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The perceived influences that prompt teachers to initiate changes in curriculum and instruction.

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THE PERCEIVED INFLUENCES THAT PROMPT TEACHERS
TO INITIATE CHANGES IN CURRICULUM AND INSTRUCTION

A Dissertation Presented

by

SYLVIA H. ABAR

Submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

DOCTOR OF EDUCATION

February 1996

Education

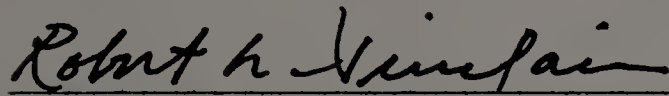
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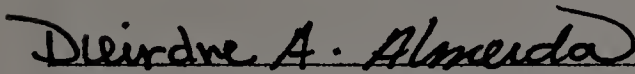
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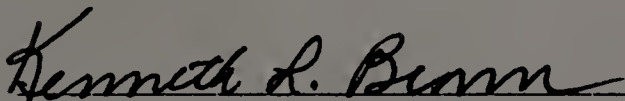
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Education

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DEDICATION

To my husband, Ed, who gave me constant support and encouragement
and to my daughter, Meridith, who patiently waited.

ACKNOWLEDGEMENTS

This dissertation is the culmination of many rewarding years of study. Robert Sinclair has been a guiding force in helping me to make great gains, both personally and professionally. I appreciate his encouragement, support, and confidence in my abilities. I will always be grateful I had the opportunity to work with and be influenced by Robert Sinclair.

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Finally, and most importantly, I thank my husband, Ed. His constant encouragement kept me on track and gave me the determination me to finish.

ABSTRACT

THE PERCEIVED INFLUENCES THAT PROMPT TEACHERS TO INITIATE CHANGES IN CURRICULUM AND INSTRUCTION

FEBRUARY 1996

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Directed by: Professor Robert L. Sinclair

This descriptive study identified the perceived influences that prompt teachers to initiate changes in curriculum and instruction. The study also examined teachers' perceptions of the Massachusetts Educational Assessment Program (MEAP) in relation to curricular and instructional change.

Three major research questions guided the study:

1. What are the perceived influences that prompt teachers to initiate changes in curriculum and instruction?
2. How has the Massachusetts Educational Assessment Program (MEAP) been helpful to teachers in prompting them to initiate changes in curriculum and instruction?
3. How has the Massachusetts Educational Assessment Program (MEAP) fallen short in in prompting teachers to initiate changes in curriculum and instruction?

Data are drawn from 52 teachers in 13 schools representing five different Kinds of Communities in Massachusetts; Urbanized, Economically Developed Suburbs, Growth Communities, Residential Suburbs, and Economic Rural

Centers. Selection was based on reading scores from the Massachusetts Educational Assessment Program. Collection of data were accomplished through a free response interviews about educational change, written surveys of possible influences which might prompt change, and teacher interviews concerning the benefits and drawbacks of the Massachusetts Educational Assessment Program as a prompt in initiating changes in curriculum and instruction.

Findings indicate teachers are most influenced by students' needs and a desire to make learning enjoyable, as well as by workshops, conferences, and courses. Testing was one of the lowest areas of influence for teachers. However, in several schools teachers were prompted by administration to initiate changes in curriculum and instruction because of the Massachusetts Educational Assessment Program.

Teachers indicated the Massachusetts Educational Assessment Program helped them to evaluate and update their present curriculum and their instructional style. Many teachers were not influenced by the MEAP because they were not familiar with the test, did not understand the test results, were given no training, materials, or guidance by their own school system or by the State Department of Education.

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CHAPTER 1

OVERVIEW OF THE STUDY

The purpose of this chapter is to provide an overview of the study. The research problem, purpose, key terms, significance, and delimitations of the study are discussed.

Statement Of The Problem

A national focus on improving education was spurred on by the 1983 release of "A Nation at Risk." This report discussed the poor state of education in our country and created the incentive for many states to adopt reform measures. Some of these reform measures included minimum competency tests for students and teachers, stricter graduation requirements, and higher teachers' salaries.

Massachusetts responded to the need to improve education by passing the School Improvement Act of 1985 (Chapter 188), under which the State Department of Education would be responsible for two statewide testing programs. "The Basic Skills Testing Program aims to identify and assist students who are deficient in mastery of basic skills in reading, writing, and mathematics" while "the Massachusetts Educational Assessment Program is designed to improve curriculum and instruction in the public schools" (Massachusetts Department of Education, 1986, p. 2). Chapter 188 has also mandated that assessment results from the Massachusetts Educational Assessment Program be made public both at the school and district level.

The Massachusetts Educational Assessment Program (MEAP) has been administered biennially since the 1985-1986 school year and is involved in the continuous effort of making the test more effective. The test was developed by

Advanced Systems in Measurement & Evaluation, Inc. of Dover,
New Hampshire.

In 1988, science and social studies components were added. In 1992, the format of the assessment test changed from a multiple choice format to a combination of open-ended questions that required answers to be written in essay form and multiple choice questions. In 1994, the testing year was changed from grade 12 to grade 10 without changing the content of what students are expected to know. This matched the National Assessment of Educational Progress and will be in sync with the current philosophy of no longer segmenting the sciences into biology, chemistry, and physics, but rather addressing each of the sciences within one year.

According to reform measures passed in 1993, the State Department of Education will test students every year. The test will no longer be in the matrix design in which it took 13 students to complete one test. The new test format will insure that every student will end up with a test score. Also, the tenth grade test will be used for graduation requirements.

The Massachusetts State Department of Education provides test information on each school's strengths and weaknesses. This information can then be analyzed by the teachers, administration, and school community for the purpose of making decisions about needed changes in curriculum and instruction. If changes in curriculum and instruction are desired for improved quality of education, then it is essential to investigate the closest link to the learner and that is the teacher. The teacher will ultimately initiate any educational changes in the classroom. Ascertaining and understanding the influences which prompt teachers to initiate educational change will be

essential for any effective reform measure or promoting any changes in curriculum and instruction within the classroom.

Purpose Of The Study

The purpose of this study is to identify the perceived influences which impact teachers when making decisions about initiating changes in curriculum and instruction in their classrooms. Teachers are closest to the learners and ultimately determine what transpires in the classroom. Those influences which teachers report are likely to have a direct link to changes in the classroom.

Further, the study examines how the Massachusetts Educational Assessment Program (MEAP) influences teachers in initiating changes in curriculum and instruction. Assessment tests are frequently used as tools to help teachers develop short-term and long-term educational goals for improving the students' learning. Tests which are appropriate, meaningful, and comprehensible can be a constructive influence on teachers in making educational decisions.

Specifically, the study was guided by the following research questions.

1. What are the perceived influences that prompt teachers to initiate changes in curriculum and instruction?
2. How has the Massachusetts Educational Assessment Program been helpful to teachers in initiating changes in curriculum and instruction?
3. How has the Massachusetts Educational Assessment Program fallen short of helping teachers to initiate changes in curriculum and instruction?

Definition Of The Terms

The definitions which follow help to clarify the key terms used in the study:

Curriculum

There are numerous interpretations for the meaning of curriculum. The recommended curriculum is what experts in the field, professional organizations, and educational commissions believe should be taught. These definitions of curriculum are usually printed in books, monographs and journals.

The written curriculum is the document which may be developed by either the state or local school district. This is to be the guide for teachers to use so that there is some standardization of what is taught in each classroom. The taught curriculum is what the teacher is actually teaching whether it is in the written curriculum or not. The learned curriculum is what the students are really learning. The supported curriculum is what might be found in textbooks, software, and media. It is what teachers use to support the written curriculum and the taught curriculum. The hidden curriculum is what the students learn every day through the culture and climate of the school. This includes the rules and norms of the school. The tested curriculum is the evaluation of what students have learned. This can be done by teacher-made tests, year-end exams, or standardized tests. The excluded curriculum is what has been left out of various curricula.

For the purpose of this study, curriculum will be viewed as environments for learning [Sinclair & Ghory 1987]. In this definition, curriculum encompasses the external environmental conditions for learning as well as the perceptions of those conditions by the students. Physical, social, and intellectual conditions all have an effect on the student's learning behavior.

Curriculum can be further clarified by viewing it as interrelated components of the expressed, the implied, and the emergent. The expressed dimension of curriculum relates to the written or stated objectives for the learner. It is the concrete aspect of content, learning opportunities and evaluation. The implied curriculum refers to the hidden messages students perceive as they go about the process of learning as well as the unintended learning that results from the physical, social, and intellectual environment. The emergent curriculum refers to the continuous alterations, adjustments, and additions the teacher would make to correct or harmonize the connections between the learner and the expressed and implied dimensions of the curriculum. This definition of curriculum by Sinclair and Ghory fits well with the study because it concentrates on the importance of the teacher as a decision-maker in initiating changes to create a dynamic curriculum for the purpose of increasing student learning.

Instruction

Instruction involves establishing learning objectives for the students, creating learning experiences or opportunities to meet the stated goals, and evaluating the students to determine if the educational goals have been realized. Ralph Tyler [1949] states that it is important to have clearly defined purposes in education. “..if an educational program is to be planned and if efforts for continued improvements are to be made, it is very necessary to have some conception of the goals that are being aimed at. These educational objectives become the criteria by which materials are selected, content is outlined, instructional procedures are developed and tests and examinations are prepared” (p. 3). Instruction involves the selection of appropriate learning experiences for the students. “The term ‘learning experience’ refers to the interaction between the learner and the external conditions in the environment

to which he can react. Learning takes place through the active behavior of the student; it is what he does that he learns, not what the teacher does" [Tyler, 1949, p. 63]. Instruction involves the mix of goals, learning experiences, and evaluation. A teacher will most likely initiate changes in instruction because he/she has a new educational goal in mind or because evaluation results indicate that a new approach or different learning experiences are necessary.

Influences

There are numerous types of influences which could be factors in causing teachers to initiate changes. There are intrinsic and extrinsic influences as well as positive and negative influences. An intrinsic influence might include a teacher who initiates changes because he/she wants every student in the class to learn. Examples of extrinsic influences might be making changes after hearing a motivating speech on a new teaching method or a principal encouraging the teacher to pilot a new educational program. Negative influences might include educational changes made as a result of pressure from the principal or school committee to raise test scores. A positive influence might be a colleague who shares his/her successes and expertise with another teacher for the purposes of initiating educational changes.

Perceived Influences

A perceived influence is an influence of which the teacher is fully aware. There may also be many inconspicuous influences that affect a teacher in making decisions. An example of a perceived influence might include participation in a cooperative learning workshop which helped the teacher acquire the needed skills to begin using cooperative learning in the classroom. Although the teacher might indicate that it was the workshop that caused him/her to initiate changes in curriculum and instruction, the teacher might also

have been affected by reading newspapers or magazine articles about corporations training their employees to become team members.

Initiate A Change

To initiate a change implies that a teacher has made a decision to alter, vary, modify, add, or delete something in the curriculum or manner of instruction. Initiating a change might also be more radical like taking on a different position, direction, or course of action. An example is a teacher who evaluates the math progress of his/her students and determines that students lack skills in measurement. The teacher then chooses to research new ways of teaching measurement and begins to introduce those new ideas into the curriculum.

Significance Of The Study

The study is important because it has both practical and theoretical implications for promoting educational change. At all levels in our society, educational change, improvements, and reforms are being discussed. Legislators believe instituting reform packages such as state-mandated tests will improve schools. Administrators and curriculum directors concentrate on providing workshops, speakers, and new programs to elevate test scores. Information about the perceived influences which encourage teachers to initiate changes in curriculum and instruction would provide educational leaders and reformers with insight on the influences which have the greatest impact on teachers. This information could possibly be utilized in developing more effective reform programs and more pertinent professional development.

This study is also important because it addresses the effectiveness of the Massachusetts Educational Assessment Program as a method of promoting educational change. This testing program was instituted to provide school communities with information on their strengths and weaknesses so that

needed changes could be made in curriculum and instruction. Information gathered from this study will provide educational leaders at the state level with data on the uses of test results by educators. The information could be utilized by the Massachusetts Department of Education for affirmation or reconsideration of the assumption that testing is a viable way to encourage changes in curriculum and instruction. Data from the study may also be helpful to future test makers in the areas of development and dissemination of tests as well as communication and interpretation of test results. Also, administrators, curriculum directors, and innovators may be able to use the data to develop a better understanding of the influences that affect teachers when making decisions about initiating a change in curriculum and instruction in the classroom.

Delimitations

This study concentrates on identifying the influences that prompt teachers to initiate changes in curriculum and instruction, not the specific types of changes the teachers are making. There are a multitude of ways that teachers can change curriculum and instruction. In this study the causes or initiating forces of the change will be more important than the actual change.

Another delimitation is the effectiveness of the educational changes that were made by teachers. This study is not concerned with whether the changes were effective or ineffective or even how long the changes were in use. The study concentrates on the initiative that teachers took to make changes in curriculum and instruction with the expectation of attaining educational improvements.

The Massachusetts Educational Assessment Program was developed to provide schools with information about their academic proficiency. This study

does not evaluate the effectiveness of the test nor the accuracy of the results. The study does not judge whether the test should even be administered.

Another delimitation to consider is whether the assessment test forces teachers to teach to the test. Low test scores could create a situation where teachers feel the need to improve scores. The Massachusetts Educational Assessment Program could then be indicated as an influence for some teachers in making educational changes but this would be considered a negative influence.

An additional delimitation deals with the grade levels addressed in the study. The Massachusetts Educational Assessment Program is administered in grades 4, 8, and 12. This study concentrates only on elementary school teachers, grades one through four, so the influences stated by these teachers may not be the same influences for teachers of other grades.

Also not all Kinds of Communities represented in Massachusetts were included in the sample. Only five of the seven Kinds of Communities generated a school score which was needed to categorize the schools into high, average, and low proficiency. Those communities that had a school score were included in the sample.

Review Of The Literature

The review of the literature consists of two major parts. The first section of the literature review, which addresses the first research question, focuses on teachers in relationship to educational change. Included in this area is research on the necessary conditions for educational change to be realized as well as a discussion of barriers to change. This helps to established a background of information on which to develop an understanding of change for interpreting teacher responses.

The second section of the literature review, which addresses the second and third research questions, investigates the effectiveness of utilizing standardized or state-mandated tests to foster changes in education especially in the areas of curriculum and instruction. The examination of this literature uncovers both the effective ways of encouraging teachers to utilize test results for educational change as well as the problems teachers experience in attempting to connect test results to meaningful educational change. This is helpful in understanding how teachers view the Massachusetts Educational Assessment Program (MEAP) and why they were or were not influenced by the test results.

Approach To The Study

The study was limited to western Massachusetts schools communities. Only five of the seven different Kinds of Communities represented in Massachusetts were included in the study since the other two Kinds of Communities were too small to generate a school score. The Kinds of Communities included in the study are Urbanized Centers, Economically Developed Suburbs, Growth Communities, Residential Suburbs, and Rural Economic Centers. Communities not included in the study are Small Rural Communities and Resort/ Retirement/ Artistic Communities.

The names of the communities were written on index cards and then separated into the five Kinds of Community categories. Starting with Urbanized Centers the researcher deposited the cards in a container and randomly drew one card at a time and numbered the card. This same procedure was done for Economically Developed Suburbs, Growth Communities, Residential Suburbs, and Rural Economic Centers. This created a random list of school communities which the researcher contacted. Starting with number one on

the list for each category, the researcher wrote a letter to each superintendent explaining the study. This was followed by a telephone call to the superintendent to answer any questions about participation in the study. If the superintendent showed no interest in being involved in the study, the researcher contacted the next school community on the list until all community, school, and teacher representation needed for the study were met.

Once the superintendent agreed to the study, the researcher followed the superintendent's direction for contacting the teachers which might be through principals, curriculum coordinators, or directly contacting the teachers by letter or telephone in order to schedule the interviews. After the interviews were completed, a thank you letter was mailed to the superintendent and the teachers.

The researcher selected one high proficiency, one average proficiency, and one low proficiency school within each Kind of Community based the 1992 school MEAP score in reading. A high proficiency score was determined by combining the averages of Levels 2, 3, and 4 for a total of 75% or higher. An average proficiency score was between 50% and 74% for the combined averages of levels 2, 3, and 4. A low proficiency score was 49% or lower.

Since some communities, especially in rural areas, did not have three elementary schools, it was necessary to continue selecting additional communities to acquire the necessary number of schools at high, average, and low proficiency in order to complete the study. Also some rural schools, especially schools organized as unions, were eliminated from the study because they had less than 40 students in a grade and therefore no school score was generated.

Four elementary school teachers, in grades one through four, were interviewed in each of the selected schools. A total of 52 interviews were conducted.

The study was guided by three research objectives. They are:

Research Objective 1

Research Objective 1 is : To identify the major perceived influences that prompt teachers to initiate changes in curriculum and instruction.

