality in this area were present 42 percent of the time in the instructional program units. Implemented in every program unit were the teacher's use of community resources and recognized bilingual education delivery approaches. Moreover, every teacher was able to state the intent of the multicultural education component and to give two examples of multicultural education classroom activities.

Math textbooks and teacher's manuals in the primary language were not evident in any of the instructional program units. Moreover, absent were also the evidence that at least two units of the multicultural education component had been implemented and that there were multicultural education materials in the primary language in the program units. The extent of program implementation was less than satisfactory in the area of multicultural education and mathematics instruction. The items of essential program quality were present in the instructional program units only 42 percent of the time.

Staff Development

As assessed by the PQRI, an effective bilingual education program would include the essential elements of a satisfactory staff development program and that the program teaching staff were properly certified to teach in a bilingual education program. In this area, the essential program elements would include the certification of

bilingual education teachers, the presence of a bilingual aide in classrooms where the teacher was not certified to teach in a bilingual education classroom, a written evaluation of staff inservice needs, staff attendance at inservice workshops, and inservice workshops conducted in the primary language.

The data collected in this study on the staff development program are presented in Table 4-4. The five items of essential program quality in this area were present 83 percent of the time. Four of the five items of essential program quality were present in every program unit with two exceptions: first, the teachers in Program Units 1, 2, 3, and 6 were not certified to teach in a bilingual education program; and second, the teachers in Program Unit 4 had not attended any inservice workshops. Even though of the four areas assessed the area of staff development was the most completely implemented, it should be noted that teachers in four of the six program units were not certified to teach in a bilingual education program. These teachers were on waivers while they participated in inservice training programs which would lead to certification to teach in a bilingual education program.

Program Implementation: Summary

The program implementation of the bilingual

Table 4-4

The Extent of Bilingual Program Implementation:
Staff Development

Items of Essential Program Quality	Program Units					
	1	2	3	4	5	6
1. Bilingual teacher is certificated.				x	x	
2. A bilingual aide is in the classroom where the teacher is not certificated to teach LES/NES pupils.	x	x	x	x	x	x
3. School has written survey results of bilingual teacher and aide training needs.	x	x	x	x	x	x
4. Attended 2 or more inservice sessions during the year to improve bilingual education skills.	x	x	x		x	x
5. Two examples of inservice conducted in the primary language.	x	x	x	x	x	x

*Note: The "x" indicates the presence of the item in the program unit as measured by the PQRI.

education project at JFK Elementary School was measured through the use of the PQRI. The extent of program implementation in each of the four areas was assessed by determining whether or not the items of essential program quality were present in the instructional program units. The extent of the overall program implementation was determined by indicating the percentage of the time that the combined 39 items of essential program quality were present in the six instructional program units. The 39 items of essential program quality were present 52 percent of the time in the program units. This meant that the overall program implementation of the bilingual education project at JFK Elementary School was only approximately half complete. In this section, the extent of program implementation was discussed; in the next section, the conditions affecting the extent of program implementation will be explained.

Conditions Affecting Implementation

A research question of this study addressed the subject of the relationship between the extent of bilingual education program implementation and the degree to which the following five conditions were present during the implementation process:

- 1) clarity of the innovation to the project staff,
- 2) capability of the project staff to implement it,

- 3) availability of needed materials and resources,
- 4) compatibility of the innovation with the organizational arrangements, and
- 5) commitment of the project staff to implement it.

In this section, the data collected on these five conditions and their relationship to the implementation of the bilingual education project are presented.

Clarity of the Innovation

The clarity of an innovation to organizational members was defined as the degree to which members understood the innovation and with the extent to which they understood what was expected of them in the implementation of that innovation. In Table 4-5, the responses of the nine project teachers on their understanding of bilingual education and on what was expected of them are presented. Four project teachers indicated that they did not have a clear understanding of bilingual education when they first started in the program, and three teachers indicated that they did not know what was expected of them. Five of the nine teachers indicated that their understanding of bilingual education had changed since the time when they first started in the project; they said that they now have a better understanding of bilingual education.

The five teachers who indicated that they had a clear understanding of bilingual education were asked to describe it in their own words. The description offered

Table 4-5

The Extent to Which Project Teachers
Understood Bilingual Education

	Number of Teachers Responding		
	Yes	No	Other
1. When you first started in bilingual education, did you have a clear understanding of it?	5	4	0
2. When you first started in bilingual education, did you have a clear picture of what you were expected to do?	6	3	0
3. Has your understanding of bilingual education changed since the beginning?	5	4	0

n = 9

by two of the teachers indicated that they had an incomplete understanding of bilingual education. One teacher described the aim of bilingual education as translating for students what they did not immediately understand, and the other teacher described the aim of bilingual education as providing a comfortable learning environment for foreign students. The former description, the translation method, has been viewed by bilingual educators as an undesirable approach to use in bilingual education because of the linguistic interference that may occur. That is, it is believed that children learn a second language better if it is used separately from their second language and not concurrently with it. Hence, the teacher who described the aim of bilingual education as merely translating for students did not know that the approach was inappropriate in a bilingual education program. The latter description, providing a comfortable learning environment for foreign students, indicated that the teacher did not understand that bilingual education was intended not only for foreign students, but that it was intended for all students who were limited-English speaking - many of whom were American born. Moreover, the aim of bilingual education was to teach limited-English speaking students English and in a language that they understood best, viz., the language that they spoke at home. In summary, over half of the teachers either did not have a clear understanding of the concept of

bilingual education, nor did they know what was expected of them when they first started in the bilingual education project. Moreover, at the time of this study, there were still project teachers who did not have a clear understanding of bilingual education.

Staff Capability to Implement Bilingual Education

In this study, staff capability was defined as the project teachers' possession of the requisite skills and knowledge to implement a bilingual education program in their classrooms. The data on the training and certification of project teachers were collected through the use of the Teacher Self-Administered Questionnaire. Of the six instructional program units, only in two were the teachers certificated to teach in a bilingual education program. The teachers in the other four program units were able to teach in the bilingual education project only because they held state-issued waivers. It was required that these teachers participate in an inservice training program that would lead to bilingual education certification. Also, as long as these teachers were on state-issued waivers, they must have a bilingual instructional aide in their classrooms.

Related to a project teacher's capability to implement bilingual education in the classroom was whether or not the teacher was able to modify his behavior in a way that was required, e.g., being able to learn the native

language of the limited-English speaking students in the classroom. Of the nine project teachers, three indicated that they were unable to make the necessary behavioral changes required to implement a program of bilingual education because they felt that their proficiency in the native language of the students was inadequate. In terms of the six instructional units, this meant that in half of the units the teachers believed that their language proficiency was inadequate to provide a program of bilingual education in their classrooms. (See Table 4-6.)

Needed Materials and Resources

In this study, the availability of needed materials and resources was defined as the extent to which curriculum materials and project support staff personnel were available to the project teachers to implement a program of bilingual education in their classrooms. With regard to curriculum materials, eight of the nine project teachers said that they had the necessary materials to implement a bilingual education program in their classrooms. (See Table 4-7.) Two of the nine project teachers indicated that a reduction in the time that project support staff was available was a problem that had arisen which hindered the full implementation of the bilingual education program in their classrooms. Project support staff included instructional aides and curriculum specialists.