Research Methodology. First, 52 elementary school teachers, in grades one through four, selected for the study were interviewed. The researcher interviewed four teachers each from a high, an average, and a low scoring school in each of the five different Kinds of Communities represented in Massachusetts. The interview began with a discussion of the meaning of curriculum and instruction. During the interview teachers were asked to think of changes they had initiated in curriculum and instruction over the past ten years. They were asked to identify what influenced them to initiate these changes. Second, teachers were asked to fill out a survey form which identified possible influences which may have been factors in their decision to make changes in curriculum and instruction. This survey form was developed by interviewing twelve elementary school teachers in grades one through four. The selection of these teachers was done by contacting local principals or teachers and asking them to recommend some teachers who would be willing to talk with the researcher for about ten minutes. The interviews were conducted over the telephone and in person. The researcher gave the teacher being interviewed a short overview of the study and then ask the person to brainstorm possible influences that might affect teachers' decision to make changes in curriculum and instruction. These responses were then

analyzed for various categories of influence and then incorporated into questions on a survey form.

Additionally, the survey form included questions about the Massachusetts Educational Assessment Program to insure that data were collected for addressing the second and third research questions. The teacher was asked to circle a number one through four to indicate to what extent each of the influences listed had been a factor in his/her decision to initiate changes in curriculum and instruction. Third, data obtained from the teachers was analyzed by the researcher to determine recognizable patterns and to categorize responses according to frequency.

Research Objective 2

Research Objective 2 is: To determine how the Massachusetts Educational Assessment Program (MEAP) has been helpful to teachers in initiating changes in curriculum and instruction.

Research Methodology. First, the researcher noted if the teacher being interviewed included the Massachusetts Educational Assessment Program as a major influence on him/her in initiating changes in curriculum and instruction. Next, the researcher scanned the survey to note if there was a positive response, either "Greatly Influenced" or "Influenced" to the question which indicated the extent to which the Massachusetts Educational Assessment Program (MEAP) had been an influence on the teacher. If the teacher being interviewed indicated that the Massachusetts Educational Assessment Program was a positive influence in any way, the researcher interview the teacher about the ways in which the assessment program was helpful. The data collected from this portion of the interview was analyzed by the researcher to

evaluate the helpfulness of the assessment program and to identify any patterns of response by the teachers.

Research Objective 3

Research Objective 3 is: To determine how the Massachusetts Educational Assessment Program has fallen short in helping teachers to initiate changes in curriculum and instruction.

Research Methodology. First, the researcher noted if the teacher excluded any reference to the Massachusetts Educational Assessment Program as a perceived influence in initiating any changes in curriculum and instruction. Second, the researcher scanned the survey to note if there was a negative response, "Somewhat Influenced" or "No Influence," to the question about the extent to which the Massachusetts Educational Assessment Program had been an influence on the teacher. If the teacher being interviewed indicated a negative response, the researcher interviewed the teacher as to why the Massachusetts Educational Assessment Program had not been helpful to him/her in initiating changes in curriculum and instruction. The data collected from this portion of the interview was analyzed by the researcher to evaluate why the assessment program had not been helpful to teachers and to determine if there was any pattern of response by the teachers.

To conclude the interview, the researcher asked the teacher background questions. The questions included the grade taught, years of experience, and level of education.

Chapter Outline

Chapter One discusses the research problem, its purpose, and significance. Chapter Two presents the literature related to the elements of change as it relates to teachers and state-mandated testing. Chapter Three

discusses the design of the study, the procedures for sample selection, and the collection of data for each of the three research objectives. Chapter Four contains the analysis of the data for each of the three research questions. Chapter Five summarizes the study and presents the major findings, conclusions, implications, and recommendations.

CHAPTER II

REVIEW OF THE LITERATURE

The purpose of this chapter is to review articles, journals, and books relevant to the two areas of study. First, literature about teachers and the change process will be reviewed. This section of the review includes the historical aspects of change as well as specific research related to teachers and change. Second, literature focusing on testing and the effects of testing upon teachers and curricular and instructional changes will be discussed.

Teachers and the Issues of Change

Teachers are deeply involved in the change process. In some situations they embrace the concept of change and work diligently to learn new skills and understandings while in other situations they reject new ideas or the demands place upon them. This section of the literature review will focus on the history of educational change as well as the issues involved in the change process.

Teachers and the Change Process

The history of planned change began in the 1940's and focused on the diffusion of technical innovations in medicine and agriculture. The literature on change grew slowly until the mid 1950's and then there was a marked increase in the number of studies on change, including educational change. After reviewing over 500 studies on innovations in anthropology, rural sociology, medical sociology, and education, Rogers (1962) developed the social interaction model to explain why individuals accept or reject innovations. Since the majority of early studies concentrated on the individual in relationship to adopting the innovation, there was a great deal of information on initial resistance to change. Researchers, studying methods that could be used to change the individual's attitude toward the innovation, advanced such ideas as

relative advantage, knowledge, peer pressure, leader-follower pressure, and appeals to self-esteem (Bennis and Chin, 1969), (Coch and French, 1948) (Lawrence, 1954), (Zander, 1962).

The concept of a change agent or consultant who was an expert in his/her field and could pass on valuable information and experience was also being studied. Havelock (1973) utilized this information to develop his linkage model.

Many researchers criticized the intense concentration of research on the individual with respect to the adoption of an innovation because it decreased the focus on organizational change. Although some of the information gathered about individuals might be interesting, it did not offer practical methods of manipulating change. Adoption of change does not mean that change has really been implemented or permanently incorporated into the system (Baldrige and Deal, 1975), (Berman, 1978), (Fullan and Pomfret, 1977), (Gaynor, 1977), (Parker, 1980). In fact, many researchers found that because the process and problems of implementation had been not addressed adequately, very little change had actually occurred (Kritek, 1976), (Sarason, 1971), (Pincus, 1974). However, McLaughlin (1976) found there was mutual adaptation in the implementation process. The teacher changed the innovation to fit his/her behavior and the behavior changed to fit the innovation.

During the 1970's the studies on change were beginning to concentrate on political, economic, and organizational factors. Also, the emphasis switched from the adoption process to the implementation process.

Crofton (1981) carried out a major review of studies on educational implementation and identified five important characteristics associated with successful implementation of innovations. First, change is to be thought of as a

process and not an event. Implementation is both lengthy and complex and affected by many factors. Second, there should be a personal and positive relationship between change agents and teachers. Change agents should be knowledgeable about local conditions, be objective, be enthusiastic about the innovation, and maintain a status of a higher level authority. The innovation should also be presented to the teachers in a manner that allows them to make alterations and adaptations to fit their own classrooms. Third, there should be continuous participation by all members involved in the change process from administration down to aides. Fourth, the administration should be actively involved providing support and enthusiasm. Fifth, material resources for implementation should be provided but should also allow for teachers to make needed changes or adaptations to tailor the innovation for their own classrooms.

Fullan and Pomfret (1977) researched fifteen different studies involving the implementation of curriculum and instruction. Through this research they were able to isolate two characteristics of innovation that relate to implementation and four factors which influence the implementation of innovations in curriculum and instruction.

The two characteristics are explicitness and complexity. If an innovation has low explicitness, there will be a lack of clarity, as well as confusion and frustration by the user which will lead to a low degree of implementation. Addressing the problem of low explicitness can be done by giving greater specification of the innovation in the areas of structure, knowledge, understanding, valuing, and commitment. In another approach to the problem of explicitness there is a continual move toward increased explicitness by involving the developers and users in the process of continually co-defining the

innovation during the practice. The second characteristic is the complexity or perceived complexity of the innovation. Within an innovation there may be varying degrees of complexity. Research indicated that teachers found it much easier to accept new curriculum as an innovation but had much more difficulty developing and applying new teaching strategies.

The four major factors that Fullan and Pomfret identified are in-service training, resource support, feedback mechanisms, and participation in decision-making. For in-service training to be effective in implementation of an innovation, it should be intensive as opposed to single workshops or preservice training. The intensive training should provide teachers with demonstration models, experiences, and psychological reinforcements to help with resocialization. Resource support is essential in successful innovations. Teachers needed time to become comfortable utilizing new methods and materials. Also, there should be adequate materials, space, and equipment. The feedback mechanisms refer to the interaction that takes place among participants during the implementation process. There should be exchanges between administration and teachers, consultants and teachers, and exchanges among peers to deal with the problems that will be encountered during implementation. Finally, participation by teachers in the day-to-day decision-making of the innovation and in the problem-solving strategies increased the chances of successful implementation.

Whether studies concentrate on the adoption of an innovation or the implementation process, one factor is crucial to the success of an innovation and that is the teacher. Success of an innovation is not merely a measure of whether the correct procedures were followed but more importantly it is the

measure of the cooperation and involvement of the teacher (Stern, Keislar, 1977). The teacher needs to feel in control of the classroom innovation and must be encouraged to use his/her individual strengths and talents in the innovation process (Shaimline & Red, 1987). Innovators and change agents must treat teachers with respect. They must view them as professionals who are responsible for their own practice (Mohr, 1985). As professionals, teachers need to be made part of the innovation process. There needs to be greater teacher involvement at the planning process of an innovation. This will help to insure greater cooperation and a more positive attitude toward the innovation (Beauchamp, 1974), (Langenbach, 1972), (Mahan & Gill, 1972).

Congruence is another crucial aspect in the innovation process. Congruence is the natural fit of an innovation. The teacher must be in agreement with the innovation. If a teacher does not see the value of an innovation or the innovation is in conflict with the teacher's educational philosophy, the innovation will be viewed negatively. Successful implementation of an innovation will be extremely difficult if not impossible (Scherwitzky, 1974).

Many innovations which are first introduced may be received negatively. It is then the obligation of the innovator or change agent to convince teachers that the innovation is sound and will be a benefit to the student. Changing ideology and behavior is not an easy process and can not be accomplished in a brief workshop or in-service. There must be a commitment to continued demonstrations and teacher experiences along with the knowledge and research from developmental child psychologists (McCauley, 1972). Teachers must be willing to change their attitudes and accept new beliefs and values before the innovation will realize success (Wlodarczyk, 1972). If the innovator

or change agent is unable to convince the teacher to accept the innovation and the teacher is antagonistic toward the innovation, it is better not to insist on the implementation of the innovation (Stern & Keislar, 1977).

Etchberger and Shaw (1992) conducted a study on teacher change as a progression of transitional images. The teacher involved changed from a dispenser of information to teacher with a more constructivist viewpoint through the process of journal reflections. The constructivist philosophy considers the gathering of data as only the first step in change. There must also be reflection, collaboration, consensus, and finally sharing of the knowledge or understandings. Etchberger and Shaw also cite the work of Shaw, Davis, Sidani-Tabbaa and McCarty (1990) which identifies conditions which are considered necessary for change to be realized. First is perturbation which is the teacher becoming dissatisfied with the way things are going in the classroom. This could include her teaching methods or the way students are developing an understanding of the content. Second, the teacher becomes aware that the only way to improve things is to make a change. Third, the teacher makes a commitment to change. Fourth, the teacher has a vision of what the change will be like. Fifth, the teacher projects a vision of both she and the class accomplishing the change. Finally, the teacher can physically act on the change.

Models of Change

Theorist have developed numerous models to explain the process of change. Paul (1977), as quoted in Waugh and Punch, (1987) categorizes the various models into four basic types. The problem-solving model (Bennis, Benne, & Chin, 1969), (Lippitt, Watson, & Westly, 1958), (Watson, 1967), (Fullan, 1972), (Mann, 1976) focuses on diagnosing the problem, developing

solutions, implementing one solution on a trial basis, and then total implementation.

The social interaction model (Rogers & Shoemaker, 1971) stresses communication for the purpose of diffusing knowledge about the innovation, persuasion to help form positive attitudes toward the innovation, decision-making for the purpose of adopting or rejecting the innovation, implementation of the innovation and confirmation or reinforcement of the innovation decision.

The research-development-diffusion model (Clark and Guba, 1965) stresses the idea of a rational sequence from research through implementation. As soon as teachers view the innovations as valuable, the innovations will be immediately implemented.

The linkage model (Havelock, 1969, 1973), (Havelock & Lingwood, 1973), (Lindquist, 1974), (Lingwood and Morris, 1974) includes five steps. The first step is problem-solving and identifying those who will help in dissemination and implementation. Second, it is necessary to determine the needs and turn those identified needs into problem statements. Third is to conduct research and fourth is to produce solutions. Finally, a working relationship is established between users and researchers.

Paul (1977) also classified these models of change with reference to strategies of change.

Empirical-- Rational Strategy: Assumes men and women are rational and that they will make rational decisions. Changes are adopted if they can be justified rationally and if they are shown to be in one's best interest.

Normative--Re-educative Strategy: Assumes men and women are heavily influenced by and committed to socio-cultural norms. Men and women hold attitudes and values supportive of these norms and have commitments to them. Change in practice comes about when people change their socio-cultural norms and thereby change their attitudes and values which supported the old norms.

Power--Coercive Strategy: Assumes men and women will comply with those with more power and thereby change. The power may be legitimate and represent formal authority, e. g., laws and policies. Conversely, the power may be coercive regardless of perceptions of its legitimacy. (pp. 31-32)

Schlechty (1988), through research on the management of the change process, has developed a general framework of ideas to help understand change in the schools. His ideas seem to reflect a combination of the problem-solving model and the social interaction model. These ideas include the importance of defining the problem to be solved, understanding and sharing the problem, and coming to consensus. Roles must be developed to carry out the functions of change. These functions include the conceptualizing function which identifies and defines the problem as well as advances the solutions. The propaganda function serves to make all those affected by the problem and the solutions aware of the situation so they can be persuaded to become a part of the change. The feedback function is essential for obtaining information at the lower levels. Frequently those in power positions tend to soften the negative responses of resisters to change and therefore the whole change effort can be sabotaged. Consequently, it is important to have informants at the lower level to insure honest feedback. The implementation function deals with carrying out the planned change. For change to be effective it must be carried out by everyone, it can not be a pilot program or an

experiment. There should be some sort of monitoring at every step of the implementation process so that decisions can be made about forging ahead or abandoning the proposed change. For successful change to occur the manager of the change must be the highest authority to be affected by the change or must be a person who can use the power of the highest authority. Another element of successful change is that those who will be directly affected by the change be actively involved in the decisions about the change process, including defining the problem and developing the solutions. Planning and implementation can not be considered two separate entities. In a sense, planning is implementing. Strategy is considered to be more important than tactics. A clear vision of what is expected as the end result of the change process is needed. The tactics will continually change as the environment changes. Finally, action must occur even on limited data and that action will produce new data which will help to maintain the stream of change.

Change is very complex and many feel that the theories are not adequate to explain the educational change process which occurs in schools. (Crofton, 1981) Since schools are a complex social system in which complex changes are taking place, simple models of change will not adequately explain the complicated process of change.

Barriers and Difficulties in Realizing Change

Similar themes on the barriers to change kept reappearing in the literature review. These themes encompassed the ideas of comfort versus risk-taking, congruence of philosophy, and self-esteem. Giacquinta's concept of the change process offers a comprehensive view of why change may be so difficult. The following detailed explanation of Giacquinta's concept of change will provide a basis upon which to understand the findings of other researchers.

Giacquinta (1975) proposed status risk-taking as an important concept to consider in the change process. Schools are viewed as complex organizations because they consist of formally defined positions or statuses such as principals, teachers, and students. Accompanying each of these statuses is a set of expectations for behavior or norms that are called roles. These roles allow us to see patterns of interaction between members of the organization. The organizational positions are associated with perquisites such as financial benefits, job security, decision-making rights, prestige, esteem, mental and physical gratification, and promotion potential. In this discussion of status risk-taking, the social theory espoused is that members of the complex organization are concerned with the self. The members are basically interested in what's best for themselves although this self-interest can be concealed by altruistic behaviors. Additionally, the altruistic behaviors can satisfy the member's personal goals which leads to a compatibility between the individual goals and organizational objectives.

Organizational innovation is defined as any alteration of the statuses or roles of school personnel or any modifications of the patterns of interaction within the school. New materials are frequently included in the innovation. Teachers often view the materials as the innovation rather than the idea that first there must be a change in the status or role expectation. Thus, in order to successfully implement a new material, there must be a change in patterns of interaction or the role and status of the individual.

Frequently innovations never get beyond the initiation stage. There is a lot of talk and behavioral commotion but little movement toward the implementation of the innovation. One reason for this is that personnel must change behavior, habits, and attitudes to be in sync with the innovation. This

needed change causes uncertainty and risk for the participants because their status and/or role will be changing. The perquisites with which school personnel have become comfortable may be threatened. The perquisites mentioned previously will also be a focus of the school personnel even if not openly mentioned. They will be concerned with whether the perquisites will increase or diminish, whether the required extra work will be worth it to them, and whether their informal, outside statuses will be affected. For instance, the extra work connected with the innovation might mean that a teacher has less time to spend with his/her family and therefore the role as parent is being threatened.