Table 4-6

Project Teachers Behavior in Implementing
Bilingual Education

	Number of Teachers Responding		
	Yes	No	Other
1. When you were first planning to implement bilingual education, did you think that you would have to make any changes in your classroom behavior?	8	1	0
2. At the time, did you think you could make the changes required in your classroom behavior?	8	1	0
3. At the present time, have you changed your mind about being able to make the changes in your classroom behavior?	1	7	1
4. Is your classroom behavior different from before?	6	3	0

n = 9

Table 4-7

The Extent to Which Teachers Were Satisfied with the
Bilingual Education Program and Their Superiors

	Number of Teachers Responding		
	Somewhat or Very Satisfied	Neutral	Somewhat or Very Dissatisfied
1. The level of competence of most of the other teachers in the bilingual education program at this school.*	6	1	1
2. The method employed in the bilingual education program for making decisions on curriculum matters.	1	3	5
3. The attitude of the students toward the teachers in the bilingual education program.	9	0	0
4. The manner in which the teachers and the administrators work together in this school.	7	2	0
5. The cooperation and help which I receive from my superiors.	7	1	1
6. The educational philosophy which seems to prevail in the bilingual education program.	6	0	3
7. The evaluation process which my superiors use to judge my effectiveness as a teacher.	3	4	2
8. The adequacy of supplies for me to use in my teaching in this school.	8	0	1
9. The level of competence of my superiors.	8	1	0
10. The academic performance of the students in the bilingual program.	7	1	1
11. The amount of time available to me for professional growth while I am at school.	3	2	4
12. I am informed by my superiors about school matters affecting me.	8	1	0

*One teacher did not respond to this item. n = 9

Even though eight of the nine project teachers indicated that they had sufficient curriculum materials, the field investigators found that there were certain curriculum materials in key subject areas that were not available to them, viz., primary aural/oral language curriculum materials and materials in the primary language for multicultural education. The project manager was asked about the apparent discrepancy between what the teachers reported and what the field investigators had found. The project manager replied that the project teachers taught content areas bilingually even though curriculum materials were not available in the primary language. The teachers took curriculum materials in English and translated them into the primary language. Moreover, the project manager commented that curriculum materials in the primary language in certain subject areas were either non-existent or that they were inappropriate for use in the United States. In summary, at the time of this study, there were needed curriculum materials in certain key subject areas that were not available in the primary language, and there were some teachers who felt that the reduction in staff support help hindered their ability to implement bilingual education in their classrooms.

Compatibility of Organizational Arrangements

In this field study, the compatibility of organizational arrangements was defined as the compatibility of the

school's policies and practices with the implementation of the bilingual education project. There were three practices at JFK Elementary School that were not compatible with the implementation of the bilingual education project. These practices had to do with the selection of project teachers, the assignment of duties to project support staff, and the placement of students in the bilingual education project classes.

The first practice that hindered the proper implementation of the bilingual education project was the assignment of teachers to the project on the basis of seniority in the school. As a result of this practice, there were teachers in the program who did not subscribe to the basic philosophy of bilingual education and who were unwilling participants in the program. Consequently, the project manager, who had the responsibility for the proper implementation of the project as it was delineated in the application for funding, did not control an important aspect of the implementation of the program, viz., staffing. Proper staffing of the project meant that individuals were selected for project positions on the basis of their qualifications and their willingness to participate. Because the project manager did not have control over the selection of the project teachers who were responsible for implementing bilingual education in their classrooms, he did not have the means to control the quality of the

teaching staff and hence the quality of the bilingual education program.

The second practice that interfered with the implementation of the bilingual education project was the assignment of additional duties to the project support staff that were not directly related to their job descriptions. The assignment of the additional duties was made by the bilingual education director of the school district. As a result of these added duties, the project manager believed that the support staff was unable to fully implement the activities in curriculum development and staff training.

The third practice that hindered the implementation of the bilingual education project was the assignment of students to the project classes to meet demands for racial integration. The school district was under a court order to desegregate its elementary schools. As a result, students were placed in the bilingual education program not because the program would appropriately address their educational needs but because of racial integration. Some of these English-speaking students needed remedial help, but because they were in the bilingual education program they were also expected to learn in English and in another language. For many of these students, their experience in the bilingual education program was a frustrating one because not only were they unable to keep up with the work

in English, but they were unable to understand the other language as well. In summary, there were school policies and practices as well as legal requirements that seriously hindered the proper implementation of the bilingual education project as it was delineated in the application for funding.

Commitment

In this study, commitment was defined as the willingness of the project teachers to expend the necessary time and effort to implement bilingual education in their classrooms. Related to the willingness to expend the necessary time and effort to implement bilingual education were the attitudes of project teachers toward bilingual education. In this section, the data on staff commitment to the implementation of the bilingual education project are discussed.

Every one of the nine project teachers indicated that the amount of time and effort required to implement the bilingual education program was considerable. The project teachers said that they had to stay late at school as well as work at home to prepare for their classes, that they had to take university courses in order to be certified to teach in a bilingual education program, and that they had to spend substantial amount of time in becoming more proficient in the primary language of their limited-English-

speaking students. Some project teachers mentioned that because they had two groups of students each day they had twice the amount of testing and record keeping, twice the number of papers to correct, and double the amount of work in general.

Even though the project teachers indicated that they had expended much time and effort in implementing bilingual education, not all of them felt that bilingual education was needed, or that it was even worthwhile. (See Table 4-8.) When asked whether they thought the goals of bilingual education were worthwhile when they first started in the project, three of them gave responses that were generally negative. One teacher said that he did not know what the goals of bilingual education were and was not able to determine if it was worthwhile. Of the other two teachers, one said that not enough stress was being put on the learning of English which was what parents wanted and expected; and the other said that bilingual education was not clearly defined, and hence he was unsure about its worthwhileness. When the project teachers were asked if they had any serious reservations about bilingual education when they first started in the project, three responded that they had serious reservations. The first teacher was concerned that it was likely that the fluent-English speakers in the program that would receive the help rather than the limited-English speaking students.

Table 4-8

The Feelings of Project Teachers Toward
Bilingual Education

	Number of Teachers Responding		
	Yes	No	Other
1. In the beginning, did you feel that the goals of bilingual education were worthwhile?	6	1	2
2. In the beginning, did you have any serious questions or reservations about bilingual education?	3	6	0
3. Has your feeling about the value of bilingual education changed since your first contact with it?	8	1	0
4. In the beginning, did you feel that there was a need for bilingual education at this school?	4	1	4
5. Has your feelings about the need for bilingual education at this school changed?	1	8	0
6. In the beginning, did you feel that bilingual education would work at this school?	6	2	1
7. Has your feelings about whether or not bilingual education would work at this school changed?	4	5	0

n = 9

The second teacher said that the concept of bilingual education was ideal but that in actual practice "it was lousy." The last teacher said, "They went overboard on bilingual education by insisting on the use of the primary language. The parents want their children to learn English." When the teachers were asked if they thought there was a need for bilingual education at JFK Elementary School, only five teachers said yes. Of the four other teachers, three said that they did not have enough information to make a judgement, and the other said that he was not clear about the aims of bilingual education and hence could not make an assessment about the need for it.

When the teachers were asked if they thought bilingual education would work at JFK Elementary School, two teachers gave negative responses, and one teacher gave a qualified response. Of the teachers who responded negatively, one said that he did not have a basis to make a judgement, and the other said that he needed convincing that it would work at the school. The teacher who gave a qualified response believed that the school did not really have a bilingual education program because "there were too many pieces missing." The project teachers were asked if their feelings about bilingual education had changed since their first contact with it. The number of teachers who responded positively to this question varied; but in general, the large majority of the teachers had changed

their feelings about bilingual education since their first contact with it. Now more teachers believed in the value of bilingual education, but more teachers also questioned whether bilingual education would work at JFK Elementary School. The teachers who had doubts about bilingual education working at the school had specific concerns about the reduction in support staff, teachers in the program who did not support bilingual education, and the placement of fluent-English speaking students in the program. In summary, with regard to the commitment of project teachers to bilingual education, all of them indicated that they had expended considerable amount of time and effort on the program. However, at least a third of the teachers had doubts about the value of bilingual education, the need for it at the school, or its efficacy.

The Role of Management

A research question of this study addressed the subject of the role of school administrators in establishing the proper conditions for the implementation of a bilingual education project. Project teachers were asked about their feelings on the role that school administrators and others had played in the implementation of the project at JFK Elementary School; moreover, they were asked about what they thought had either facilitated or blocked the implementation process.

Project teachers were asked who they thought should have the primary responsibility for establishing the proper conditions for the implementation of the bilingual education project. The responses to this question are presented in Table 4-9. Forty-six percent of the teacher responses revealed that they believed that the school principal should have primary responsibility for establishing the proper conditions for the implementation of the bilingual education project at JFK Elementary School. The majority of the project teachers believed that the school principal should have primary responsibility for three of the five conditions affecting the implementation process, viz., assuring that needed materials and resources are available, assuring that school policies and practices are compatible with the implementation of the project, and assuring that project staff is willing to implement the project.

A majority of the project teachers believed that the State Department of Education and the bilingual education resource teachers should have the primary responsibility for assuring that project staff members have the capability for implementing bilingual education. Moreover, four of the five project teachers believed that the school district's central administration should have the primary responsibility for assuring that project staff members have a clear understanding of the concept of bilingual education.

Table 4-9

Those Indicated by the Project Teachers as Having Primary
Responsibility for Establishing Proper Conditions for
the Implementation of Bilingual Education

	Number of Teachers Responding				
	Project School Teacher	School Principal	Central Resource Ofc Adm Teacher	State Dept. of Education	
1. That project staff have a clear under- standing of bilingual education.	1	2	4	0	2
2. That project staff were capable of implementing bilin- gual education.	1	1	1	3	3
3. That needed materials and resources were available.	0	5	1	3	0
4. That school policies and practices were compatible with the implementation of bilingual education.	0	8	1	0	0
5. That project staff were willing to expend the time and effort to implement bilingual education.	2	5	2	0	0

n = 9

The principal of JFK Elementary School was also asked who he believed should have the primary responsibility for establishing the five conditions for the implementation of the bilingual education project. He believed that the central office administration should have primary responsibility for three of the five conditions, viz., assuring that project staff members have a clear understanding of bilingual education, assuring that project staff members have the capability for implementing bilingual education, and assuring that needed materials and resources are available. He believed that the school principal should have the primary responsibility for the other two conditions, viz., assuring that school policies and practices are compatible with the implementation of bilingual education and assuring that project staff members are willing to implement it.

Project teachers were asked to identify factors that either facilitated or blocked the implementation of the bilingual education project. The project teachers identified the overall reaction of the former principal and of the other teachers in the school as factors which they believed hindered the implementation of the bilingual education project at JFK Elementary School. Four of the nine teachers said that the former principal did not support the bilingual education project and that he tried to undermine and destroy it. Another teacher said that

the same principal gave him "free reign" to do anything he wanted to do in the bilingual education program; the teacher said that he could do a good job regardless of whether or not he himself believed in the concept of bilingual education.

The project teachers were asked about the reaction of the other teachers to the introduction of bilingual education to JFK Elementary School. Seven of the nine teachers felt that the overall reaction of the non-project teachers was generally negative. Some of the reasons the project teachers responded the way they did included that they believed that

- 1) the other teachers feared the loss of their jobs,
- 2) that the other teachers were jealous of the extra services and materials that were available to the project teachers,
- 3) that the other teachers did not think that bilingual education was the best way to teach English, and
- 4) that the other teachers believed that the bilingual education project took the best pupils in the school.

In summary, the project teachers felt that the school principal should have a major role in assuring that proper conditions were established for the implementation of the bilingual education project. However, the school principal was not perceived as having the only responsibility for establishing the proper conditions for the implementation of the bilingual education project. Other persons

and agencies were also identified as having an important role in the implementation process. The project teachers perceived the former principal as having hindered the implementation of the bilingual education project at JFK Elementary School by his non-supportive behavior toward it. And they also perceived that the non-project teachers in the school as having generally negative attitudes toward the bilingual education project. In this chapter, the data collected and the findings were presented, in the next chapter, the conclusions and recommendations will be presented.

Chapter 5

CONCLUSIONS

The purpose of this study was to test, modify and refine the organizational change theory on the implementation of organizational innovations developed by Gross, Giacquinta, and Bernstein. This was achieved by investigating the attempt to implement a bilingual education project at JFK Elementary School. This field study was conducted within the parameters of the following research questions:

- 1) What is the relationship between the extent of bilingual education program implementation and the degree to which the five conditions identified in Gross' theory were present during the implementation process?
- 2) What are the factors in the implementation of a bilingual education project that are not accounted for in Gross' theory on organizational change?
- 3) What is the extent to which school administrators have control over the five conditions identified in Gross' theory in the implementation of a bilingual education project?

Criteria were established for the selection of the school site for the study. Once the school site had been selected, data were collected from available school site documents, classroom observations, staff interviews, and staff questionnaires. Presented in Chapter 4 were the data collected

on the background of the bilingual education project at JFK Elementary School, the extent of bilingual education program implementation, the conditions affecting the implementation process, and the degree to which school administrators had control over the conditions affecting the implementation process. In this chapter, the theoretical implications of the findings, a restatement of the original theory, suggestions for the applications of the modified theory, and recommendations for further research are presented.

Theoretical Implications

The Relationship between Program Implementation and the Conditions Affecting Implementation

A research question of this study was concerned with the relationship between the extent of bilingual education program implementation and the degree to which certain conditions affecting the implementation process were present. The specific question was:

What is the relationship between the extent of bilingual program implementation and the degree to which the five conditions identified in Gross' theory were present during the implementation process?

The findings of this study indicated that the implementation of the bilingual education project at JFK Elementary School was incomplete with the PQRI items of essential program quality present in the instructional program units only 52 percent of the time. The findings also indicated that the

five conditions, which Gross had identified as being important in the implementation of organizational innovations, were absent during the implementation of the bilingual education project at JFK Elementary School. The incomplete implementation of the bilingual education project and the concomitant absence of the five conditions provided the basis to conclude that there may be a positive relationship between the extent of bilingual education program implementation and the degree to which the five conditions were present during the implementation process. This conclusion substantially supports Gross' hypothesis that the extent of the implementation of an organizational innovation depends on the degree to which the five conditions specified in his organizational change theory were present during the implementation process.

The Role of Management

A research question of this study was concerned with the control that school administrators had over the conditions that affected the implementation of the bilingual education project. The specific question was:

What is the extent to which school administrators have control over the five conditions identified in Gross' theory in the implementation of a bilingual education project?

The findings of this study indicated that the school principal had little or no control over three of the five conditions identified in Gross' organizational change theory.

The school principal had little or no control over making the concept of bilingual education any clearer for project teachers because no commonly agreed upon definition of bilingual education existed. He did not have control over the certification or training of the project teachers in bilingual education because these activities were the responsibility of the state's Commission on Teacher Preparation and Licensing and the institutions of higher education. And he did not have control over making available needed bilingual education materials and resources because many of these materials and resources had not been developed; and hence, they were not available to anyone. The incomplete implementation of the bilingual education project at JFK Elementary School and the concomitant lack of control over the majority of the five conditions by the school principal provided the basis to conclude that there may be a positive relationship between the extent of bilingual education program implementation and the degree to which school administrators have control over the five conditions specified in Gross' organizational change theory. This conclusion supports Gross' contention that the control of the five conditions is important in the implementation of organizational innovations.

Factors Not Accounted for in the Theory

A research question of this study was concerned with the factors in the implementation of a bilingual education project that had not been accounted for in Gross' theory on organizational change. The specific question was:

What are the factors in the implementation of a bilingual education project that are not accounted for in Gross' theory on organizational change?

The findings of this study indicated that there were two factors uncovered that were not accounted for in Gross' theory on organizational change. The first had to do with the clarity of an organizational innovation to organizational members. In Gross' theory, there was an implicit assumption that organizational innovations could be clearly defined and explained to those who were implementing them. In the case of bilingual education, this assumption could not be supported for several reasons. First, bilingual education as a concept and a practice had been evolving over the past fifteen years, and no commonly agreed upon definition nor approach had emerged. Unlike other educational innovations such as "new" math and language laboratories, which were relatively well-defined, bilingual education was not fully developed as a concept when it was introduced into the public schools of the United States. Second, state and federal agencies that had funded bilingual education programs had contributed to the confusion over bilingual education terminology and

practices. With the passage of new bilingual education legislation almost every year, there had been not only a change in the basic terminology used in bilingual education, but more importantly, there had been changes in the fundamental purposes and activities of bilingual education programs. The evolving nature of the definition of bilingual education provided the basis to conclude that there may be organizational innovations that may not be clearly definable at a given point in time. This conclusion does not support Gross' implicit assumption that organizational innovations could be clearly defined for those responsible for implementing them. However, this conclusion does suggest that a period of time is needed to develop a suitable innovation which can be clearly defined in order to address an identified need.