Innovations bring uncertainty to participants which bring about an evaluation of the risks involved. The higher the risks, the less likely the participant will be to implement the innovation. Participants can reject an innovation either by openly refusing to comply or subtly undermining the innovation. Teachers can undermine an innovation by doing such things as reverting to their old methods after completion of the implementation process.

One of the recommended procedures for dealing with status risk-taking is to develop a risk profile for each person. This is a difficult task because each person perceives the risks of the innovation differently. Each person has different outside statuses that affect them. Also the perceived risks may change as the participant faces new experiences, reflections, and feedback from the environment. Therefore, there is a need to constantly monitor the participants throughout the introduction and implementation process. Additionally, it is essential that the change agents present clear information about the innovation and its ramifications. Also to insure that old behaviors are eradicated, it is

necessary for the school to create situations in which new behaviors are valued and reinforced.

A strategy for success of an innovation is participation in the decision-making process. It is considered to be important because it is more democratic and might lead to an increased commitment on the part of the participants. The status risk-taking framework is in agreement with that viewpoint when it expels uncertainty and reduces the perceived risks. However, the increased participation by the school personnel may lead to the discovery of additional uncertainties and risks. This may answer the question why participation does not always assure successful implementation or why the innovation becomes watered down from its original concept.

Marris (1975) concurred that whether change was voluntary or imposed it was natural for people to experience loss, anxiety, and struggle. The initial reaction to change is to feel ambivalent. Marris indicated the meaning of an innovation must be shared before it can be accepted. Any circumvention of the natural struggle to bring about shared meaning would be useless. The following quote from Marris highlights the importance of respecting individuals by allowing them the time to accept and integrate the idea of an innovation.

No one can resolve the crisis of reintegration on behalf of another. Every attempt to preempt conflict, argument, protest by rational planning can only be abortive: however reasonable the proposed changes, the process of implementing them must still allow the impulse of rejection to play itself out. When those who have power to manipulate changes act as if they have only to explain, and when their explanations are not at once accepted, shrug off opposition as ignorance or prejudice, they express a profound contempt for the meaning of lives other than their own. For the reformers have already assimilated those changes to their purposes, and worked out a reformulation which makes sense to them, perhaps through months

or years of analysis and debate. If they deny others the chance to do the same, they treat them as puppets dangling by the threads of their own conceptions. (p. 166)

Schon (1971) also shared a similar philosophy of change as Marris. He spoke of change as zones of uncertainty which individuals must move through in order to develop shared meaning.

Sarason (1971) also found that change is usually met with suspicion and reluctance when the innovation, whether it be a new practice, policy or program, does not fit with the present philosophy of the school.

Teachers' attitudes towards change may also have a direct effect on the success of an innovation. Sparks (1988) conducted a study to investigate three teacher attitudes in relationship to observed change. They were philosophical acceptance of an innovation, perceived cost of the innovation, and self-efficacy. Philosophical acceptance (Doyle and Ponder, 1977) relates to the teacher's perception of practicality. If a teacher perceives that a new teaching practice is practical and fits in with his/her present method of teaching, he/she is more willing to accept the new practice. This is called congruence.

Rosenholtz (1989) also found in her study of the teachers' workplace the importance of shared consensus. She found schools which exhibited a high consensus about goals and organization were more likely to accept new ideas related to student learning and show continued improvements as opposed to those schools which had low consensus and teachers exhibiting a tendency toward isolation.

The perceived cost of an innovation (Doyle and Ponder, 1977) relates to how easy or difficult the innovation is to use and the benefits the teacher sees in using it. Difficult and complex practices will not be implemented if the teacher

views them as too costly. Lortie (1975) found teachers were reluctant to change because the innovation did not address the issues such as time scheduling, student disruptions, psychic rewards, boundedness, and interpersonal support.

House (1974) indicated teachers are reluctant to change if they are uncertain about the benefits of the change. He referred to innovations as "acts of faith" which require personal investments of time and energy to learn new skills or roles and frequently without immediate results. The greater the personal cost of the innovation the greater the resistance.

Self-efficacy (Ashton, 1984) relates to the confidence a teacher exhibits in his/her own ability to control the classroom. Those teachers with strong self-efficacy are more likely to improve because of their confidence to take risks and to experiment. In this study Spark investigated the relationship between teachers' attitudes and the use of new practices and the differences between improving and non-improving teachers after in-service training was provided.

The most significant difference between improving and non-improving teachers was in their rating of the importance of the innovation. Non-improving teachers did not become convinced that the innovation was of importance to them. In interviewing teachers it was discovered there was little congruence between the teachers' preferred method of teaching and the innovation. Teachers did not believe in the value of the changes, did not feel the changes would be good for their students, and were not willing to make changes at that time.

Another difference between the improving and non-improving teachers was in self-efficacy. Improving teachers developed more control of their teaching environment, were more confident in their ability to handle classroom problems, were more aware of problems and how to deal with them

successfully. Non-improving teachers had lower expectations for their students. They appeared to have given up on their students as well as their ability to increase student learning.

Spark's (1988) suggestions for increasing teacher receptivity to innovation include discussions to compare present and proposed new teaching practices, the benefits the innovation will have for students, small discussion groups for teachers to express their positive and negative feelings, informing teachers of the theory and research behind the innovation, access to people who have success with the innovation. Also, to counteract the low self-efficacy of some teachers, it may be necessary to provide support groups for sharing and problem-solving.

At times administrators and innovators can be misled into believing that innovations have been accepted and implemented by teachers. When teachers are given general goals to personalize for their own particular situation or teachers volunteer to participate in an innovation effort, it is often assumed that the implementation process is complete. However, no change may be realized. False clarity occurs when teachers accept the outward signs of an innovation but make no real changes. Painful unclarity occurs when teachers attempt to implement an unclear innovation without support needed to develop an understanding of the innovation. In a study of 158 classrooms Goodlad, Klein, & Associates (1970) found teachers who had implemented such innovations as team teaching and individualization had personalized them to such an extent that the innovations conformed to their previous teaching patterns and did not resemble the stated innovation in its true form. Teachers who were mandated to implement abstract goals stopped the

implementation process after becoming confused, frustrated, and anxious (Charters & Pellegrin, 1973, Huberman & Miles 1984).

Hall (1992) found the policy-maker and the teacher in the classroom misunderstood and misinterpreted each other. Teachers felt the policy-makers viewed their classroom responsibilities as relatively simple and straightforward and therefore failed to recognize and /or accept the complexities in the classroom. Teachers were feeling low status as well as being continually bombarded by innovations and solutions. Policy-makers were viewed by the teachers as having a relatively easy life by espousing simplistic solutions. This misunderstanding of perspective has had the negative effect of lowering the success rate of curriculum development and implementation. Teachers were feeling overwhelmed, under-supported, and resistant to change.

This resistance could best be explained by the term "classroom press" (Crandall et al., 1982). This term was used to explain the demands upon the teacher in the classroom which included immediacy and concreteness since teachers experience 20,000 interchanges a year which require immediate action. Teachers are multidimensional since they perform a variety of duties and these are usually performed simultaneously such as interacting, monitoring, and assessing students. Teachers must adapt to constantly changing conditions and unpredictable situations on a day-to-day basis as well as develop and maintain personal involvement with their students so that student learning will be more successful. Huberman and Crandall found these teacher expectations created a situation in which teachers developed a short term perspectives, felt isolated from adults and meaningful interaction, felt exhausted both at the end of the week and the end of the year, and felt they had little time to reflect on the educational process in the classroom. The

isolation created a situation where teachers did not seek out information outside of their classrooms and therefore change was received negatively.

Another problem area which Hall has denoted is that of an imbalance between development and implementation. Great amounts of time and money are spent on development but very little on implementation. An example is the multi-year project to develop the curriculum frameworks in California in 1991. However, when it came to the implementation there was only a request to submit a district-wide plan and a school plan. Development and implementation should be equal in the change process in both time and finances.

Hall also mentions that there is frequently no common agreement on the definition of a particular innovation among teachers, schools, policy makers, and innovators. Consequently, what is being done under the name of the same innovation will differ in various schools.

Another barrier to change for teachers encompasses the issues of standardized testing in the classroom. Frequently teachers receive basic knowledge of measurement and evaluation in their teacher education programs but the amount of time devoted to testing issues by professors is limited (Goslin (1967), Roeder, (1972), Rudman, Kelly, Wanous, Mehrens, Clark, & Porter (1980). Professors would rather spend time on topics which they feel are important to the teachers. Gullickson (1986) found elementary teachers favored student evaluations in the form of class discussions, student papers, and student behaviors rather than tests. However, at the secondary level teachers favored the test rather than the informal evaluations. Gullickson advocated spending more time on instructing teachers in the use of the measurement tools teachers use in order improve teacher practices. In fact, this has been the focus

of the recent educational movement toward authentic assessment which includes using many types of informal assessments. Included in the authentic assessment movement are the areas of whole language, portfolio assessment, multiple intelligences (Gardner 1983), process writing, reading recovery, miscue analysis inventory (Goodman, Waston, Burke 1987), holistic evaluations, individual student and teacher conferences (Graves, 1983), informal and formal observation notes (Goodman, Goodman, & Hodd 1989), daily reflection notes (La Forge 1979), and student self-evaluation.

Implementation in Relation to the Change Process

Another crucial aspect of successful innovation is implementation. It was not until the 70's and 80's that studies were diverting their concentration from innovation development and toward implementation. It was this move toward the study of implementation which brought into focus the idea that change was not an event but rather a process (Hall, Wallace, Dossett, 1973). This way of thinking focused on how money was being used for innovations. Most money was being directed toward the development of the innovation but very little toward the dissemination and even less toward implementation.

Implementation of innovations was done in various ways. Hall (1992) suggests that we must first understand that innovation is the actual change which is desired and interventions are the actions or activities by the policy-makers or change agents to help facilitate the use of the innovation by the teachers in the context of the classroom, school, school district, or the state. Successful change occurs when change agents intervene to help teachers in such areas as defined by the concerns-based adoption model (CBAM) which concentrates on the change process for individual teachers and schools in three areas of stages of concern, levels of use, and innovation configurations.

In this approach it is suggested that schools do not change until the individual teachers within the school change first (Hall & Hord, 1987; Hall, Wallace & Dossett, 1973).

Successful implementation required that there was a mutual adaptation in that there was a natural fit of the innovation and the users of the innovation. (McLaughlin 1990, Rand Change Agent Study, 1974-1978). Hall (1992) indicated that misunderstandings between those involved in policy and practice affect the rate of success in both the development and the implementation of curriculum. Teachers view their life as extremely complex whereas policy-makers frequently fail to recognize or accept the classroom complexities and view the teachers' lives as simple and straightforward. Policy-makers are viewed by teachers as having an easy life developing simplistic solutions. Without a shared vision and mutual respect of each other's roles and responsibilities, meaningful change will be in a gridlock. Teachers tended to resist change because they felt low status along with overwhelming pressure to change. The policy-makers become impatient and moved ahead with more ardor creating more invasive policies.

The principal has also been studied as a change agent to facilitate the implementation of innovations. Hall (1992) discusses the term strategic sense used by Hall & George, (1988) to define the way principals think and work within their school in relation to implementing an innovation. Some principals only think on a day-to-day basis while other principals can picture the entire innovation process and all the activities building upon each other to finally reach the goal of complete innovation implementation. Studies have shown that those principals having a day- to-day perspective on implementation of innovation experience less success (Hall et. al., 1984).

Another concept of implementing change is the idea of middle-level guiding parameters. Instead of the top down decision-making, the top administrators assign tasks to be completed that are not too precise so as not to constrict the thinking of the teachers and principals and not allow them the opportunity to modify an innovation to meet their individual situations. The tasks are also not too vague so as not to leave teachers and principals confused as to what should be accomplished. In order to accomplish this middle level planning some schools have created new leadership roles for teachers such as lead teachers (Hall & Galluzzo, 1991).

Testing

Testing and its relationship to teacher change will be examined in this section of the literature review. Also included in this section will be an overview of testing in relation to accountability and curricular and instructional change. The non-benefits of testing as well as using testing as a smokescreen to change will also be discussed. The review will conclude with a discussion of testing's relationship to the future needs of society.

Testing and its Relationship to Teacher Change

Testing and its relationship to teacher change will be examined. Included in this section will be an overview of testing, accountability in relation to testing, nonbenefits of testing, and testing's relationship to the future needs of society.

The 1983 report by the National Commission on Excellence in Education criticized American education to such a degree that numerous reform measures were created. These measures developed new and expanded testing programs. These mandated tests could be used for a variety of purposes. In a review of possible uses of tests conducted by Haladyna, Haas, and Nolen, (1989), 29 uses of tests were categorized into seven areas. On the national

level, tests were used to allocate resources and evaluate federal programs. At the state level test were also used for allocation of resources and program evaluation as well as an evaluation of the state's progress toward relevant standards. At the school district level there was an evaluation of the central administration, building administration, and teachers in the areas of evaluation of the districts, schools, teachers, curricula, and instructional programs, as well as grouping of students for instruction, diagnosing achievement deficits, placement of students into special programs such as handicapped, gifted, etc., promotion and graduation. The public, which includes parents, school board, press and lay people, used test scores to evaluate the state's status, diagnose achievement deficits, and develop expectations for future success. Testing was also used as smokescreen, appeasing both the public and state leaders but having no connection to real change or improvement. This section of this literature review will examine testing and issues related to teacher change and testing.

The first standardized test used in public schools was the Thorndike Handwriting Scale developed in 1909. By the 1930's most schools had some form of standardized testing but on a very limited scale. Most people completing high school in the 1950's would have taken three standardized tests. Students completing high school in 1991 would have taken an average of between 18 to 21 standardized tests. Before 1965 the majority of tests were given in the early grades to evaluate natural growth and development. However, after 1965 with the advent of new federal and state resources for schools, tests were used as an easy and inexpensive way to meet requirements. In the 1970's there was increased attention on accountability and tests began to determine the standards in all curriculum areas. By the end

of the 1980's there was frequent testing of children in the primary grades. Presently 16 states and 21 districts in other states require standardized testing for entrance to kindergarten and 42 districts require passing a standardized test before passing to the next level (National Commission on testing and Public Policy, 1990). The business of testing has continually grown since the 1950's at an annual rate of 10 to 20 percent (Haney & Madaus 1989).

Assessments have two fundamental goals. "First, assessment establishes performance standards and goals; the tests become the benchmarks of learning and educational effectiveness. Second, assessment drives the design of curriculum and instruction by signaling the valued objectives of education" (Paris, Lawton, Turner, Roth, 1991, p.12). The public, political leaders, and commercial testing firms are all interested in maintaining these goals. The public and political leaders are looking for accountability while commercial firms receive huge profits from selling their tests and providing scoring services and data reports.

The California Achievement Test, the Iowa Test of Basic Skills, and the Stanford Achievement Test are among the most widely used tests. Although the tests are deemed to be reliable, some researchers have questioned their validity. They feel these tests espouse outdated educational theories about learning and cognition being measured through isolated skills (Resnick & Resnick, 1989). Other researchers indicate that the tests do not match classroom curriculum and methods by which students learn. Therefore, these tests lack instructional and curricular validity (Linn, 1987), (Wiggins, 1989). Frequently the inferences which are made from test results are questionable because of test pollution (Haladyna, Nolen, and Haas, 1991).

Another type of assessment, measurement-driven instruction (MDI), increases the validity of testing by first establishing educational objectives and then designing or purchasing a test to match those stated objectives. In this type situation teachers are allowed to teach to the test since it matches the educational goals of the school (Airasian, 1988). The main drawback is that both the educational objectives and the test are developed externally without input from the teachers.

Although much standardized testing is conducted in classrooms, it does not necessarily follow that teachers actually utilize the results to make changes in the curriculum or instruction. Anderson (1990) expressed concern about the connection between testing and learning.

Questions have been raised as to the utility of procedures developed through educational measurement to teaching and learning. There appears to be a disparity between the science of measurement and the craft of evaluation as practiced in the classrooms. (123-124)

In a study Gullickson (1986) conducted on teachers' perceived needs in measurement, he found that teachers were much more interested in nontest methods which could be utilized for instructional purposes. Johnston (1987) related the goals of collecting objective data for the purposes of classification, accountability, and monitoring progress as really subgoals. The true goal of evaluation is to provide optimal instruction and therefore evaluation is only worthwhile if it meets that goal. Shavelson and Stern (1981) indicated that we really should not be concentrating on refining tests and testing since most instructional decisions made by teachers in the classroom were based on informal observations of their students and hunches which were made on a moment-to-moment basis. Informal observations gave more pertinent

instructional information to teachers than objective test data. Clay (1985) advocates teacher evaluators using running records to monitor a student's oral reading progress and Graves (1983) contends that a five-minute conference with a student can help the teacher to evaluate the student's understanding of the reading and writing process and thereby give direction to the teacher in making instructional decisions. Although informal evaluation may be more time-consuming, it is a more effective method of insuring optimal instruction. Frederiksen (1984) indicated standardized tests are efficient for using objective data to make comparisons of individuals and groups but it is both expensive and wasteful as well as interfering with the goal of providing children with optimal instruction.

Arizona had been mandating standardized tests for all students in grades 1 through 12 since the 1980's. Teachers spent time preparing the students to take the test and some districts changed their curriculum to teach what was on the test or bought special programs to help boost their scores. Teachers and principals felt pressure to raise scores because of the newspaper publicity. Finally in 1987 the Legislature passed a reform measure called the Goals for Educational Excellence which concentrated on raising performance standards. To establish whether students could perform the standards, new assessments were developed to match the standards of the documents and norm-referenced standardized testing was reduced so that teachers could concentrate on the curriculum and not worry about testing. In 1989, testing was made optional except for a small sample. A third grade teacher, Cynthia Giroux, explained the educational transition in Arizona this way: "We had to change the testing to change the system" (Eaton, 1992).

Goodman (1992) contends that in the past seventy years there has been the development of the educational myth that measurable things are important and things that aren't measured or can't be measured aren't important. This myth is the reason why tests control the curriculum. Writing declined in schools because it wasn't tested on the SAT exam. Students are reluctant to learn anything unless they know it's going to be on the test.

Testing and Accountability

Testing provides a convenient method of maintaining accountability of teachers, schools, and administrators. The reform movements of the past decade have changed the perspective on how education is viewed. "School success is no longer defined primarily in terms of providing services (processes) but rather in terms of product quality, namely student learning outcomes (Murphy and Hart 1988), (Finn & Rebarber, 1992, p.9). Test scores are used by parents, legislators, and school communities to evaluate the product quality of individual schools or entire school communities. Low-scoring schools may find themselves either defending present teaching practices and curriculum or be faced with a barrage of innovations to help raise test scores (Rogers, 1990), (Ellwein, Glass, Smith, 1988).

The political use of test scores affects teacher accountability. Newspapers publish test scores with incomplete explanations about test results which then compare teachers, schools, and communities. Scores are even used by real estate agents to sell houses. In some situations, test scores are used to determine merit pay and allocation of state funds.

Accountability through expanded assessment programs reflects the increased interest in developing better quality schools and insuring that the students in all schools have the same educational advantage. In a study done

by the Ministry of Education in British Columbia, it was found that more than 90% of both the general public and educational professionals believed that standards should be set for all schools, all grades, and all subjects. More than 95% of both of these groups also believed that the standards should be monitored. More than 50% of both groups favored government exams as opposed to teacher tests. Also, more than 75% of the general public and more than 65% of the educational professionals believed that post-secondary entrance requirements should determine secondary curriculum and standards. This study brings to focus the desire for accountability through the setting of standards and developing of curriculum which will meet those standards. Overwhelmingly, testing is desired to monitor the achievement of those standards. The reasons cited for the provincial exams were: "To uphold standards; to ensure uniformity among districts; to measure, evaluate, and monitor student achievement; and to evaluate and monitor teacher performance. Those opposed to province-wide tests stated that such tests 'inhibit learning,' lead teachers to teach to the tests, and are expensive and a waste of time" (Rogers, 1990, p. 59).

In the above study more than 50% of both teachers and parents believed in government exams as opposed to teacher-made exams. However, standardized test data is frequently accepted without question and comprehension. Frequently teachers and parents are not knowledgeable about test design, scoring, and interpretation. In one study it was found that 34% of the teachers felt comfortable interpreting test scores with parents while 64% felt threatened. When teachers were asked about their school districts

providing training for test interpretation, only 10% of high school teachers and 23% of others felt their training was adequate (Nolen, Haladyna & Haas, 1990).

Curriculum and Instructional Change to Increase Accountability

Making teachers accountable puts pressure on them to adhere to curriculum which they know will be tested. Teachers may concentrate on low-level skills and facts instead of higher-order thinking skills which are difficult to assess such as discovering solutions, doing experiments, and problem-solving (Devaney & Sykes, 1988). If a test contained high-order thinking skills, there would be no problem teaching to the test. At the present time there is a mismatch between the tests which hold teachers accountable and the higher-order thinking skills (Frederiksen, 1986). This creates a vicious cycle in which teachers change their instruction and curriculum to increase test scores so there is the appearance of better quality schools but in truth no meaningful educational gains for the student may have been realized. Change is for the purpose of increasing test scores and not evaluating the true needs of their students in their individual communities or their philosophy of education on how students should be taught.

One of the tactics often proposed to realize change in teachers is the use of merit pay based on test scores. Without merit pay there was a belief that the present system tolerated low-performing teachers and did not reward high-performing teachers (Schlechty, 1988). However, in the study done by Huberman and Miles, (1984) where merit pay systems were already in force, many teachers negotiated for high-achieving students. Thus, teachers were not changing their instructional techniques or curriculum to service the low-achieving student, but arguing against receiving them.

The importance of testing has increased along with the increased interest in accountability. Since teachers feel the pressure to raise or maintain their students' test scores, there is an increased problem with test score pollution. This pollution reduces the validity of test score interpretation and limits the use of tests (Haladyna, Nolen, Haas, 1991).

Messick (1984) believed test score pollution was prevalent throughout the United States and affected both public opinion and policy which then impacted education. Test score pollution is related to accuracy and truthfulness of the interpretation of a test.

Three forms of test pollution are identified. First are the different methods used to prepare students for the test. The second deals with how the test is administered and third are external factors such as not indicating what influence the family, economic environment, or language proficiency might have on the test scores. Haladyna, Haas, Nolen (1989) and Mehrens & Kaminski (1989) documented the following test pollution practices.

These include (a) teaching test-taking skills, (b) promoting student motivation for the test, (c) developing a curriculum to match the test, (d) preparing teaching objectives to match the test, (e) presenting items similar to those presented on the test, (f) using commercial materials specifically designed to improve test performance, and (g) presenting before the test the actual items to be tested.

Polluting practices also occur during the actual administration of the tests. These include (a) "cleaning" answer sheets by darkening responses and erasing stray marks, (b) dismissing low-achieving students on test days, and (c) interfering with responses (e.g. giving hints or answers to students or altering response sheets). (Haladyna, Nolen, Haas, 1991) p. 4

There are many different viewpoints on whether the above practices are ethical or not. If a test publisher recommends using a particular practice, it

would then be considered ethical. According to Haladyna, Nolen, and Haas, the only ethical practices are teaching test-taking skills, increasing student motivation, and checking answer sheets for completion. However, even ethical practices can pollute if everyone being compared is not using them.

Testing as a Smokescreen of Change

Many of the initial legislative reform measures and testing programs did not culminate with educational improvements. Researchers found that competency testing and standards were more symbolic and political in nature than true reform measures (Ellein, Glass, and Smith, 1988), (Anderson, 1982), (Airasian, 1987).

Ellwein, Glass, and Smith (1988) found the public image of the test was extremely important. The standards should be set high enough to be viewed as rigorous but safety nets should be available for students who could not meet the standards. With the safety nets in place the schools could maintain the status quo. Safety nets included allowing students to retake the test anywhere from one to eleven times, allowing students to substitute another standards or test, allowing test exemptions for certain students, and allowing teachers or administrators to overrule the test results. Safety nets were supposed to protect the student but it also relieved the school districts from having to provide additional personnel to remediate the large number of students who would fail. This also restored professional discretion at the district level which was being threatened by the external testing programs.

The desire for a positive public image even altered the method of reporting test scores. Since it was felt that raw scores would be viewed as much too low to be acceptable to the community, standard scores were developed that appeared more scientific.

Initial interest and involvement in the test development was high but continually waned with the passage of time. Great attention was paid to test development, setting the standards, and implementation but very little attention was paid to any follow-up. The impact, utility, and value of the test was not considered. This was an example of developing the test as an end and not as a means to improvement.

According to Anderson (1982), the new tests to monitor policy had little impact on schools and students because test results were used to monitor and not to motivate schools or teachers to make any changes. Frequently tests were given only on a voluntary basis and the test scores generated were not representative of every school and individual within the school system. There were no consequences if a school did poorly and the test results were seldom used when making educational decisions within the school system (Airasian, 1987).

Airasian (1987) speaks of the indirect effects of the early reform measures. First, the publication of test scores succeeded in making the general public and educators evaluate their school system in relationship to neighboring school systems. Second, test scores became an acceptable and trusted means of evaluating school systems both by the general public and educational policymakers. Third, the dismal reports about the state of educational illiteracy created the impetus for more accountability of the educators by developing more intrusive testing programs. The new testing programs are no longer monitoring educational policy or guiding instruction, they are involved with actual certification. In the second wave of reform movements, tests have become the crucial element of change (Airasian and Madus, 1983).

This may be accomplished by the state giving teachers some guidance as to what students should know but not requiring teachers to adhere to a state-mandated curriculum (Smith and O'Day, 1991). According to Michael W. Kirst, programs and policies need to reinforce one another. He does not advocate state-wide teaching methods but does suggest that an assessment system could provide information about student learning so that local restructuring could take place.

Drawbacks of Testing

Testing may have serious drawbacks which have negative influences on the quality of education that students receive. Teachers and schools may be coerced either directly or indirectly to conform to a state curriculum in order to maintain high test scores. By conforming to test standards the individual needs of the students and the community may be compromised. The quality of education will be diminished by focusing on testable curriculum as opposed to developing higher-order thinking skills which are not frequently included in test situations.

Making teachers accountable puts pressure on them to adhere to curriculum which they know will be tested. For instance, in the 1980's the Texas legislature enacted a law which forced teachers to teach reading from only state-approved basal readers. A teacher would be assessed a \$50 fine if he/she was found defying this law.

Although the state-testing's ultimate goal is to improve education, it may in fact promote the opposite effect. In one study it was found that external testing programs narrowed the curriculum offerings, reduced the time devoted to instruction, curbed the variety of instruction, and limited the teachers' use of

content, materials, and methods that did not complement the standardized testing format (Smith, 1991).

Smith (1991) cites the results of a study on the external effects of testing on teachers which was conducted in 1989 by Smith, Edelsky, Draper, Rottenberg, and Cherland. External testing has several negative effects on teachers. When test results are published, teachers feel shame, embarrassment, guilt, and anger over the scores. Teachers are willing to make change in order to prevent this from happening again. Even if the students received high scores, the teachers continually feel pressure from administrators to maintain those high scores. This creates further anxiety for teachers since they have no control over which students are assigned to them and no control over how their students do on the test.

Teachers perceive that principals are also affected by the students' test scores. Principals get pressure to keep up the test scores and they pass that pressure along to the teachers. In some instances principals are transferred or fired because of low test scores.

Teachers also feel alienation and dissonance because they are required to maintain high test scores while having negative feelings towards the test. There is frequently a mismatch between what is taught in the classroom and test items. Test scores have little meaning for teachers when they view the test as worthless.

Teachers also worry about the impact that testing has upon their students in the elementary grades. Many children become anxious and even physically ill. Teachers try to calm them as much as possible by suggesting they get a good night's sleep and have a good breakfast. Teachers also promise students

rewards and breaks, and even decreasing their work load before and after the test.

Testing which also includes test preparation before and recovery time after consumes a tremendous amount of time. Smith and the other researchers found that teachers spent 100 hours to prepare and give the Iowa Test of Basic Skills and the state-mandated criterion-referenced test. The National Commission on Testing and Public Policy (1990) estimated that in one year American school children spend 20 million school days taking tests and maybe 10 to 20 times that in test preparation. Also, it is estimated that taxpayers spend \$100 million per year for the purchase and scoring of state and local tests. If additional services are included, the estimate would rise to one half billion dollars. This does not include commercial curricular materials purchased for test preparation. The United States tops all other countries in the world for the number of achievement tests which are given and the amount of profit allowed to commercial testing firms:

Curriculum is drastically affected when test preparation takes over. Smith (1991) cited an example of how instruction had changed from frequent hands-on science lessons to less frequent textbook lessons to no science lessons at all before the test. Another example centered on a writing project in which the students wrote for 40 minutes each day starting in the fall and ending in January. The teacher then began using worksheets on grammar, capitalization, punctuation, and usage. The writing project then resumed again in May. In math the teacher drilled only the skills which she remembered from the test and skipped over metrics and pre-algebra. Instruction in social studies and health stopped altogether during test preparation time.

The study recognized two kinds of teachers. One type went along with the demands of the testing program and the administrators by changing the classroom curriculum to match the test. The other type of teacher became resistant and continued to teach what he/she felt was important for the students without any concern for test scores.

Teaching skills were also affected by the multiple-choice format of the test. Teachers stopped using manipulatives and problem-solving techniques and concentrated on testlike worksheets. Teachers who received lower scores, even a month difference, were required to review the subject matter by setting aside extra time to work on more exercises or worksheets which would help to improve the test scores. Teachers were expected to break down the skill and drill until it was mastered.

Testing may also create many inequities in our society. The Ford Foundation reported the testing system which exists in the the United States is a "hostile gatekeeper" because it limits the opportunities of people, especially women and minorities (Rothman 1990). In a study comparing prompted writing samples with classroom portfolios, Simmons (1992) found the writing samples failed to predict classroom performance. Students from poorer districts were more likely to score low on the writing test in comparison to their classroom work. In comparing portfolios of fifth graders from a poor school and from a rich school there were only marginal differences but the test scores from the rich school significantly surpassed the test scores from the poor school. In this situation the test results would have failed to admit or promote students to the next level, but 80% of those failures would have been able to complete or pass

the classroom work. Simmons advocates whole, authentic assessment in the form of portfolios and not competitive writing tests.

Cummins (1989) indicated that it would take five to seven years for a second-language student to reach the same achievement level as an English-speaking student. Bilingual students learn at an amazing rate but this is not reflected in the standardized test scores. Duran (1988) also concurred that limited language proficiency among Hispanic students reduces the validity and reliability of tests. Students were also unfamiliar with test-taking strategies and the content of the test. Cummins (1984) as quoted by Anderson (1989) indicated low scores on aptitude and achievement tests usually meant students would be placed in remedial classes which frequently reduce the students' self-image as an able learner. Secondly, these tests offer the teacher little direction for prescriptive teaching.

School improvement has become closely tied to testing. However, according to Jeannie Oakes (1992), there is no documented proof that testing improved education. Instead, there is concern for the negative effects of testing and reform upon low-income families, Latinos, and African-Americans. By requiring students to show competence through testing or certification programs, certain members of the population will be denied entrance to further educations or jobs. Oakes discusses two negative features of American schools.

The first of these involves uneven distribution of resources and opportunities, which disadvantaged and minority students nearly always get less. Most low-income and minority children's schools spend less than those attended by their more advantaged peers. In some states, per-pupil expenditures differ between neighboring high- and low-wealth districts by a factor of three or more. Such inequalities persist even in many states attempting to equalize resources. Thus, some students have less access to well-maintained

facilities, smaller classes, and equipment and materials. These resources inevitably affect schools' ability to help students develop academic and workplace competencies. (Oakes, 1992. p.21)

Low-income and minority students also tend to receive a less demanding academic program and fewer well-qualified teachers. The second negative feature Oakes discusses is that United States schools frequently use test scores to deny students access to future opportunities. Oakes states that low-income and minority students have a tendency to score lower on tests and therefore they are viewed as being less capable learners. These students are then placed in vocational tracks rather than the college preparatory tracks. "The bottom line is that the differentiation of resources and opportunities triggered, in part, by testing widens the achievement gap between students judged to be more and less able between the advantaged and disadvantaged." (Oakes, 1992, p. 22

Testing's Relationship to the Future Needs of Society

The organization of work in American society has changed over the last two hundred years. In the 1700's over 80% of the people worked on farms but by the 1900's the number of people working on farms had decreased to 41%. The industrial revolution created the need for numerous skilled and unskilled workers for manufacturing. Industry was run by bureaucratic means with top-down management decisions. Low level workers had no input because most managers followed the Frederick W. Taylor work design which awarded the thinking, planning, and job design to the top administrative levels (Carnoy & Levin, 1985). The United states is now shifting from the manufacturing era to the electronic/computer revolution. In 1985 only 19% of workers were still employed in manufacturing and 53% were employed in the information sector, which includes clerks, sales, technical, professional, and managerial positions.

By 1990 only 3% were employed in farming (Skills, Schools, and Technology, 1985), (Carnoy & Levin, 1985).

The electronic/ computer shift has changed the educational requirements of many businesses. The old top-down management design no longer works. Companies of today are engaging their employees in the democratic socio-technical design. In this design there is communication, collaboration, and idea-generation (Wirth, 1983, 1991). This change impacts greatly on the role of schools in preparing students for the future.