The second factor that was uncovered in this study which was not accounted for in Gross' theory had to do with the implicit assumption that in organizations management personnel made the decision to implement an innovation and then attempted to get organizational members to carry it out. The findings of this study indicated that the former principal had allowed the introduction of the bilingual education project into the school even though he was not fully committed to its successful implementation. This finding provided the basis to conclude that the commitment of management personnel may also be a necessary condition

in the successful implementation of any organizational innovation.

Restatement of the Theory

The findings of this study substantially supported Gross' hypothesis that the extent to which an organizational innovation was implemented was dependent on the degree to which the following five conditions were present during the implementation process:

- 1) organizational members were clear in their understanding of the innovation,
- 2) organizational members were capable of implementing it,
- 3) needed materials and resources were available,
- 4) organizational arrangements were compatible with the implementation of the innovation, and
- 5) organizational members were committed to implementing the innovation.

However, the findings of this study did not support Gross' contention that in organizations management personnel had complete control over the five conditions specified in his theory. In the case of the bilingual education project, management personnel had only limited control over these conditions. Moreover, the findings of this study resulted in the uncovering of two factors that were not accounted for in Gross' theory, viz., that organizational innovations like bilingual education may not always be clearly definable at a given point in time, and that management personnel may

not always be committed to an innovation that had been introduced into the organization. Based on these findings, it was proposed that the original organizational change theory developed by Gross and his associates be restated in the following manner (Modifications to the theory are underlined): The extent to which an organizational innovation is implemented depends on the degree to which

- 1) the innovation is clearly definable,
- 2) organizational members have a clear understanding of the innovation,
- 3) members are capable of implementing the innovation,
- 4) necessary materials and resources are available,
- 5) organizational arrangements are compatible with the innovation,
- 6) organizational members and management personnel are committed to implementing the innovation, and
- 7) management personnel have control over the conditions affecting the implementation process.

In this section, Gross' organizational change theory had been restated; in the next section, practical implications of the modified theory are presented.

Practical Implications

Discussed in this section are some practical applications of the modified theory for school administrators and other management personnel involved in the promotion and management of change in their organizations. When a school administrator is confronted with the task of implementing an

innovation that is not clearly definable, he can do several things to improve the chances of its successful implementation. First, he can establish a process so that those involved can come to some agreement as to the aims of the innovation and as to the means by which those aims are to be achieved. Second, he can keep up-to-date on the development of the innovation so that he can inform those involved in implementing the innovation on the latest findings and practices.

When a school district is confronted with the task of introducing an innovation into its schools, it needs to be certain that the site administrators who are responsible for implementing the innovation are committed to the new school program. Site administrators must be committed to any new school program if they are to provide the leadership necessary to get their staff members to accept it and to implement it effectively.

When a school administrator is confronted with the task of implementing an educational innovation, he needs to be aware of which conditions important to the implementation process are within his control and which ones are not so that he can accurately assess the potential problems that may arise. Once he has identified the potential problems, he can attempt to resolve them. A school administrator needs to understand the educational change process so that he can plan effectively for the successful implementation

of desired new school programs. In this section, suggestions for the application of the modified theory were made; in the next section, recommendations for further research will be presented.

Recommendations

This study focused on the testing and refinement of of one theory on the implementation of organizational innovations. As such, the findings are neither complete nor conclusive. Further research is needed to address the following questions:

- 1) Are different explanations needed to account for different types of organizational innovations?
- 2) Is the implementation process different for organizational innovations that are legally required as compared with those which are not?
- 3) Is there a differential success rate for organizational innovations that are fully developed as compared with those which are not?
- 4) Is there a differential success rate for school programs that involve the entire school staff as compared with those which involved only a part of the school staff?

Finally, there is a need for further research to determine the limitations or generality of the modified theory that was developed from the findings of this study.

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APPENDICES

APPENDIX A
TEACHER INTERVIEW SCHEDULE

TEACHER INTERVIEW SCHEDULE

A) Introduction

- 1) We are studying the implementation of bilingual education. We need your help in providing data necessary for a better understanding of the process.
- 2) I want to assure you of the anonymity and confidentiality of everything that will be said between you and me. Nothing you will say to me will be shared with anyone else.
- 3) I want you to be frank and honest in responding to the questions. This is so that we can get an accurate picture of the problems that confront educators as they attempt to implement a program of bilingual education.
- 4) I welcome your afterthoughts about this interview, whether they be additions, deletions, or corrections.

Do you have any questions? (Make sure that any questions are answered before going on.)

B) Transistional Note #1

First, let's talk about your understanding of bilingual education.

- 1)* When you first started in bilingual education, did you have a clear understanding of it? Y N OS

If yes: How would you describe it?

If no: What was unclear about it? Describe what you thought it was all about.

- 2) When you first started in the bilingual program, did you feel you had a clear picture of what you were expected to do? Y N OS

If no: In what respect was it unclear?

- 3)* Has your understanding of bilingual education changed since then? Y N OS

*Questions with an asterisk beside their numbers were also used in the interviews with the principal and project manager.

If yes: In what way?

C) Transitional Note #2

Now, let's talk about your feelings on bilingual education.

- 4)* At the beginning, did you feel that the goals of bilingual education were worthwhile? Y N OS

If yes: Why?

If no: Why not?

- 5)* At the beginning, did you have any serious questions or reservations about bilingual education? Y N OS

If yes: What were they? Why?

- 6)* Has your feeling about the value of bilingual education changed since your first contact with it? Y N OS

If yes: In what way? How?

- 7)* In the beginning, did you feel that there was a need for bilingual education at this school? Y N OS

If yes: Why?

If no: Why not?

- 8)* Has your feelings about the need for bilingual education at this school changed? Y N OS

If yes: In what way?

- 9)* At the beginning did you feel that bilingual education would work at this school? Y N OS

What were your reasons?

If yes: What degree of probable success did you give to it? (Use Code B)

- 10)* Has your feelings about whether or not bilingual education would work at this school changed? Y N OS

If yes: Why? How?

11)* If you were to make an impartial judgement about the future of bilingual education at this school, what would it be? (Use items listed below.)

- a) eventual success
- b) eventual partial success
- c) eventual rejection

D) Transitional Note #3

We have talked about your feelings on bilingual education. Now, let's talk about what you did in the attempt to implement bilingual education.

12) When you first started with bilingual education, how much effort would you say that you had to put into it? (Use Code B.) Why?

13)* What kinds of things did you do? (List activities.)

14) Overall, between the time you started and now, how much effort have you made in trying to carry it out? (Use Code B.)

15)* Do you think your efforts have been successful in implementing bilingual education here? Y N OS

If yes: Why do you believe this?

If no: What are your reasons for not believing this?

E) Transitional Note #4

Now, let's talk about the overall reaction to bilingual education.

16)* What was your overall reaction to bilingual education when you were first introduced to it? (Use Code A.)

Why did you feel this way? (Probe: Other reasons)

17)* What is your overall reaction to bilingual education having been started at this school? (Use Code A.)

Why did you feel this way?

- 18)* Between the time you started and now, indicate your overall reaction to the introduction of bilingual education in this school:

	Initially	Subsequently	Now
Very Positive	_____	_____	_____
Somewhat Positive	_____	_____	_____
Ambivalent	_____	_____	_____
Somewhat Negative	_____	_____	_____
Very Negative	_____	_____	_____

If there is a shift: Why?

- 19)* What was the overall reaction of the other staff members to the introduction of bilingual education in this school? (Use Code A.)