Schools can no longer follow the old top-down management style for teachers or their students. This method was employed to insure each teacher was doing his/her job and each student was learning the required material or content. The state as well as the schools frequently required tests to evaluate the work their teachers and students were doing. This type of structure prevents students from truly being educated (Shanker, 1990).

In the new era of the electronic/computer age, administration, teachers, and students must change to be in congruence with the needs of today's society. Schools need to follow the trend of many businesses in utilizing the democratic socio-technical models. Teachers and students need to be personally and actively engaged in the learning process (Handy, 1985); (Shanker, 1990). Shanker even promoted the idea of "incentive schools" in which schools across the country could be involved in a competition to create and practice new learning models for schools to use. These schools could receive waivers from regulations so that they would feel free to promote change. One school in Washington, transformed its school culture by combining cooperative teams and high technology.

Administration, teachers and parents worked cooperatively to increase student learning by developing new ideas and strategies. Included in these ideas were that educational and administrative decisions be made at the lowest level, that is the teachers and students. Teachers were to manage the instruction and not present material in lecture format. Teachers should meet in teams to share ideas and communicate, and students should take an active part in their learning. Computers were used to individualize the learning of students and a voice mail system allowed teachers and parents to keep in constant contact. Utilizing this system eliminated the need for group tests because each student's progress was monitored through the computer (Fiske, 1990).

Summary

This chapter reviews the major research findings of educational change in relation to teachers and testing. The review of the literature on teachers and the change process reveal the need for teachers to feel comfortable with a proposed educational change. Teachers must agree with the value of the educational change (Scherwitzky, 1974) or they will reject any efforts at the implementation of an innovation. Sparks identified three critical teacher attitudes in relationship to change which could effect the implementation of an innovation; philosophical acceptance of an innovation, the perceived cost of an innovation, and self-efficacy. Giacquinta (1975) also found the implementation of an innovation was difficult because of the risk-taking which was required by teachers. Accompanying any change was a whole gamut of other life changes which might be affected by the implementation of an innovation such as job security, self-esteem, prestige, an increased work load and reduced family time. Stern, Keislar (1977) found that implementation of an innovation was more

successful when the teacher was involved and cooperated. The teacher needed to feel in control of the innovation and be able to incorporate their own expertise into the innovation (Shaimline & Red, 1987). When the implementation of an innovation is desired teachers must be shown respect (Mohr, 1985) and must be involved in the planning process (Beauchamp, 1974), Langenbach, 1972), Mahan & Gill, 1971).

The review of the literature on teachers and testing reveals that testing may have a variety of purposes other than evaluating students' needs for educational improvements. Haladyna, Haas, and Nolen (1989) identified 29 uses of tests which included allocating resources, evaluation of school personnel and curriculum, grouping students, diagnosing achievement deficits, and promotion. Mandated testing has created a situation where teachers allocated a considerable amount of time for test preparation. Smith (1991) found that teachers spent an average of 100 hours to prepare students for tests. External testing can also create feeling of shame, embarrassment, guilt, and anger over test scores (Smith, Edelsky, Draper, Rottenberg, & Cherland, 1989). Testing can also have negative effects upon students since test scores can limit a student's opportunities or access to selected programs (Rothman, 1990). Many educators are incorporating more authentic types of testing. Fiske (1990) proposed utilizing the computer to individualize and monitor a student's progress as alternative to the standardized testing which is now being done in schools.

CHAPTER III

RESEARCH PROCEDURES

The purpose of this chapter is to describe the design and procedures of the study. The process used for selecting the sample schools and teachers is detailed. The development of the survey instruments and preliminary testing are explained. Finally, the procedures used to collect and analyze the data are described.

Selection of the Sample Schools

The schools included in the sample represent five of the seven different Kinds of Communities (KOC) in Massachusetts. In the 1980's the Office of Executive Planning developed a working group to classify communities according to fifteen variables. These variables included income, property valuation, educational level of adults, index of manufacturing, commercial, and residential activity, percentage of minorities, percentage that speak a foreign language, percentage of renters, age of housing, and population change and density. Kinds of Communities gave the State Department of Education and local communities a better tool for comparing test results from the Massachusetts Educational Assessment Program between and among similar communities. The Kinds of Communities included in the study are Urbanized Centers, Economically-Developed Suburbs, Growth Communities, Residential Suburbs, and Rural Economic Centers. Small Rural Communities and Resort / Retirement / Artistic Communities were not included in the study since no MEAP scores were generated for the classes which were tested. MEAP scores for individual schools are not generated if a school does not have forty students at one grade level.

The selection of the schools within each Kind of Community was based on the reading test scores from the latest MEAP given to schools in 1992. Three schools were selected within each Kind of Community; one school with high reading scores; one school with average reading scores; and one school with low reading scores. Reading scores were used as a selection device since reading ability is a good indicator of a student's overall abilities in the school curriculum.

The Massachusetts Department of Education provided the proficiency test scores for Grade 4 of the Massachusetts Educational Assessment Program (MEAP) for the elementary schools within each Kind of Community. The overall state average for proficiency levels for the 1992 MEAP for grade four follows:

<u>Below Level 1</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Level 4</u>
6%	35%	38%	18%	3%

The meaning of the Levels of Proficiency as quoted from the Description of Proficiency Levels by the Massachusetts Department of Education are:

- | | |
|---------------|---|
| Below Level 1 | Students are able to respond to very few multiple-choice questions and are unable to interpret or respond to open-ended questions. |
| Level 1 | Students are capable of responding to simple familiar material which is presented in a highly structured format, but fail to recognize the requirements of unfamiliar tasks. |
| Level 2 | Students have mastered the basic components of the grade-appropriate curriculum; however, when asked to generate their own response, their answers seldom go beyond the minimally acceptable and may indicate major misconceptions. |
| Level 3 | Students have mastered the underlying principles of the grade-appropriate curriculum. They reason |

and communicate clearly, and can apply their knowledge in a variety of contexts.

Level 4 Students possess a broad and detailed base of knowledge that goes beyond the traditional curriculum. Their analytic ability is sophisticated for their age level, as is their ability to communicate their reasoning. [Massachusetts Department of Education, 1992]

The state average scores for reading proficiency for grade four of the 1992 MEAP are as follows:

<u>Below Level 1</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Level 4</u>
9%	32 %	36%	20%	3%

Level 2 indicated that students were adept as far as basic skills were concerned. Level 3 indicated students possessed high proficiency in basic skills and Level 4 indicated superior skills. Schools were categorized as high if their combined score for Levels 2, 3, and 4 was 75 % or higher. Average schools had a combined score of 50 % to 74% for Levels 2, 3, and 4. Low-scoring schools had a combined score of 49% or lower.

The names of all western Massachusetts communities in Urbanized Centers were written on separate cards and placed in a container. The cards were drawn from the container one at a time and the name of the community was placed on a list. This list represented the order in which communities would be contacted for participation in the study. This same process was used for creating a list of schools for the other four Kinds of Communities; the Economically-Developed Suburbs, Growth Communities, Residential Suburbs, and Rural Economic Centers.

Once all lists were developed, the researcher contacted the Massachusetts State Department of Education to obtain reading scores for the

individual schools in each community. The researcher proceeded down the list of communities until a high-scoring, average-scoring, and low-scoring school was located for each Kind of Community. Communities that had no individual school scores were eliminated from the study. This occurred when a school did not have 40 students in one grade level. Some communities had two or more schools that were high, average, or low. In that situation the names of the schools were written on cards and placed in a container. The cards were then drawn one at a time to create a random order for contacting schools. In the Residential Suburbs and the Economically-Developed Suburbs no low-scoring schools were located. The schools will not be referred to by their name but rather by a combination of the Kind of Community classification and the MEAP reading score. Appendix A shows the thirteen schools involved in the study with their code by which they will be referred to in the study and MEAP reading score for each school.

Sampling Procedures

The researcher composed a letter (see Appendix B) which was sent to the superintendent of schools for each school chosen in the study. The day the letter was mailed, the researcher contacted the superintendent's office and either spoke with the superintendent or the secretary to introduce herself, explain a little about the study, and to alert him/her about a letter that would be arriving explaining the study in more detail. The researcher explained that she would call back in a few days to answer any questions.

In most cases the superintendents forwarded the letters to the principals of schools which would be involved in the study. In a few cases the letter was forwarded to a director of curriculum. The researcher then followed the directions of each superintendent's office. In some cases the researcher was

given the names and telephone numbers of the curriculum directors or principals to contact and in other cases the researcher was to wait for the principal or curriculum director to make the initial contact.

In one case the superintendent declined the invitation to participate in the study and therefore the researcher returned to the random list of schools and again contacted the Department of Education to obtain additional reading scores in order to locate another school to complete the sample. Also, the principal of one school was not interested in participating so the researcher returned to the random list to contact the next school for that Kind of Community.

The principals of each school requested volunteers to participate in the study. Most principals arranged the teacher interviews for the researcher. A few principals gave the researcher the names of the teachers and requested the researcher to personally contact the teachers to make the appointments. In most schools it was possible to interview a teacher from each grade, one through four. In two schools the interviews consisted of teachers in only grades three and four. One teacher contacted the researcher after the interview and wished to drop from the study. The researcher respected the teacher's rights and did not include any information from her interview or survey in the study. The sample consisted of a total of 52 teachers. Appendix C lists information about their years of experience and level of education.

The majority of the interviews were conducted during the school day. The researcher made arrangements with each principal to hire a substitute teacher from his/her school system to monitor the classrooms while the teachers were being interviewed. The researcher paid for the substitute teacher. Two principals said it was unnecessary to hire a substitute. In one school, student

teachers monitored the classrooms while the teachers were being interviewed and in another school the principal monitored the classrooms for the teachers.

After the interviews were conducted in each school, the researcher sent letters to the teachers, principals, and superintendents thanking them for their participation in the study. See Appendix D for sample copies of the letters.

Instrument Development

The techniques used to gather the data for the study consisted of three parts. First, the teachers were asked to respond freely about influences which prompted him/her to initiate changes in curriculum and instruction in the classroom. Second, the teachers were asked to fill out a survey form of the possible influences which might have prompted them to initiate changes in the classroom. Third, the teacher was asked follow-up questions about the MEAP as an influence in initiating changes.

The survey form was developed by interviewing twelve elementary school teachers. The population included teachers representing school systems from rural to urbanized. Teachers were selected in a variety of ways. In some cases, the researcher contacted a principal and asked if one or two teachers would be willing to be interviewed for the survey. The researcher also interviewed teachers who were part of a staff development committee. Some teachers who had been part of the Coalition for School Improvement were also interviewed.

Teachers were asked what they thought were the influences that prompted teachers to initiate changes in curriculum and instruction in the classroom. The researcher informed the teachers that these were not necessarily personal influences but influences that might prompt any teacher to initiate changes. Teachers were encouraged to think of as many influences as they could.

Teachers frequently listed two or three influences and went on to talk about them in more detail. When encouraged to think of any other responses, some teachers came up with an additional one, but more frequently they reviewed what they had already said as the major influences. The responses gathered from the short interviews are listed in Appendix E.

The teacher responses were used to develop a survey form which would become the second part of the interview process. Additional responses were added by the researcher so that information could be gathered for answering the second and third research questions. Some teacher responses were reworded so they were stated in positive terms. A copy of the survey form used for the second part of the interview process is found in Appendix F.

Pilot Study

A pilot study was conducted for the purpose of refining the interview questions and the survey form. Trial interviews were conducted with three elementary school teachers. As a result of the preliminary interviews, the researcher developed some strategies to be used during the interviews. The strategies can be summarized in four parts: 1) development of rapport; 2) wait time; 3) survey discussions; 4) MEAP and standardized test clarification.

Development of Rapport. It was apparent that teachers might be very apprehensive when talking about changes in their classrooms. It was important for the researcher to make the participant feel very comfortable especially since the researcher was asking for the interview to be taped. The researcher should begin the interviews by expressing appreciation to the teachers for their willingness to participate in the study. The signing of a release form (See Appendix G) should be done as way of introducing the purpose of the study and giving some control to the participant by reinforcing the idea that if they don't

feel comfortable with answering something it's perfectly all right. Additionally, letting each participant know that the researcher would send to them a synopsis of the results of the study would help them to feel more involved.

Wait Time. Just as teachers find it invaluable to allow students some wait time, it is important for the researcher to allow for wait time. Since the tape recorder is on, teachers may feel a need to give short, quick answers. The researcher can help the participant relax by waiting for the teacher to add more information and then asking him/her if there are any other influences that might have prompted him/her to make changes.

Survey Discussions. The pilot study revealed that teachers relaxed immediately with the survey and it actually prompted them to start talking about the various influences. They said the survey reminded them of other influences they had forgotten. It also provided for them an opportunity to voice opinions about some of the influences as well as the degree to which the influences prompted them to change.

MEAP and Standardized Test Clarifications. It became obvious in the pilot study that teachers may be confused about the difference between the standardized tests given by their school system and the MEAP. During the third part of the interview process it may be necessary to ask additional questions to determine if the teacher is really responding about the MEAP or some other test. The researcher will rephrase the question about the MEAP and gently provide additional information about the MEAP so that the teacher can give an honest answer about the influence of the MEAP in initiating changes in curriculum and instruction.

Data Collection and Analysis for Objective 1: To identify the perceived influences that prompt teachers to initiate changes in curriculum and instruction

Data describing the influences which have prompted teachers to initiate changes in curriculum and instruction were obtained by the researcher through interviews with teachers in the sample schools. Additional data was obtained by having each teacher complete a survey after he/she finished the initial free-response part of the interview about the influences that initiated changes in curriculum and instruction.

Teacher Interview

An interview of approximately 30 minutes was scheduled for each teacher. In order for the teachers to feel more relaxed and more willing to participate, the researcher paid for a substitute teacher to assume the classroom responsibilities while each teacher was being interviewed. In some schools the principal arranged for student teachers to cover the classrooms or asked for volunteers from those teachers who had student teachers. In another school the principal offered to assume the classroom responsibilities for the teachers since it was report card time and the principal made it a practice of spending 30 minutes in every classroom handing out report cards and awards, and talking with the students about their progress.

The interview commenced with the researcher introducing herself and explaining a little bit about the study. Next, the researcher reviewed the release form with the participant and then asked the teacher for permission to tape the interview. Two teachers said they would be uncomfortable with the tape recorder running so the researcher relied mainly on notes for those two interviews.

The researcher then asked the participant to think about changes he/she had made in curriculum and instruction in their classrooms. He/she could even think back to ten years ago if they wanted to. The researcher then asked the participant to explain what initiated them to make the changes. The researcher reinforced the idea that she was not really interested in the changes they made but why they made those changes. What caused them to initiate a change?

During this part of the interview the researcher allowed the participant to talk freely while audio taping the interview. The researcher was also taking notes as a back-up and also for reference later in the interview. If there was a lull in the interview, the researcher would wait a little while and then ask if he/she could think of any other influences that caused him/her to initiate any changes in the curriculum or instruction. Some participants also asked the researcher to recap what they had already said or asked for verification if they had already stated an influence. This part of the interview ended when the participant indicated he/she couldn't think of anything else.

Teacher Survey

Next the teacher was handed a survey to complete. The survey contained 26 possible influences that might prompt teachers to initiate change. The teacher was required to circle a number one through four to indicate the degree to which each of the statements influenced him/ her in initiating change in curriculum and/or instruction. One indicated Greatly Influenced, two indicated Influenced, three indicated Somewhat Influenced, and four indicated No Influence. The researcher left the tape recorder running since this part of the interview seemed to relax many participants. They frequently stopped circling the numbers and begin discussing some of the influences. Several participants began to give information that was going to be discussed later in the interview.

Data Analysis

Data collected from the free response interviews was organized by frequency of response. Each response was categorized by type of influence: student-centered or student needs, teacher educational enrichment and needs, administrative directives and professional influences, and testing.

Data collected on the 26 influences from the teacher surveys were organized in several ways. First, two tables were constructed showing the responses for the entire population of teachers surveyed. The first displayed each question and the percentage of teachers indicating Greatly Influenced, Influenced, Somewhat Influenced, and No Influence. Second, the items on the survey were rearranged in rank order by teacher responses for Greatly Influenced. This table also categorized each item according to type of influence: student-centered or student needs, teacher educational enrichment and needs, administrative directives and professional influences, and testing. The table also combined the percentages for Greatly Influenced and Influenced to get a better picture of positive influence of each item in relation to initiating changes in curriculum and instruction.

Data from this survey was also displayed in four other types of tables. Each item of the survey was also analyzed according to Kind of Community, individual school with MEAP score, MEAP scores, and by grade level. Each of these tables shows the teacher responses according to Greatly Influenced, Influenced, Somewhat Influenced, and No Influence.