F) Transitional Note #5

Now, let's talk about your behavior in the implementation of bilingual education.

- 20) When you were first planning to implement bilingual education, did you think you would have to make any changes in your classroom behavior? Y N OS

If yes: What kind of changes?

If no: Why not?

- 21) At the time, did you think you could make the changes required in your behavior? Y N OS

If no: Why not?

- 22) At the present time, have you changed your mind about being able to make the changes in your behavior? Y N OS

If yes: Why? How?

- 23) Is your classroom behavior different from before? Y N OS

If yes: In what ways have they changed?

G) Transitional Note #6

Now, let's focus on the consequences of trying out bilingual education.

- 24)* At the beginning, did you think there would be any positive consequences for you personally? Y N OS

If yes: What would they be?

- 25)* Did you think there would be any negative consequences for your personally? Y N OS

If yes: What were these?

- 26)* Did you think there would be any positive consequences for other staff members here? Y N OS

If yes: For whom? In what ways?

- 27)* Any negative consequences for other staff members? Y N OS

If yes: For whom? In what ways?

- 28)* How about the students? Any positive consequences? Y N OS

If yes: For what kind of child? In what ways?

- 29)* Any negative consequences? Y N OS

If yes: For what kind of child? In what ways?

- 30) In regard to the consequences of trying to carry out bilingual education for you, other teachers, or students have your feelings changed about any of these? Y N OS

If yes: Why? How?

H) Transitional Note #7

In trying out any new program, there are often difficulties that arise.

- 31)* In the beginning did you have any serious problems in trying to implement bilingual education? Y N OS

If yes: What were they? (Probe: Any others?)

- 32)* Have any of the initial problems continue to exist? Y N OS

If yes: Which ones?

- 33)* Have any new problems arisen since the beginning and now in trying to implement bilingual education?
Y N OS

If yes: What have they been? (Probe: Any others?)

I) Transitional Note #8

Now let's explore the extent to which people were a help to you in your attempts to implement bilingual education.

- 34)* Who was helpful to you in your attempts to implement bilingual education? (List names/titles.)

Anyone else?

- 35)* Who was the most helpful? (List names/titles.)

Any others?

- 36)* How did _____ help? (Use persons listed in
Name of Person #34.)

J) Transitional Note #9

Now let's talk about the extent to which people were obstacles or blocked you in your attempts to implement bilingual education.

- 37)* Was there anyone who was an obstacle to you?
(List names/titles.)

Anyone else?

- 38)* How did _____ block you? (Use persons listed
Name in #37.)

- 39)* Have we left out anything important in talking about what has blocked or facilitated your efforts to implement bilingual education?

If yes: What?

K) Transitional Note #10

Finally, let's talk about the role that superiors have played in the implementation of bilingual education at this school.

- 40)* Which administrators have been involved with the implementation of bilingual education at this school? (List names/titles.)

Anyone else?

- 41)* What did _____ do? (Use persons listed in
Name #40.)

- 42)* What do think of what was done? (Use activites listed
in #41.)

Probe: Helpful? Hindering?

Why did you feel this way?

- 43)* Were you completely satisfied with what was done overall? Y N OS

If yes: Go on to question #45.

If no: Why not? What do you think should have been done?

- 44)* If no efforts were made or if the efforts were inadequate, why do you think it happened?

- 45)* Did your superior(s) try to find out what your feelings about bilingual education were? Y N OS

If no: Why do think they didn't try to find out?

- 46)* Did your superior(s) attempt to answer any questions you had about bilingual education?

If yes: How did you respond to their attempts?

If no: Why do you think they didn't make the attempt?

- 47)* Were the questions or reservations you had about bilingual education effectively dealt with to your satisfaction by your superior(s)?

If yes: By whom? (List names/titles.)

If no: Why in your estimatimation they were effectively handled?

- 48)* Has there been any help or advice you needed in implementing bilingual education that you didn't get? Y N OS

If yes: What kind?

- 49)* Who in your judgement should have provided the help or advice? (List names/titles)

L) Transitional Note #11

Now, let's talk about who you believe should have had the primary responsibility for assuring that certain conditions important to the implementation of the bilingual education project were present. (Use Code C)

- 50)* Who should have had the responsibility for assuring that the project teachers had a clear understanding of bilingual education?
- 51)* Who should have had the responsibility for assuring that project teachers had the necessary skills and training to implement bilingual education in their classrooms?
- 52)* Who should have had the responsibility for assuring that project teachers had the necessary materials and resources to implement bilingual education in their classrooms?
- 53)* Who should have had the responsibility for assuring that school policies and practices were compatible with the implementation of the bilingual education project?
- 54)* Who should have had the responsibility for assuring that the project teachers were willing to expend the time and effort necessary to implement the bilingual education project?

(Conclude the interview with expression of thanks and reassurance of anonymity and confidentiality.)

Codes

General: Y=Yes, N=No, OS=Other, specify.

Code A: 5=very positive, 4=somewhat positive, 3=ambivalent, 2=somewhat negative, 1=very negative.

Code B: 5=great, 4=considerable, 3=some, 2=little, 1=none.

Code C: 1=teacher, 2=principal, 3=central office, 4=state department of education, 5=other, specify.

APPENDIX B

BILINGUAL PROGRAM QUALITY REVIEW INSTRUMENT

County _____	CDS Code _____
District _____	Reviewer(s) Name(s) _____
School _____	Date of Review _____

CALIFORNIA STATE DEPARTMENT OF EDUCATION
 Bilingual Bicultural Education Section
 721 Capitol Mall
 Sacramento, California 95814

BILINGUAL EDUCATION PROGRAMS - PROGRAM QUALITY REVIEW INSTRUMENT

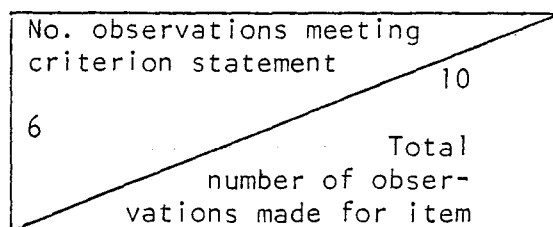
1977-78/Elementary Schools/K-6 Span

The Bilingual Education Program Quality Review Instrument (PQRI) is to be used in selected schools which receive funds under ESEA Title VII and/or are required to establish programs of partial bilingual instruction, full bilingual instruction or bilingual bicultural education under AB 1329. The instrument is designed to identify indicators of success which are present in the bilingual program.

- Part I Operational Definitions
- Part II Program Data
- Part III Primary Language Instruction
- Part IV English as a Second Language Instruction
- Part V Multicultural Education and Mathematics Instruction
- Part VI Bilingual Staff Development

Parts III, IV, V, and VI deal with the programmatic aspects of bilingual education programs. Each of these sections consists of a series of items of Essential Program Quality. The State Department of Education suggests that developing bilingual programs first concentrate on the development of Items of Essential Program Quality before dealing with other programmatic elements.

Although the instrument includes topic items, the bilingual program will receive a rating for each criterion statement under each item. The rating will indicate the number of observations meeting the criterion as compared to the number of total observations made by the reviewer.



← SAMPLE RATING

For instance, if a reviewer rated a particular criterion statement 6/10, this would mean that out of ten total observations made, the criterion was met in six of the observations. Of course, the observations can be correlated to an observable entity such as classrooms, staff members, students, or lessons, whichever is most appropriate to the item being reviewed.

Only the criterion statements and the Directory of Operational Definitions will be considered by the reviewers in rating an item.

The Bilingual Education PQRI is to be used in addition to other state and federal review instruments in schools which receive Title VII and/or are affected by the programmatic requirements of AB 1329.

Questions regarding the Bilingual Education PQRI should be directed to the Bilingual Bicultural Education Section of the California State Department of Education, telephone (916) 445-2872.

PART I - OPERATIONAL DEFINITIONS

The Operational Definitions consist of a list of important terms used in the Bilingual Education PQRI. Note that when used in the instrument, such terms have been underlined. Should any clarification be needed regarding an item or criterion statement, the Operational Definitions should be consulted.

1. Alternative Language Approach: Lessons are one day (or at one time) delivered in one language and then another day (or at another time) delivered in the other language. It is important to note that only one language is used at a time and the same lesson is often delivered twice, once in each language.
2. Bilingual Lesson Delivery Approaches:
 - A. For primary language development in oral language and reading; language dominant grouping only.
 - B. For concept development in such areas as mathematics and multicultural education, one of the following: language dominant grouping, preview-review, alternate language, and concurrent or other approaches of equally demonstrable effectiveness.
3. Concurrent Method: During lessons, two languages are used interchangeably. Special care is taken to avoid direct translation. One person may deliver the lessons using both languages or two individuals may be utilized each modeling a different language.
4. Continuum of Skills - English as a Second Language: A list of developmental language structures consisting of at least three levels (e.g., beginning, intermediate, and advanced). Each level consists of at least five skills in each of the following topic areas: sentence patterns, grammatical structures, vocabulary, and pronunciation.

5. Continuum of Skills - Primary Language Reading: A list of developmental reading skills consisting of at least five specific skills in each of the following four topic areas: visual perception, decoding/encoding, vocabulary, and comprehension.
6. Continuum of Skills - Oral Primary Language: A list of developmental oral language skills in the primary language of the LES/NES students consisting of at least five specific skills in each of the following topic areas: (1) phonology, (2) morphology, (3) syntax, (4) vocabulary.
7. Criteria for Bilingualism - Teacher Aides: A written document indicating assessment of each bilingual crosscultural teacher aide and specifying minimal proficiencies in each of the following areas of the primary language of the LES/NES students: pronunciation, vocabulary, fluency, comprehension, and literacy.
8. Criteria for Introduction of English Language Reading: A written statement containing specific criteria for the introduction of English language reading to LES/NES students. Consideration of a minimal level of oral English language proficiency and minimal level of primary language reading skill must be included.
9. Demonstrably Equal Effectiveness: If a school should decide to select an approach other than those listed as an item, it may do so; however, the following supportive evidence must be given: (1) a brief written description of the approach selected, and (2) an evaluation report which indicates an equal level of effectiveness of the selected approach as compared to any of the approaches listed in the item.
10. Flexible Grouping: Grouping characterized by ready capability for modification or change within groups based on student performance at a minimal frequency rate of at least one modification for each group for every two months of instruction.
11. Individual Study Carrel: A designated place for independent study by a single student.
12. Instructional Unit: A fixed number of structured lessons (at least nine) covering the same basic topic area.
13. Language Dominant Grouping: During lessons, students are grouped by dominant language and only the dominant language is used for instruction. EXAMPLE: Spanish speaking students receive math instruction only in Spanish; English speaking students receive math instruction only in English. Languages and groups are not mixed.
14. Learning Center: A designated place where students can work on specific but varied assignments based on their individual abilities without direct and continuous tutoring.

15. Preview-Review:

- Step 1: A preview is first given to students in one language by an instructor who is a model in that language.
- Step 2: The body of the lesson is then given by another instructor in the other language. This person is also a model in the language he/she is using as a medium of instruction.
- Step 3: Finally, a review of the lesson is conducted. This can be accomplished by dividing the students into dominant language groups--each with a model instructor or by maintaining a mixed language group delivering the review in a concurrent approach.

16. Second Language Acquisition Materials: Materials that are centered about the objective of developing English language competency in LES/NES students. Materials are to correlate to specific skills listed in the Continuum of Skills - English as a Second Language. Note that these materials do not include remedial approaches to reading.
17. Small Group Study Area: A designated place where a group of students (not exceeding seven in number) can work or study with the teacher or teacher aide serving as the facilitating agent.
18. Structured Lessons: A period of at least 20 minutes of formal instruction devoted to a single subject and having a fixed pattern or organization.
19. Task/Activity Center: A designated place where students can work independently on the same task. While instructions are provided by the teacher or teacher aide, no direct and continuous supervision by the instructional staff is needed.
20. Inventory of Assessment Instruments for English Oral Language Proficiency:* Following is a list of assessment instruments for English Oral Language Proficiency known to the State Department of Education to have reliability and validity. Only instruments meeting this specific criteria have been listed. Periodically this inventory will be updated to include other instruments of demonstrably equal value which meet the test for reliability and validity:
- Bahia Oral Language Test
 - Bilingual Syntax Measure
 - Basic Inventory of Natural Lang
 - Language Assessment Scale
 - Dailey Language Facility Test
 - Language Assessment Battery
 - Moreno Oral Language Proficiency Test
- (Only when referenced to the H-200 Curriculum Materials)

*Listing of instruments in the Inventory of Assessment Instruments for English Oral Language Proficiency does not constitute endorsement by the Calif. State Department of Education, nor does it reflect the Bilingual Bicultural Education Section's position on any particular instrument.

21. Inventory of Techniques for Second Language Instruction:

Following is a list of techniques commonly used for Second Language instruction. Periodically this inventory will be updated to include other techniques of demonstrably equal effectiveness.

- | | |
|-------------------------------|--------------------------------|
| -Total Physical Response(TPR) | -Dialogues |
| -Repetition Drills | -Use of Audio-Visual Equipment |
| -Pattern Practice Drills | -Language Games |
| -Dictation | -Use of Worksheets |
| -Dramatic Plays | |

PART II - PROGRAM DATA

School _____

District _____

GRADE LEVEL	Number AB 1329 Classes	Number NES Pupils	Number LES Pupils	Number FES Pupils	Funding Sources (A)	Years Bilingual Instruction Offered at Grade Level	Number Teachers with Bilingual Credential (B)	Number Teachers on Waivers	F.T.E. Bilingual Aides	Language
K										
1										
2										
3										
4										
5										
6										

Legend:

(A) Funding Sources

1=ECE/SIP
2=Title I
3=AB 2284/AB 1329
4=Title VII
5=SB 90
6=Other (specify)

(B) Bilingual Credentials

Bilingual Crosscultural Specialist
Standard Credential with Bilingual Emphasis
Emergency Bilingual Credential
Certificate of Competence

(C) F.T.E.

Full time Equivalent Staff
(Average number of hours per classroom
per grade level)

PART III - PRIMARY LANGUAGE INSTRUCTION

Items of Essential Program Quality

1. LES/NES students are assessed at least in the beginning of the school year and at the end of the school year to determine the degree of proficiency in primary language aural-oral skills.

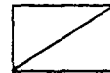
A. Participating classrooms have assessment instruments and documented individual student results for each LES/NES student in primary language aural-oral skills.



COMMENTS: _____

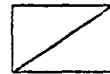
2. LES/NES students receive oral language instruction in their primary language.

A. Participating bilingual classroom teachers have a schedule or log of primary oral language instruction indicating that LES/NES students receive the following amounts of instruction:

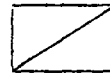


K-3 = one structured lesson daily
4-6 = one structured lesson, twice weekly

B. The teaching staff involved in oral language instruction for LES/NES students in their primary language can exhibit an oral primary language continuum.



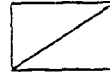
C. Participating bilingual classroom teachers are able to give at least three examples of how oral primary language lesson activities exercise specific skills listed in the oral primary language continuum.



COMMENTS: _____

3. The program has a continuum of primary language reading skills for students in grades K-6 and reading materials which are clearly exercise each reading skill listed in the continuum.

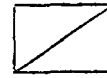
A. Participating bilingual classroom teachers are able to give at least three examples of how reading lesson activities exercise specific skills listed in the continuum.



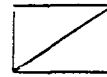
COMMENTS: _____

4. Each participating bilingual classroom teacher has a schedule indicating daily instruction for each LES/NES student in reading in the primary language.

A. Teachers in the participating bilingual classrooms have a written document indicating an allocation of at least twenty minutes a day of reading instruction in the primary language.



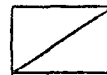
B. All the primary language reading sessions observed are conducted only in the primary language.