Data Collection and Analysis for Objective 2: To determine how the Massachusetts Educational Assessment Program has been helpful to teachers in initiating changes in curriculum and instruction

Data describing how the Massachusetts Educational Assessment Program has been helpful to teachers in initiating changes in curriculum and instruction was obtained by the researcher through interviewing teachers after they completed the teacher survey. The tape recorder was running throughout the entire interview and the researcher continued to take notes as a back-up. Information and perceptions which were offered during the initial interview and comments made during completion of the written survey are compiled with data received in the third part of the interviewing process.

Teacher Interview

The researcher referred to notes taken during the initial free response interview and quickly scanned the teacher survey to observe the responses for items 7 and 14. Teachers may have also indicated their responses orally while completing the written survey or they may have voiced their opinion while filling out the survey. If the participant indicated a positive response to the MEAP, the researcher then asked the participant to explain how the Massachusetts Assessment Program has been helpful to them. If the researcher senses the teacher is responding about some other test than the MEAP, she will rephrase the question while gently adding some additional information about the MEAP to help clarify the situation such as this is the state test which is given in fourth grade.

Data Analysis

Data collected on this objective was analyzed in narrative form. Personal perceptions and experiences of teachers about the Massachusetts

Educational Assessment Program are discussed. Additionally, information about formal and informal programs initiated by schools or teachers to improve MEAP scores are also included. In the narrative there is also a discussion of the different perceptions of the MEAP according to grade level, MEAP scores, and Kind of Community.

Data Collection and Analysis for Objective 3: To determine how the Massachusetts Educational Assessment Program has fallen short in helping teachers to initiate changes in curriculum and instruction

Data describing how the Massachusetts Educational Assessment Program has fallen short in helping teachers in initiating changes in curriculum and instruction was obtained by the researcher through interviewing teachers after they completed the teacher survey. The tape recorder was running throughout the entire interview and the researcher continued to take notes as a back-up. Information and perceptions which were offered during the initial interview and comments made during completion of the written survey are compiled with data received in the third part of the interviewing process.

Teacher Interview

The researcher referred to notes taken during the initial free response interview and quickly scanned the teacher survey to observe the responses for items 7 and 14. Teachers may have also indicated their responses orally while completing the written survey or they may have voiced their opinion while filling out the survey. If the participant indicated a negative response to the MEAP, the researcher then asked the participant to explain how the Massachusetts Assessment Program has fallen short in helping him/her to initiate changes in curriculum and instruction. If the researcher senses the teacher is responding about some other test than the MEAP, she rephrased the question while

gently adding some additional information about the MEAP to help clarify the situation such as this is the state test which is given in fourth grade.

Data Analysis

Data collected on this objective was analyzed in narrative form. Personal perceptions and experiences of teachers about the Massachusetts Educational Assessment Program are discussed. Additionally, information about formal and informal programs initiated by schools or teachers to improve MEAP scores are also included. In the narrative there is also a discussion of the different perceptions of the MEAP according to grade level, MEAP scores, and Kind of Community.

Chapter Summary

Data to achieve the three objectives of this study were obtained from interviewing 52 teachers in 13 different schools in grades one through four. The interview consisted of three parts. First, the participant was asked to think about past educational changes he/she has made in curriculum and instruction and then to explain what caused him/her to initiate those changes. Second, the participant was asked to complete a survey form of 26 items which may have influenced him/her to initiate changes in curriculum and instruction. Third, the participant was asked either how the MEAP was helpful to him/her in initiating change in curriculum and instruction or how the MEAP had fallen short in helping him/her to initiate changes in curriculum and instruction. The findings of this study will be reported in Chapter IV in both a tabular and narrative format.

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION OF FINDINGS

The purpose of this chapter is to report, analyze, and interpret the data obtained from the interviews of 52 teachers in 13 schools. The data were collected from January to May of 1994. Each of the schools represents one of the five different Kinds of Communities in Massachusetts. Schools with high, average, and low MEAP scores are represented in the study. This study describes the perceived influences that affect teachers in their decisions to initiate changes in curriculum and instruction.

The analysis of the data in this chapter occurs in three sections which correspond to each of the research objectives which guided the investigation. The first section answers the question: What are the perceived influences that prompt teachers to initiate changes in curriculum and instruction? The second section answers the question: How has the Massachusetts Educational Assessment Program been helpful to teachers in initiating changes in curriculum and instruction.? The third section answers the question: How has the Massachusetts Educational Assessment program fallen short of helping teachers to initiate changes in curriculum and instruction?

Research Question 1:

What are the perceived influences that prompt teachers to initiate changes in curriculum and instruction?

Interview data and survey responses are analyzed and discussed by related areas of influence. The teachers' interview responses and the survey questions are categorized into four areas of influence which include: 1) students' needs and educational changes to meet student needs, 2) teachers'

educational enrichment and needs; 3) administrative directives and professional influences; and 4) testing.

It is essential to understand that the four areas of influence stated above do not have definite boundaries. For instance, it may have been an administrative decision to include special education students in the regular classroom but once special education students are present, the teacher is making accommodations to meet their educational needs. The influence of parents is also grouped into the category of meeting students' needs because either parents volunteer or teachers invite parents to supply additional information about their children. This added information enables teachers to make better educational decisions about meeting the individual needs of each student.

Teachers' educational enrichment and needs includes any effort on the part of the teacher to seek out new ideas or information, whether it is from a professional group, other teachers, or individual efforts made by the teacher to gain more knowledge about a problem or new method. Although students' needs may have precipitated a teacher to seek out a workshop or advice, for the purpose of this study it will be considered a change initiated by the teacher. Also included in this category are teacher needs. Teachers may feel tired of teaching the same curriculum year after year. Therefore, teachers may feel a need to revitalize the curriculum or experiment with new ideas.

Data from the individual teacher interviews are presented for the entire population of teachers interviewed. The data from survey responses are presented for the entire population of teachers, by Kind of Community, by specific schools according to their MEAP scores, by MEAP scores, and by grade level.

In the discussion of the data from the survey, for comparative purposes, Greatly Influenced and Influenced are viewed as positive responses and frequently the percentages of Greatly Influenced and Influenced are combined to give a total positive influence response. Somewhat Influenced and No Influence are viewed as negative responses and also the percentages are frequently combined to give a total negative response.

Table 1 indicates the teacher responses from the individual interviews of the entire population of teachers the researcher interviewed. The responses are listed according to frequency of response. Each item was also assigned a category of influence.

Table 1 indicates teachers were greatly influenced by workshops, conferences, and courses as initiatives to make changes in curriculum and instruction. If the response total for professional development were also added to the workshop response, the total would rise to 29. Students' needs also ranked extremely high with a total of 21 responses. However, many other responses could actually fall into the category of students' needs such as inclusion, changes in children, ability level, discipline, children's interests, keeping them motivated, type of class, different learning style, individual development, making education meaningful, kind of child, and language needs. If these varied individual responses were added to the students' needs responses, the total would rise to 46. Administrative directives received a response of 16. The influence of other teachers was a response of 15, but if the item about observing other teachers and the support of others were included it would rise to 17. Reading was also considered an important initiative for change and if you include the response for research, it would rise from 14 to 19. Change in families and society was also important to teachers and if the item

changes in children were included, the response would rise from 10 to 17.

Teachers indicated they changed instruction to include more manipulatives and more authentic learning which received a response of 10. Nine teachers responded that testing influenced them to initiate changes in curriculum and instruction and five of the nine actually identified the MEAP in their responses.

Table 1

Frequency of Teacher Responses from Free Response Interviews

The following are teacher responses from the free response interviews on the Influences that prompt teachers to initiate changes in curriculum and instruction.

<u>Frequency of Response</u>	<u>Response</u>	<u>Category</u>
24	Workshops, conferences, courses	Teacher
21	Student needs	Student
16	Administration	Directive
15	Other teachers	Teacher
14	Reading journals, books, newspapers	Teacher
13	Workshops, conferences	Teacher
10	Change in families, society	Student
10	Hands-on, manipulatives, authentic	Student
9	Testing, assessment (MEAP-5)	Testing
8	Inclusion, mainstreaming	Student
7	Changes in children	Student
7	Teaching, experience	Teacher
7	New ideas, trends, movements	Teacher
6	Ability level of children	Student
5	Discipline, behavioral-ADD	Student
5	Parents	Student
5	Professional development	Teacher
5	Becoming stagnant-bored	Teacher
5	Outdated materials	Directive
5	Number of students, class size	Directive
4	Research	Teacher
3	Children's interests	Student
3	Something is not working	Student
3	Wanting to try something new	Teacher

(continued, next page)

Table 1, continued

<u>Frequency of Response</u>	<u>Response</u>	<u>Category</u>
2	Preparing students for the future	Student
2	Add spice to teaching, finding new ways	Student
2	Keep them motivated	Student
2	Type of class	Student
2	Multiculturalism	Student
2	Personal interests	Teacher
2	Becoming a parent	Teacher
2	Additional Curriculum	Directive
1	Different learning style of students	Student
1	Individual development	Student
1	Making education meaningful	Student
1	Kind of child (Very needy)	Student
1	Experience of children	Student
1	Language needs	Student
1	Learning involving communities	Student
1	Observing other teachers	Teacher
1	Support from others	Teacher
1	Giving Workshops	Teacher
1	Self-direction	Teacher
1	New concepts interesting to try	Teacher
1	Math standards	Directive
1	Change of text	Directive
1	State-mandated curriculum	Directive
1	Budget cuts	Directive
1	Change in school physical environment	Directive
1	Technology	Directive

Table 2 indicates the responses generated by the written survey for all 52 teachers interviewed. Table 3 reorganized the data from Table 2 into rank order from greatest to least influence according to the responses under Greatly Influenced. The table also includes the categories of influence as students' needs, teachers' educational enrichment and needs, administrative directives and professional influences, and testing. Table 3 also includes the combined

percentages of Greatly Influenced and Influenced to show a total positive response.

Table 3 shows the greatest influences for teachers in initiating changes in curriculum and instruction are meeting the individual needs of each child and making learning more enjoyable and interesting. Both of these items received a positive response of 88.5% of the teachers under Greatly Influenced and when combining the percentages of Greatly Influenced and Influenced the percentage increased to 100%. No other item received a combined percentage of 100% influence. Other items that received more than 50% of the teachers indicating greatly influenced were college courses, workshops, seminars, and conferences, an interest in experimenting with new ideas or methods, the move toward teaching children in more authentic ways such as using projects rather than using the test, preparing students for the future, the need to revitalize curriculum and instruction in the classroom, the need to develop more cooperative skills in learning, and discussions with other teachers about curriculum and instruction. A review of the top nine responses where more than 50% of the teachers said they were Greatly Influenced, all of the items fell into the students' needs and teacher enrichment categories.

Table 3 shows that the lowest area of influence is in the category of testing, specifically school discussion about test results from standardized tests. This item received only 7.7% under Greatly Influenced and the combined percentage of Greatly Influenced and Influenced was 26.9%. In fact, four of the five testing items came in at the bottom. The percentages for those testing items were all under 15.4% for Greatly Influenced and the highest combined response was 34.7%. The only testing item which fared better was item 11, results from personally made assessment tests, which scored 36.5% under

Greatly Influenced and 92.3% under the combined score of Greatly Influenced and Influenced. Overall, testing was the lowest category of influence for teachers in initiating changes in curriculum and instruction. Another low item was directives from administration to make changes in curriculum and/or instruction which received 13.5% under Greatly Influenced but a high of 52% for the combined responses of Greatly Influenced and Influenced. The other two items in the category of directives fared better with the current debate about reform and restructuring in education receiving 23.1% for Greatly Influenced and 61.6% for Greatly Influenced and Influenced combined. New standards such as the standards proposed by the National Council of Teachers of Math received 38.5% for Greatly Influenced and 77% for Greatly Influenced and Influenced combined.

In comparing Tables 1 and 3, similar items on both tables showed high responses. For instance, on Table 1 meeting the individual needs of each child showed a response of 21 but when combined with many of the other specific student need items it increased to 46. On Table 3, meeting individual needs showed 88.5% for Greatly Influenced and 100% for the combined response of Greatly Influence and Influenced. Workshop, conference, and courses on Table 1 showed 24 responses and on Table 3 the same item showed 69.2% for Greatly Influenced and 92.3% for a combined response of Greatly Influenced and Influenced. Other items that came out on top on both tables were the influence of other teachers and the move toward more authentic learning.

Administrative directives showed a response of 16 on Table 1 which was 30.7% of the teachers. On Table 3, administrative directives indicates 13.5% for Greatly Influenced but 52% for a combined response of Greatly Influenced and Influenced. Reading books, journals, and newspapers showed a response

of 14 on Table 1 which was 26.9 % of the teachers and on Table 3 the same item shows 23.1% for Greatly Influenced and 80.8% for the combined response of Greatly Influenced and Influenced.

Table 1 indicated a high response for changes in families and society (10 responses) and a change in children (7 responses) which was not included on Table 3.

Table 2

Teacher Responses to Written Survey

Participants indicated to what degree each of the following influenced them in making changes in curriculum and instruction in their classrooms. The following numbers are listed in percentages.

	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
1. Reading professional journals and books	23.1	57.7	19.2	0.0
2. Classroom observations of other teachers either formal or informal	34.6	34.6	25.0	5.8
3. Professional development offered in your own school system	21.2	44.2	26.9	7.7
4. The move toward more mainstreaming of special education students into the regular classroom	36.3	28.8	34.6	0.0
5. Results from standardized test scores by your own school system	13.5	9.6	50.0	26.9
6. Wanting to include a more multicultural aspect to the curriculum	26.9	42.3	30.8	0.0
7. Test results form the Massachusetts Educational Assessment Program (MEAP)	15.4	13.5	40.4	30.8
8. Discussions with other teachers about curriculum and instruction	58.3	36.5	9.6	0.0

(Continued, next page)

Table 2, continued

	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
18. The need to revitalize curriculum or instruction in the classroom	63.5	32.7	1.9	1.9
19. New standards such as the standards proposed by the National Council of Teachers of Math	38.5	38.5	19.2	3.8
20. An interest in experimenting with new ideas or methods	69.2	25.0	5.8	0.0
21. Preparing students for the future	63.5	34.6	1.9	0.0
22. Making learning more enjoyable and interesting	88.5	11.5	0.0	0.0
23. The current debate about reform and restructuring of education	23.1	40.4	30.8	5.8
24. The need to try something new because you are dissatisfied with the way things are going at the present time	40.4	48.1	7.7	3.3
25. Learning about the new ideas, methods, or techniques from other teachers	46.2	40.4	13.5	0.0
26. The need to get more parental involvement in education	23.1	38.5	30.8	7.7

Table 2, continued

	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
9. School discussions about test results from standardized test administered by the school system	7.7	19.2	55.8	17.3
10. College courses, workshops, seminars, conferences	69.2	23.1	7.7	0.0
11. Results from you own personally made assessment test	36.5	55.8	7.7	0.0
12. Meeting the individual needs of each child	88.5	11.5	0.0	0.0
13. Need to develop more cultural understanding	26.9	48.1	25.0	0.0
14. School discussion about test results from the Massachusetts Educational Assessment Program (MEAP)	13.5	21.2	44.2	21.2
15. The move toward teaching children in more authentic ways such as using projects rather than using the test	63.5	32.7	3.8	0.0
16. The need to develop more cooperative skills in learning	59.6	36.5	3.8	0.0
17. Directives from administration to make changes in curriculum and/or instruction	13.5	38.5	25.0	23.1

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Table 3

Teacher Responses to Written Survey Ranked by Percentages of Greatly Influenced

Survey Results of All Teachers Listed in Rank Order by Greatly Influenced in Initiating Changes in Curriculum and Instruction

Item	Percentage Responding <u>Greatly Influenced</u>	Category	Combined Percentage of <u>Greatly Influenced & Influenced</u>
12. Meeting the individual needs of each child	88.5%	Student	100.0%
22. Making learning more enjoyable and interesting	88.5%	Student	100.0%
10. College courses, workshops, seminars, conferences	69.2%	Teacher	92.3%
20. An interest in experimenting with new ideas or methods	69.2%	Teacher	94.2%
15. The move toward teaching children in more authentic ways such as using projects rather than using the test	63.5%	Student	96.2%
21. Preparing students for the future	63.5%	Student	98.1%
18. The need to revitalize curriculum or instruction in the classroom	63.5%	Teacher	96.2%
16. The need to develop more cooperative skills in learning	59.6%	Student	96.1%
8. Discussions with other teachers about curriculum and instruction	58.3%	Teacher	94.8%

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Table 3, continued

<u>Item</u>	<u>Percentage Responding Greatly Influenced</u>	<u>Category</u>	<u>Combined Percentage of Greatly Influenced & Influenced</u>
25. Learning about the new ideas, methods, or techniques from other teachers	46.2%	Teacher	86.6%
24. The need to try something new because you are dissatisfied with the way things are going at the present time	40.4%	Teacher	98.5%
19. New standards such as the standards proposed by the National Council of Teachers of Math	38.5%	Directives	77.0%
11. Results from our own personally made assessment tests	36.5%	Testing	92.3%
4. The move toward more mainstreaming of special education students into the regular classroom	36.3%	Student	65.1%
2. Classroom observations of other teachers either formal or informal	34.6%	Teacher	69.2%
6. Wanting to include a more multicultural aspect to the curriculum	26.9%	Student	69.2%
23. The current debate about reform and restructuring of education	23.1%	Directives	63.5%
26. The need to get more parental involvement in education	23.1%	Student	61.6%

(Continued , next page)

Table 3, continued

<u>Item</u>	<u>Percentage Responding Greatly Influenced</u>	<u>Category</u>	<u>Combined Percentage of Greatly Influenced & Influenced</u>
1. Reading professional journals and books	23.1%	Teacher	80.8%
3. Professional development offered in your own school system	21.2%	Teacher	64.4%
7. Test results from the Massachusetts Educational Assessment Program (MEAP)	15.4%	Testing	28.9%
5. Results from standardized test scores by your own school system	13.5%	Testing	23.1%
14. School discussions about test results from the Massachusetts Educational Assessment Program (MEAP)	13.5%	Testing	34.7%
17. Directives from administration to make changes in curriculum and/or instruction	13.5%	Directives	52.0%
9. School discussions about test results from standardized test administered by the school system	7.7%	Testing	26.9%

The survey responses are analyzed by the four categories discussed above; students' needs, teachers' educational enrichment and needs, administrative directives and professional influences, and testing. Each area is discussed starting with the item which received the highest percentage on Greatly Influenced on the survey form for each category. On several of the following charts the percentages may be off by one tenth of a percent due to computer round off.