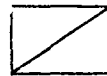
COMMENTS: _____

5. Each participating bilingual classroom has an ongoing assessment procedure for LES/NES students for reading instruction in their primary language.

A. Teachers have a documented set of measurement instruments consisting of reading skills in at least three topic areas of the primary language reading continuum.



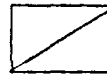
B. A random sample of LES/NES students indicates that students receive at least one assessment for each month of instruction.



COMMENTS: _____

6. The school has a variety of reading materials used for reading instruction in the primary language of LES/NES students.

A. Participating bilingual classroom teachers can exhibit at least two book selections in at least five of the following seven topic areas: (1) science____, (2) sports/hobbies____, (3) fiction____, (4) geography____, (5) poems____, (6) biographies____, (7) history____.



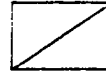
B. Participating bilingual classroom teachers can exhibit supplementary reading materials by showing at least two materials in each of the following categories in the primary language: (1) filmstrips____, (2) games____, (3) magazines____, (4) newspapers____.



COMMENTS: _____

7. In each participating bilingual classroom there are support reading services in the form of resource teachers, reading labs, and media centers for LES/NES students in their primary language comparable to those services provided for ES students in English.

- A. Records indicate that LES/NES students have at least the same amount of time as the FES students in each of the following situations for reading instruction in the primary language: (1) reading labs____, (2) media centers____, (3) resource teachers____.



COMMENTS: _____

8. For reading instruction of LES/NES students in their primary language, there are several different types of learning areas clearly evident in the classroom structure that would accommodate student groupings of different sizes.

- A. Participating bilingual classrooms contain at least three of the following classroom structures accommodating different sizes of LES/NES student groupings for primary language reading: (1) Small Group Study not exceeding seven students, (2) Individual Study Carrel, (3) Activity/Task Center, (4) Learning Center.



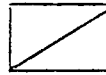
COMMENTS: _____

PART IV - ENGLISH AS A SECOND LANGUAGE INSTRUCTION

Items of Essential Program Quality

9. The program assesses the LES/NES student's English language proficiency at the beginning and at the end of the school year using an English oral language proficiency assessment instrument.

- A. Test records show that approximately 95 percent of the LES/NES students are pre- and post-tested for English language proficiency using an instrument listed in the inventory of assessment instruments for English oral language proficiency or a test of demonstrable equal value.



COMMENTS: _____

10. The teaching staff uses a variety of techniques to teach English as a second language.

A. Teaching staff in the participating bilingual classrooms can give three examples of techniques being used for English as a second language instruction from those listed in the inventory of techniques for second language instruction.



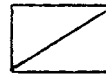
B. During classroom observations of English as a second language lessons it can be observed that a least three different techniques from those listed are being used.



COMMENTS: _____

11. Classroom teachers have a written schedule of daily structured lessons for second language instruction for LES/NES students.

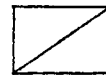
A. Teachers have a written schedule of daily structured lessons for second language instruction.



COMMENTS: _____

12. The program uses an English as a second language continuum to document the continuous progress of LES/NES students.

A. Teachers in the participating bilingual classrooms can display a class, group, or individual profile of continuous progress in English as a second language for each LES/NES student.



COMMENTS: _____

13. The program has a written criteria for the introduction of reading in English to LES/NES students.

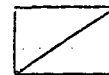
A. Teaching staff in the participating bilingual classrooms can describe the criteria for the introduction of reading in English.



COMMENTS: _____

14. LES/NES students are consistently placed in English language reading based on the criteria established at the school.

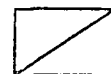
A. Upon examining a random sample of LES/Nes students during reading lessons, only those LES/NES students who have met the criteria for the introduction of English language reading are receiving such instruction.



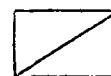
COMMENTS: _____

15. Structured second language lessons are individualized and conducted in small flexible groupings not to exceed seven children per group.

A. ESL groups observed do not exceed seven children per group.



B. Student profiles show that each LES/NES student receives English as a second language skills based on individual diagnosed needs.



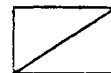
COMMENTS: _____

PART V - MULTICULTURAL EDUCATION AND MATHEMATICS

Items of Essential Program Quality

16. There is a documented multicultural curriculum reflecting at least the culture of the LES/NES students and covering all of the participating bilingual classrooms (the documented multicultural curriculum consists of at least five instructional units each involving several hours' of learning).

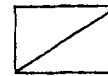
A. Teachers in each of the participating bilingual classrooms have records that indicate at least two instructional units of the multicultural curriculum have been implemented.



COMMENTS: _____

17. In each participating bilingual classroom or learning center used for multicultural education, there are visible examples of multicultural education materials in the primary language of the LES/NES students.

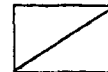
- A) In participating bilingual classrooms or multicultural learning centers there are at least two examples from each of the following categories of multicultural materials in the primary language of the LES/NES students: (1) books and magazines, (2) films and film strips, (3) charts and posters, (4) tape recordings and records.



COMMENTS: _____

18. The cultural resources of the LES/NES community are utilized in the participating bilingual classrooms.

- A. Participating bilingual classroom teachers are able to give at least one example of utilizing the resources of the LES/NES community in each of the following categories:



- (1) LES/NES community persons assisted in the classroom ____.
- (2) Class participated in LES/NES community event ____.
- (3) Class visited point of interest in LES/NES community ____.

COMMENTS: _____

19. Staff members in participating bilingual classrooms consistently utilized one of the recognized bilingual lesson delivery approaches during mathematics and multicultural lessons.

- A. During each observation of math and multicultural lessons for LES/NES students in participating bilingual classrooms, one of the listed bilingual lesson delivery approaches is utilized.

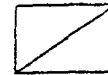


- (1) Language Dominant Grouping ____.
- (2) Preview-Review ____.
- (3) Alternate Language Approach ____.
- (4) Concurrent Method ____.
- (5) Any other approach of demonstrably equal effectiveness or value ____.

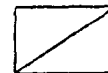
COMMENTS: _____

20. Staff members in participating bilingual classrooms understand the intent and content of the Multicultural Instructional Component.

A. Staff members in participating bilingual classrooms are able to give at least two statements of the intent of the multicultural component.



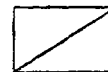
B. Staff members in participating bilingual classrooms are able to give at least two examples of classroom activities of the multicultural component.



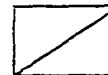
COMMENTS: _____

21. The school has mathematics materials in the primary language of the LES/NES students.

A. In a random sample of LES/NES students, each student has a math textbook or instructional guide in his/her primary language.



B. Participating bilingual classroom teachers can exhibit mathematics teacher manuals used to support math lessons in the primary language of the LES/NES students.



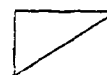
COMMENTS: _____

PART VI - BILINGUAL STAFF DEVELOPMENT

Items of Essential Program Quality

22. In participating bilingual classrooms, where teachers are on waiver, the aides are proficient in English and the primary language of the LES/NES students.

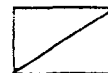
A. At least one teacher aide assigned to each participating bilingual classroom where the teacher is on waiver has met the criteria for bilingualism as documented in written form by the school district.



COMMENTS: _____

23. The program has assessed the individual needs of each bilingual teacher and teacher aide in participating bilingual classrooms.

- A. The school has a written survey of bilingual staff needs which assess individual priorities in at least the following topic areas:



- (1) Cultural heritage of the LES/NES student
- (2) Bilingual lesson delivery approaches
- (3) Second language instruction - methodology
- (4) Reading instruction in the primary language of LES/NES students
- (5) Oral language development for LES/NES students
- (6) Basic intent and content of a bilingual program

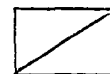
COMMENTS: _____

24. The program provides inservice sessions based on the assessed needs of the staff of the bilingual classrooms.

- A. Teachers in the bilingual classrooms can give at least three examples of inservice sessions attended during the school year which improved their skills in bilingual instruction.



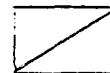
- B. Teacher aide(s) in the bilingual classrooms can give at least two examples of inservice sessions attended during the school year which improved their skills in bilingual instruction.



COMMENTS: _____

25. The primary language of the LES/NES students is utilized in a supportive manner for staff development sessions in bilingual education.

- A. Bilingual staff members are able to recall at least two examples of inservice sessions conducted in the primary language of the LES/NES students.



COMMENTS: _____

GENERAL COMMENTS

BILINGUAL PROGRAM QUALITY REVIEW INSTRUMENT

Primary Language Instruction Room _____

1. Primary aural/oral language assessment instruments and results in the classroom? Y N
2. Primary oral language instruction: K-3 daily, 4-6 twice weekly? Y N
3. Primary oral language continuum? Y N
4. BE teacher can cite 3 examples of primary oral language skills in lessons which are a part of the continuum? Y N
5. Primary language reading continuum? Y N
6. Written evidence of at least 20 min. of primary language reading daily? Y N
7. Primary language reading lesson conducted only in the primary language? Y N
8. Primary language reading assessment instruments have at least 3 topics which are in the primary language reading continuum? Y N
9. Monthly assessment of primary language reading skills? Y N
10. Two primary language reading books in at least 5 of 7 areas? Y N
11. Supplemental primary language reading materials: film-strips, games, magazines, and newspapers? Y N
12. Same amount of time for NES/LES pupils in primary language reading as for FES pupils in English reading? Y N
13. At least 3 classroom structures for accommodating different sizes of groups of NES/LES pupils for primary language reading instruction? Y N

English as a Second Language Instruction Room _____

14. 95% of NES/LES pupils are pre- and post-tested in English oral language proficiency? Y N

15. Evidence of at least 3 ESL techniques from PQRI inventory? Y N
16. Observation of at least 3 ESL techniques used by the teacher? Y N
17. Teacher has written daily ESL lessons? Y N
18. Display of class, group, or individual ESL progress profile? Y N
19. Written criteria for introduction of English reading to NES/LES pupils? Y N
20. NES/LES pupils placed in English reading based on criteria? Y N
21. ESL groups do not exceed y pupils? Y N
22. ESL instruction based on diagnosed needs per student profiles? Y N

Multicultural Education & Mathematics Room _____

23. Evidence of at least 2 units (9 units each) of the multicultural curriculum which have been implemented?
Y N
24. Evidence of at least 2 examples of multicultural materials in the primary language (books, films, film-strips, charts, posters, tapes, records)? Y N
25. Evidence of one example of using resources in the NES/LES community (volunteers, community events, field trips, etc.)? Y N
26. Use of one of the recognized bilingual lesson delivery approaches during the math and multicultural lessons?
Y N
27. Teacher can give 2 statements of the intent of the multicultural component? Y N
28. Teacher can give 2 examples of classroom activities in the multicultural component? Y N
29. Each NES/LES pupil has his own primary language math text? Y N
30. Teacher has a math manual in the primary language? Y N

Staff Development

P. Lang Teacher		ESL Teacher	
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- | | | | | |
|--|---|---|---|---|
| 31. Bilingual teacher is certificated? | Y | N | Y | N |
| 32. A bilingual aide in classroom where teacher is not certificated to teach NES/LES pupils? | Y | N | Y | N |
| 33. School has written survey results of bilingual teacher and aide staff training needs? Y N | | | | |
| 34. Attended 2 or more inservice sessions during the year to improve bilingual education skills? | Y | N | Y | N |
| 35. Two examples of inservice conducted in the primary language? Y N | | | | |

APPENDIX C

TEACHER SELF-ADMINISTERED QUESTIONNAIRE

TEACHER SELF-ADMINISTERED QUESTIONNAIRE

Instructions

The purpose of this questionnaire is to obtain background information on the teachers who are participating in the study. Please answer the following questions by circling the letter next to the answer which best specifies your reply.

1) How many years have you been a teacher?

- | | |
|------------|------------------|
| a. 1 year | f. 6-10 years |
| b. 2 years | g. 11-15 years |
| c. 3 years | h. 16-20 years |
| d. 4 years | i. 21-25 years |
| e. 5 years | j. over 25 years |

2) On the average, how frequently do you work on school activities at home?

- | | |
|---------------------|-----------------------------|
| a. none | d. 4-5 times a week |
| b. once a week | e. more than 5 times a week |
| c. 2-3 times a week | |

3) As a teacher in the bilingual education program, what type of certification do you possess?

- a. Bilingual/Crosscultural Specialist Credential
- b. Bilingual/Crosscultural Certificate of Proficiency
- c. Other Credential in Bilingual Education
- d. On a Waiver Authorized by AB 1329
- e. No waiver or certification in bilingual education

Instructions for Question #4

Please write one code number which best represents your answer after each of the statements listed below.

Code: 1 = very dissatisfied 4 = somewhat satisfied
2 = somewhat dissatisfied 5 = very satisfied
3 = neutral

4) How do you feel about the following items?

- a. The level of competence of most of the other teachers in the bilingual education program in this school. ____
- b. The method employed in the bilingual education program for making decisions on curriculum matters. ____

- c. The attitude of the students toward the teachers in the bilingual education program. ____
- d. The manner in which the teachers and administrators work together in this school. ____
- e. The cooperation and help which I receive from my superiors. ____
- f. The educational philosophy which seems to prevail in the bilingual education program. ____
- g. The evaluation process which my superiors use to judge my effectiveness as a teacher. ____
- h. The level of competence of my superiors. ____
- i. The adequacy of supplies for me to use in my teaching in this school. ____
- j. The academic performance of the students in the bilingual education program. ____
- k. The amount of time which is available to me while I am at school for my personal professional growth. ____
- l. The extent to which I am informed by my superiors about school matters affecting me. ____

APPENDIX D
LETTER REQUESTING DISTRICT APPROVAL

October 6, 1978

Roger Tom
J Eugene McAteer High School
555 Portola Drive
San Francisco, CA 94131

Dr. Mary Byrd
San Francisco Unified School District
135 Van Ness Avenue
San Francisco, California 94102

Dear Dr. Byrd:

As you had requested, attached is a brief description of the research study that I would like to conduct. I am requesting approval to conduct a field study at JFK Elementary School which will involve the school principal, nine bilingual education teachers, and the bilingual education project manager. The purpose of the study will be to test an organizational change theory by applying it to the implementation of a bilingual education project.

The data collection will be accomplished through staff interviews and questionnaires, classroom observations, and a review of available school documents. It is expected that the data collection will require that the field investigators be on the school site from two to three weeks. In the final research report the identity of the school and the participants in the study will be kept anonymous.

I have already spoken to the principal of JFK Elementary School and the bilingual education project manager about the proposed study. Both individuals saw a need for the study and are willing to cooperate with it should approval be granted by your office. Please call me should you have any questions about the study at 824-6696.

Sincerely,

Roger Tom
J Eugene McAteer High School
555 Portola Drive
San Francisco, CA 94131
Phone: 824-6696

Dissertation Outline

Tentative Title

"A Study of Gross' Theory on Implementing Organizational Innovations: The Case of Bilingual Education"

Purpose of the Study

To test, modify, and refine Gross' organizational change theory by applying it to the attempt to implement a bilingual education project.

Research Questions

- 1) What is the relationship between the extent of bilingual education program implementation and the degree to which the five conditions identified in Gross' theory were present during the implementation process?
- 2) What is the extent to which school administrators have control over the five conditions identified in Gross' theory in the implementation of a bilingual education project?
- 3) What are the factors in the implementation of a bilingual education project that are not accounted for in Gross' theory on organizational change?

Procedures

- 1) Data will be collected through the use of staff interview schedules, questionnaires, classroom observations, and available school documents.
- 2) Data will be analyzed in terms of their fit or lack of fit with elements of Gross' theory.
- 3) Findings will be used to modify and refine Gross' theory on organizational change.
- 4) The identity of the school and the participants in the study will be kept anonymous in the final research report.
- 5) The study is being conducted in order to fulfill a graduate degree requirement at the University of the Pacific, School of Education.