Student Needs

At the beginning of each interview, the researcher asked the teacher to express the influences which encouraged him/her to initiate changes in curriculum and instruction. Overwhelmingly, the issue of students' needs came out as the most stated influence as is borne out on Tables 1-3. In some cases the teacher would explain that the students were lacking in basic academic skills, coming from poor home environments, or that language was a barrier to the learning process. These teachers indicated they had to start with where the students were and help them to learn. The teachers indicated outside influences did not affect them as much because they had to deal with the reality of their particular students. Some teachers indicated students' needs as a primary influence in initiating changes in curriculum and instruction because their students needed to be challenged and their skills expanded to include expertise in problem-solving, critical thinking, and writing skills. Whether the teachers were dealing with students who had low academic skills or high academic skills, the main influence was meeting their individual needs.

Students' needs included changes teachers observed over the years. Some teachers were indicating that the family structure had changed from parents being very involved to the point where there is very little parent contact.

Parents were not available to help their children with homework or special projects. Therefore, teachers were using behavior modification to create incentives to get homework in on a daily basis and they were doing more of the special projects in school. Cooperative learning and cooperative teaching were being used to compensate for the decrease in parental involvement. One school was making the teachers' telephone numbers available to the parents so that parents would be encouraged to call the teacher to keep in contact about their child's progress or when questions arose about homework.

Teachers are getting more involved in more authentic ways of learning. In one classroom the teacher uses the social studies text only as a resource. The children go out on walking trips into the community and study the history of their own town. They visit the cemetery and do stone rubbings and collect information about the people who lived long ago and discuss why streets had certain names. Teachers find their students are becoming more passive learners so they are moving away from the lecture format and toward more student involvement in the lesson. Some teachers said they are going away from the skill, drill, kill method and are now using math manipulatives with their students to develop more understanding of the math concepts. Also, some teachers are using more wait time to encourage the students to become more active, responsible learners.

Numerous teachers and schools are changing to the whole language approach. Frequently it was a school-wide or system-wide decision to make the change. Teachers were provided with workshops and support groups to help them through the transition. Other times individual teachers attended workshops or courses or read books to get more information on whole language.

Some communities lacked cultural diversity and therefore teachers were creating units to help students understand and appreciate other cultures. One teacher devoted the month of February to studying the African culture and literature.

Meeting the Individual Needs of Each Child. Tables 4, 5, 6, and 7 show the responses to question 12 about the influence of meeting the individual needs of each child. All of these tables show that the combined positive responses of Greatly Influenced and Influenced equaled 100%. Table 4 shows Urban and Economic Rural Centers as having slightly higher percentages than the other three Kinds of Communities but all were above 85% for Greatly Influenced. Table 5 shows seven of the the 13 schools responded 100% for Greatly Influenced and the other six schools were at 75% for Greatly Influenced. Although the percentages are very close, Table 6 shows a slight decrease in the Greatly Influenced as the MEAP scores rise. The highest percentage 91.7% was for schools having the lowest MEAP scores and the lowest percentage 85.7% was for schools having the highest MEAP scores. In Table 7 all grades showed 90% or above for Greatly Influenced except for grade two which indicated 70 % for Greatly Influenced.

Table 4

Meeting the Individual Needs of Each Child
Survey Responses to Item 12 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	91.7	8.3	0.0	0.0
Economically Developed Suburbs	87.5	12.5	0.0	0.0
Growth Communities	84.6	15.4	0.0	0.0
Residential Suburbs	85.7	14.3	0.0	0.0
Economic Rural Centers	91.7	16.3	0.0	0.0

Table 5

Meeting the Individual Needs of Each Child
Survey Responses to Item 12 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	100.0	0.0	0.0	0.0
EDSH	75.0	25.0	0.0	0.0
GCH	100.0	0.0	0.0	0.0
RSH	75.0	25.0	0.0	0.0
ERCH	75.0	25.0	0.0	0.0
With Average MEAP Scores				
UA	75.0	25.0	0.0	0.0
EDSA	100.0	0.0	0.0	0.0
GCA	75.0	25.0	0.0	0.0
RSA	100.0	0.0	0.0	0.0
ERCA	100.0	0.0	0.0	0.0
with Low MEAP Scores				
UL	100.0	0.0	0.0	0.0
GCL	75.0	25.0	0.0	0.0
ERCL	100.0	0.0	0.0	0.0

Table 6

Meeting the Individual Needs of Each Child
Survey Responses to Item 12 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	85.7	14.3	0.0	0.0
Average	89.5	10.5	0.0	0.0
Low	91.7	8.3	0.0	0.0

Table 7

Meeting the Individual Needs of Each Child
Survey Responses to Item 12 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	90.0	10.0	0.0	0.0
Two	70.0	30.0	0.0	0.0
Three	93.3	6.7	0.0	0.0
Four	94.1	5.9	0.0	0.0

Making Learning More Enjoyable and Interesting. Table 1 shows a response of 3 for children's interests, a response of 2 for adding spice to teaching and finding new ways, and a response of 1 for making education meaningful. Tables 2 and 3 show 88.5% of the teachers responded Greatly Influenced and 11.5 % responded Influenced which gives a combined total of 100%. Table 8 shows all schools above 75% for Greatly Influenced with Residential Suburbs at 100% and Urban and Economic Rural Centers at 91.7%. When Greatly Influenced and Influenced are combined, the responses for all schools rose to 100%. Table 9 shows eight of the thirteen schools with a response of 100% for Greatly influenced and when Greatly Influenced and Influenced are combined the response rises to 100% for all schools. Table 10 shows Low scoring MEAP schools at 100%. When Greatly Influenced and Influenced are combined all schools are at 100%. Table 11 shows grade four at 94.1% for Greatly Influenced and grades one and two at 90% and grade three at 80%. When Greatly Influenced and Influenced are combined the percentage rises to 100% for all grades.

Table 8

Making Learning More Enjoyable and Interesting
Survey Responses to Item 22 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	91.7	8.3	0.0	0.0
Economically Developed Suburbs	75.0	25.0	0.0	0.0
Growth Communities	84.6	15.4	0.0	0.0
Residential Suburbs	100.0	0.0	0.0	0.0
Economic Rural Centers	91.7	8.3	0.0	0.0

Table 9

Making Learning More Enjoyable and Interesting
Survey Responses to Item 22 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>School</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	75.0	25.0	0.0	0.0
EDSH	75.0	25.0	0.0	0.0
GCH	100.0	0.0	0.0	0.0
RSH	100.0	0.0	0.0	0.0
ERCH	75.0	25.0	0.0	0.0
with Average MEAP Scores				
UA	100.0	0.0	0.0	0.0
EDSA	75.0	25.0	0.0	0.0
GCA	50.0	50.0	0.0	0.0
RSA	100.0	0.0	0.0	0.0
ERCA	100.0	0.0	0.0	0.0
With Low MEAP Scores				
UL	100.0	0.0	0.0	0.0
GCL	100.0	0.0	0.0	0.0
ERCL	100.0	0.0	0.0	0.0

Table 10

Making Learning More Enjoyable and Interesting
Survey Responses to Item 22 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	85.7	14.3	0.0	0.0
Average	84.2	15.8	0.0	0.0
Low	100.0	0.0	0.0	0.0

Table 11

Making Learning More Enjoyable and Interesting
Survey Responses to Item 22 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	90.0	10.0	0.0	0.0
Two	90.0	10.0	0.0	0.0
Three	80.0	20.0	0.0	0.0
Four*	94.1	5.8	0.0	0.0

* Row total is 99.9% due to computer round off.

The Move Toward Teaching Children in More Authentic Ways

Such as Using Projects Rather Than Using the Text. Some teachers indicated they actually had taught differently 20 years ago and were now returning to some of those older methods such as using hands-on instruction in science and math manipulatives. They had always agreed with those methods but along the way they had been sidetracked by using a lot of paper and pencil and workbook methods. A need to return to hands-on instruction has occurred because of the push for inclusions and mainstreaming in the classroom. Teachers indicated there was an increase in the number of children with Attention Deficit Disorder which called for the use of different teaching methods, namely more student involvement in the learning process. Some teachers indicated the school was providing them with funds to purchase a variety of manipulatives for the classroom.

Table 1 shows a response of 10 for hand-on instruction, manipulatives and more authentic learning. Tables 2 and 3 show 63.5% for Greatly Influenced and 32.7 % for Influenced which gives a combined response of 96.2%. Table 12 shows Residential Suburbs with a high of 85.7% and Economically Developed Suburbs with a low of 50%. When Greatly Influenced and Influenced are combined, all community responses rose to 100% except for Urban and Economic Rural Centers which were at 91.7%. Table 13 shows Residential Suburb High and Urban Low with a response of 100%. When Greatly Influenced and Influenced are combined all schools rise to 100% except for Urban High and Economic Rural Centers Average and Low which were at 75%. Table 14 shows High and Low scoring MEAP schools at 66.7% and Average MEAP schools at 57.9%. When Greatly Influenced and Influenced are combined the Average MEAP school rise to 100%, the High to 95.2%, and

the Low to 91.7%. Table 15 shows grade four at a high of 76.5% and grade two at a low of 30%. When Greatly Influenced and Influenced are combined, grades one and two rise to 100%, grade three to 93.3%, and grade two to 90%.

Table 12

The Move Toward Teaching Children in More Authentic Ways Such as
Using Projects Rather Than Using the Text
Survey Responses to Item 15 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	66.7	25.0	8.3	0.0
Economically developed Suburbs	50.0	50.0	0.0	0.0
Growth Communities	61.5	38.5	0.0	0.0
Residential Suburbs	85.7	14.3	0.0	0.0
Economic Rural Centers*	58.3	33.3	8.3	0.0

* Row total is 99.9% due to computer round off.

Table 13

The Move Toward Teaching Children in More Authentic Ways Such as Using
Projects Rather Than Using the Text
Survey Responses to Item 15 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	25.0	50.0	25.0	0.0
EDSH	75.0	25.0	0.0	0.0
GCH	60.0	40.0	0.0	0.0
RSH	100.0	0.0	0.0	0.0
ERCH	75.0	25.0	0.0	0.0
With Average MEAP Scores				
UA	75.0	25.0	0.0	0.0
EDSA	25.0	75.0	0.0	0.0
GCA	75.0	25.0	0.0	0.0
RSA*	66.7	33.4	0.0	0.0
ERCA	50.0	25.0	25.0	0.0
With Low MEAP Scores				
UL	100.0	0.0	0.0	0.0
GCL	50.0	50.0	0.0	0.0
ERCL	50.0	25.0	25.0	0.0

* Row total is 100.1% due to computer round off.

Table 14

The Move Toward Teaching Children in More Authentic Ways
Such as Using Projects Rather Than Using the Text
Survey Results to Item 15 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High*	66.7	28.6	4.8	0.0
Average	57.9	42.1	0.0	0.0
Low	66.7	25.0	8.3	0.0

* Row total is 100.1% due to computer round off.

Table 15

The Move Toward Teaching Children in More Authentic Ways
Such as Using Projects Rather Than Using the Text
Survey Responses to Item 15 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	60.0	40.0	0.0	0.0
Two	30.0	60.0	10.0	0.0
Three	73.3	20.0	6.7	0.0
Four	76.5	23.5	0.0	0.0

Preparing Students for the Future. In the initial part of the interview, only two teachers indicated a need for preparing students for the future as an initiative to make changes in curriculum and instruction. One teacher expressed the need to change education if our students are going to be ready for the work in the twenty-first century. She indicated we must be aware of the ever-changing community and business world. What is appropriate now, will not be appropriate in ten years. Education must continually change and she and other teachers must also be willing to change to accomplish the goal of educating for the twenty-first century.

Table 3 showed 63.5% of the teachers responded Greatly Influenced and when Greatly Influenced and Influenced were combined the percentage rose to 98.1%. Tables 16, 17, 18, and 19 show the responses for question 21, preparing students for the future. Table 16 shows Urban schools with a high response of 75% for Greatly Influenced followed by Residential Suburbs with 71.4% and Growth Communities with 69.2%. Economically Developed Suburbs was lowest with a response of 37.5% for Greatly Influenced. However, when Greatly Influenced and Influenced are combined percentages in all communities rise to 100% except for Economically Developed Suburbs which is at 87.5%. Table 17 shows all schools are above 50% except Economically Developed Suburbs Average at 0% for Greatly Influenced. Urban Average and Residential Suburbs Average are at 100% for Greatly Influenced. When Greatly Influenced and Influenced are combined, all schools are at 100% except for Economically Developed Suburbs Average which is at 75%. Table 18 shows a decreasing pattern for Greatly Influenced ranging from 66.7% to 58.3%. As MEAP scores decrease, so does the Response for Greatly Influenced. However, when Greatly Influenced and Influenced are combined,

all schools rise to 100% except for the Average MEAP scoring schools at 94.5%. Table 19 shows grade four at 70.6%, grades one and two at 70%, and grade three at 46.7% for Greatly Influenced. When Greatly Influenced and Influenced are combined all grades rise to 100% except for grade three at 93.3%.

Table 16

Preparing Students for the Future
Survey Responses to Item 21 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	75.0	25.0	0.0	0.0
Economically Developed Suburbs	37.5	50.0	12.5	0.0
Growth Communities	69.2	30.8	0.0	0.0
Residential Suburbs	71.4	28.6	0.0	0.0
Economic Rural Centers	58.3	41.7	0.0	0.0

Table 17
 Preparing Students for the Future
 Survey Responses to Item 21 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	75.0	25.0	0.0	0.0
EDSH	75.0	25.0	0.0	0.0
GCH	80.0	20.0	0.0	0.0
RSH	50.0	50.0	0.0	0.0
ERCH	50.0	50.0	0.0	0.0
With Average MEAP Scores				
UA	100.0	0.0	0.0	0.0
EDSA	0.0	75.0	25.0	0.0
GCA	50.0	50.0	0.0	0.0
RSA	100.0	0.0	0.0	0.0
ERCA	75.0	25.0	0.0	0.0
With Low MEAP Scores				
UL	50.0	50.0	0.0	0.0
GCL	75.0	25.0	0.0	0.0
ERCL	50.0	50.0	0.0	0.0

Table 18

Preparing Students for the Future
Survey Responses to Item 21 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	66.7	33.3	0.0	0.0
Average*	63.2	31.6	5.3	0.0
Low	58.3	41.7	0.0	0.0

* Row total is 100.1% due to computer round off.

Table 19

Preparing Students for the Future
Survey Responses to Item 21 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	70.0	30.0	0.0	0.0
Two	70.0	30.0	0.0	0.0
Three*	46.7	46.7	6.7	0.0
Four	70.6	29.4	0.0	0.0

* Row total is 100.1% due to computer round off.

The Need to Develop More Cooperative Skills in Learning. Teachers who began to use cooperative learning noticed their students seem to be learning more as well as being more interested in what they are doing in school. Also, the students seem to be working together better in the classroom.

Table 1 shows one teacher specifically mentioned cooperative learning. Tables 2 and 3 show 59.6% responded Greatly Influenced and 36.5 for Influence. When Greatly Influenced and Influenced are combined the percentage rises to 96.1%. Table 20 shows Residential Suburbs with a high of 85.7% for Greatly Influenced while all the other communities are between 50% and 58.3%. When Greatly Influenced and Influenced are combined, all the communities rise to 100% except for Urban which is at 83.3%. Table 21 shows Urban Average, Residential Suburbs High, and Economic rural Centers Average at 100% for Greatly Influenced while Urban High and Economic Rural Centers Low at 0%. When greatly Influenced and Influenced are combined all school rise to 100% except for Urban High and Urban Low which is at 75%. Table 22 shows High MEAP scoring schools with a high percentage of 61.9% for Greatly Influenced and then as MEAP scores decline so does the percentage of influence. Table 23 shows fourth grade to have a high of 70.6% for Greatly Influenced but when Greatly Influenced and Influenced are combined, all grades rise to 100% except for grade two at 80%.

Table 20

**The Need to Develop More Cooperative Skills in Learning
Survey Responses to Item 16 by Kind of Community**

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	58.3	25.0	16.7	0.0
Economically Developed Suburbs	50.0	50.0	0.0	0.0
Growth Communities	53.8	46.2	0.0	0.0
Residential Suburbs	85.7	14.3	0.0	0.0
Economic Rural Centers	58.3	41.7	0.0	0.0

Table 21

The Need to Develop More Cooperative Skills in Learning
Survey Responses to Item 16 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms.. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	0.0	75.0	25.0	0.0
EDSH	75.0	25.0	0.0	0.0
GCH	60.0	40.0	0.0	0.0
RSH	100.0	0.0	0.0	0.0
ERCH	75.0	25.0	0.0	0.0
With Average MEAP Scores				
UA	100.0	0.0	0.0	0.0
EDSA	25.0	75.0	0.0	0.0
GCA	75.0	25.0	0.0	0.0
RSA	66.7	33.3	0.0	0.0
ERCA	100.0	0.0	0.0	0.0
With Low MEAP Scores				
UL	75.0	0.0	25.0	0.0
GCL	25.0	75.0	0.0	0.0
ERCL	0.0	100.0	0.0	0.0

Table 22

The Need to Develop More Cooperative Skills in Learning
Survey Responses to Item 16 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	61.9	33.3	4.8	0.0
Average	73.7	26.3	0.0	0.0
Low*	33.3	58.3	8.3	0.0

* Row total is 99.9% due to computer round off.

Table 23

The Need to Develop More Cooperative Skills in Learning
Survey Responses to Item 16 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	50.0	50.0	0.0	0.0
Two	40.0	40.0	20.0	0.0
Three	66.7	33.3	0.0	0.0
Four	70.6	29.4	0.0	0.0

The Move Toward More Mainstreaming of Special Education

Students into the Regular Classroom. Table 3 shows only 36.3% of the teachers responded Greatly Influenced and 65.1% responded when Greatly influenced and Influenced were combined. On Table 24 Residential Suburbs showed the greatest influence at 71.4% along with Economically Developed Suburbs at 62.5%. The other communities were much lower with the Urban community responding at 16.7%. Table 24 also shows the Urban schools and Economically Developed schools with the highest influence in initiating changes in curriculum and instruction. During the interviewing process, several teachers in the Residential Schools informed the researcher that class size was low and because of their teaching style which included many individualized learning plans. There was a tendency for some families to move into their community to take advantage of what the schools had to offer. This was especially true for students who had learning problems. This might account for the higher interest in mainstreaming special education students. Also, Table 25 shows that schools with the highest MEAP scores showed the most influence and the influence decreased as the MEAP scores decreased.

Table 24

The Move Toward More Mainstreaming of Special Education
Students into the Regular Classroom
Survey Responses to Item 4 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban*	16.7	41.7	41.7	0.0
Economically Developed Suburbs	62.5	25.0	12.5	0.0
Growth Communities*	23.1	30.8	46.2	0.0
Residential Suburbs	71.4	14.3	14.3	0.0
Economic Rural Centers	33.3	25.0	41.7	0.0

* Row total is 100.1% due to computer round off.

Table 25

The Move Toward More Mainstreaming of Special Education
Students into the Regular Classroom
Survey Responses to Item 4 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>School</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	0.0	75.0	25.0	0.0
EDSH	75.0	0.0	25.0	0.0
GCH	40.0	60.0	0.0	0.0
RSH	75.0	25.0	0.0	0.0
ERCH	25.0	25.0	50.0	0.0
With Average MEAP Scores				
UA	25.0	25.0	50.0	0.0
EDSA	50.0	50.0	0.0	0.0
GCA	0.0	0.0	100.0	0.0
RSA	66.7	0.0	33.3	0.0
ERCA	50.0	25.0	25.0	0.0
With Low MEAP Scores				
UL	25.0	25.0	50.0	0.0
GCL	25.0	25.0	50.0	0.0
ERCL	25.0	25.0	50.0	0.0

Table 26

The Move Toward More Mainstreaming of Special Education
Students into the Regular Classroom
Survey Responses to Item 4 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	42.9	38.1	19.0	0.0
Average	36.8	21.1	42.1	0.0
Low	25.0	25.0	50.0	0.0

Table 27

The Move Toward More Mainstreaming of Special Education
Students into the Regular Classroom
Survey Responses to Item 4 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	10.0	60.0	30.0	0.0
Two	20.0	20.0	60.0	0.0
Three	53.3	20.0	26.7	0.0
Four	47.1	23.5	29.4	0.0

Wanting to Include a More Multicultural Aspect to the Curriculum. Some communities lacked cultural diversity and therefore teachers were creating units to help students understand and appreciate other cultures. One teacher devoted the month of February to the study of the African cultures and literature. In another school system, teachers attended workshops on understanding different cultures. One of the workshops given by the regional lab in Andover helped teachers to better understand the culture of the Native Americans. They were presently teaching about Native Americans as part of their curriculum but after the workshop they discovered they were teaching some concepts inappropriately. This information helped them to approach the curriculum differently.

Table 3 shows 26.9% of the teachers responded to Greatly Influenced and 69.2% when Greatly Influenced and Influenced were combined. Table 28 shows the highest response for both Urban and Economic Rural Centers was 33.3% for Greatly Influenced. Even when combining the percentages for Greatly Influenced and Influenced, these two Kinds of Communities remained high. Urban communities rose to 83.3% while Rural Economic Centers and Economically Developed Suburbs rose to 75%. Table 29 shows 5 of the 13 schools at 0% for Greatly Influenced and the highest response of 75% for the Economic Rural Center Average. However, when combining Greatly influenced and Influenced all schools were 50% or higher. Table 30 shows all schools, no matter the MEAP score, are under 28.6% for Greatly Influenced. When combining Greatly Influenced and Influenced, the percentage rises to 61.9% for the high-scoring MEAP schools and to 75% for low-scoring MEAP schools. Table 31 shows the highest level of influence for including a more multicultural aspect in curriculum and instruction occurs in grades four with 41.2%. Grades

one and two are at 30% for Greatly Influenced. When combining Greatly Influenced and Influenced grade one shows the highest percentage at 80% and grade three again the lowest at 60%.

Table 28

Wanting to Include a More Multicultural Aspect to the Curriculum
Survey Responses to Item 6 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	33.3	50.0	16.7	0.0
Economically Developed Suburbs	12.5	62.5	25.0	0.0
Growth Communities*	23.1	38.5	38.5	0.0
Residential Suburbs	28.6	14.3	57.1	0.0
Economic Rural Centers	33.3	41.7	25.0	0.0

* Row total is 100.1% due to computer round off.

Table 29

Wanting to Include a More Multicultural Aspect to the Curriculum
Survey Responses to Item 6 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No influence</u>
With High MEAP Scores				
UH	50.0	25.0	25.0	0.0
EDSH	25.0	25.0	50.0	0.0
GCH	40.0	60.0	0.0	0.0
RSH	0.0	25.0	75.0	0.0
ERCH	25.0	25.0	50.0	0.0
With Average MEAP Scores				
UA	0.0	75.0	25.0	0.0
EDSA	0.0	100.0	0.0	0.0
GCA	0.0	25.0	75.0	0.0
RSA	66.7	0.0	33.3	0.0
ERCA	75.0	25.0	0.0	0.0
With Low MEAP Scores				
UL	50.0	50.0	0.0	0.0
GCL	25.0	25.0	50.0	0.0
ERCL	0.0	75.0	25.0	0.0

Table 30

Wanting to Include a More Multicultural Aspect to the Curriculum
Survey Responses to Item 6 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	28.6	33.3	38.1	0.0
Average	26.3	47.4	26.3	0.0
Low	25.0	50.0	25.0	0.0

Table 31

Wanting To Include a More Multicultural Aspect to the Curriculum
Survey Responses to Item 6 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	30.0	50.0	20.0	0.0
Two	30.0	40.0	30.0	0.0
Three	6.7	53.3	40.0	0.0
Four	41.2	29.4	29.4	0.0

The Need to Develop More Cultural Understanding. Table 1 shows a response of 2 for Multiculturalism. Tables 2 and 3 shows a response of 26.9% for Greatly Influenced and 48.15% for Influenced. When Greatly Influenced and Influenced are combined, the response rises to 75%. Table 13 shows Economic Rural Centers Average with a high of 75% for Greatly Influenced. Four of the 13 schools show a low of 0%. When Greatly Influenced and Influenced are combined the percentages rise to 50% or greater for all. Economic Rural Centers Average and Low as well as Residential Suburbs High show a high of 100%. Table 34 shows High MEAP scoring schools have a lower percentage of influence for both Greatly Influenced and the combined percentage of Greatly Influenced and Influenced than do Average and Low scoring MEAP schools. The Low MEAP scoring schools showed the highest response. Table 35 shows grade four the highest response at 47.1% and grade three the lowest at 6.7 % for Greatly Influenced. When Greatly Influenced and Influenced are combined grade four is high at 82.4% and grade three is still low at 60%.

Table 32

The Need to Develop More Cultural Understanding
Survey Responses to Item 13 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	25.0	50.0	25.0	0.0
Economically Developed Suburbs	12.5	50.0	37.5	0.0
Growth Communities	23.1	53.8	23.1	0.0
Residential Suburbs*	28.6	28.6	42.9	0.0
Economic Rural Centers	41.7	50.0	8.3	0.0

* Row total is 100.1% due to computer round off.

Table 33

The Need to Develop More Cultural Understanding
Survey Responses to Item 13 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in instruction and curriculum in their classrooms. The numbers below are listed as percentages.

Schools	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Schools With High MEAP Scores				
UH	25.0	50.0	25.0	0.0
EDSH	25.0	25.0	50.0	0.0
GCH	40.0	60.0	0.0	0.0
RSH	0.0	50.0	50.0	0.0
ERCH	25.0	50.0	25.0	0.0
Schools With Average MEAP Scores				
UA	0.0	75.0	25.0	0.0
EDSA	0.0	75.0	25.0	0.0
GCA	0.0	50.0	50.0	0.0
RSA	66.7	0.0	33.3	0.0
ERCA	75.0	25.0	0.0	0.0
Schools With Low MEAP Scores				
UL	50.0	25.0	25.0	0.0
GCL	25.0	50.0	25.0	0.0
ERCL	25.0	50.0	0.0	0.0

Table 34

The Need to Develop More Cultural Understanding
Survey Responses to Item 13 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	23.8	47.6	28.6	0.0
Average	26.3	47.4	26.3	0.0
Low	33.3	50.0	16.7	0.0

Table 35

The Need to Develop More Cultural Understanding
Survey Responses to Item 13 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	30.0	50.0	20.0	0.0
Two	20.0	60.0	20.0	0.0
Three	6.7	53.3	40.0	0.0
Four	47.1	35.3	17.6	0.0

The Need to Get More Parental Involvement in Education. Many teachers indicated that the family structure had changed. They were no longer able to get the help they needed from the parents, especially where homework was concerned. This precipitated the need to change teaching methods and homework assignments.

A teacher explained that many parents feel threatened by the school. For them, school had not been a positive experience and therefore it was important to turn that feeling around. She tries to get the parents involved in a lot of nonthreatening activities. She calls them regularly and tries to see them as much as possible. Telephone calls are to be very positive, and to include all the good things the child was doing at school. It is important parents not see the teacher as an authority figure but as a person interested in helping their child and working cooperatively with them. In her school parents are encouraged to come in any time they want and sit in on the classes. In fact, if children are very disruptive, parents are invited to spend the morning or afternoon with their child in the classroom so they have a better understanding of the problem. Sometimes just having the parent sit in on a class solves the problem.

One teacher spoke about the importance of respecting parents for who they were and not trying to teach them how to raise their kids. It is not necessary that parents teach their kids how to do math. Rather, it is more important that teachers use parents as a resource.

Two teachers responded that becoming a parent actually initiated changes in how they did things in the classroom. They had an opportunity to experience elements of school such as conferences, report cards, and first-day-of-school separation through the eyes of parents. These experiences

helped teachers to see both the child and the parent-child connection differently which then resulted in changes in the classroom.

On another front, teachers spoke about parents who felt their children were bright and gifted and were upset that their children were not being challenged enough in the regular classroom. These parents wanted teachers to change the curriculum to meet their children's needs.

Some classrooms have substituted senior citizens for parent volunteers. One school invites elderly citizens to come into the classrooms and read to the children. Another school celebrated Grandparents' Day by inviting grandparents or a significant person in the child's life to come and spend the day.

In another school, parent requests are impacting the curriculum. Parents are concerned about whether or not their children are learning. They would like to see more standardized testing instituted by the school so that they can see test results. The administration has listened to the parent concerns and has started asking the teachers to begin using workbooks or create lessons that follow the scope and sequence of the workbook.

Table 1 shows 5 responses for parents and 2 responses for becoming a parent. Usually this meant the teachers were talking about changes they made because they developed more understanding about the parent-school relationship. Additionally, parents were used as a resource to acquire additional information to help meet the individual needs of each child. Table 1 also indicated 10 responses for a change in families. This reference was usually negative. Teachers would explain about the declining interest parents were showing toward how their children were doing in school and also the decline of the parent-school connection. Tables 2 and 3 indicate 23.1% of the

teachers responded Greatly Influenced and 38.5% responded Influenced. When Greatly Influenced and Influenced were combined, the percentage rose to 61.6%. Table 36 shows many low responses for all Kinds of Communities in considering parent involvement as an influence to initiate changes in curriculum and instruction. Under Greatly Influenced, the Economic Rural Centers had a high of 41.7% followed by Urban with 33.3%. The other communities were all below 15.4% for Greatly Influenced. However, when combining Greatly Influenced and Influenced the percentages show an influence 50% to 75% for parents as an initiative to change curriculum and instruction. Table 37 shows 0% for five of the 13 schools. Urban High and Economic Rural Centers Average were the only two with a high of 75% for Greatly Influenced. When Greatly Influenced and Influenced are combined, the percentages do rise. Residential Suburbs Average and Economic Rural Centers Average rise to 100% while Economic Rural Communities High and Low and Growth Communities Average remain at 25%. Table 38 shows a close range of 21.1% to 25% for Greatly Influenced by MEAP score. When Greatly Influenced and Influenced are combined, the responses range from 57.1% to 68.5%. Table 39 shows fourth grade with the highest percentage at 52.9 and second grade at a low of 20% for Greatly Influenced. When Greatly Influenced and Influenced are combined, second grade rises to a high of 100% and all other are above 73.3%.

Table 36

The Need to Get More Parental Involvement in Education
Survey Responses to Item 26 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	33.3	41.7	25.0	0.0
Economically Developed Suburbs	0.0	50.0	37.5	12.5
Growth Communities*	15.4	46.2	23.1	15.4
Residential Suburbs	14.3	57.1	14.3	14.3
Economic Rural Centers	41.7	8.3	50.0	0.0

* Row total is 100.1% due to computer round off.

Table 37

The Need to Get More Parental Involvement in Education
Survey Responses to Item 26 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classroom. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	75.0	0.0	25.0	0.0
EDSH	0.0	50.0	50.0	0.0
GCH	20.0	60.0	20.0	0.0
RSH	0.0	50.0	25.0	25.0
ERCH	25.0	0.0	75.0	0.0
With Average MEAP Scores				
UA	0.0	75.0	25.0	0.0
EDSA	0.0	50.0	25.0	25.0
GCA	0.0	25.0	50.0	25.0
RSA	33.3	66.7	0.0	0.0
ERCA	75.0	25.0	0.0	0.0
With Low MEAP Scores				
UL	25.0	50.0	25.0	0.0
GCL	25.0	50.0	0.0	25.0
ERCL	25.0	0.0	75.0	0.0

Table 38

The Need to Get More Parental Involvement in Education
Survey Responses to Item 26 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	23.8	33.3	38.1	4.8
Average*	21.1	47.4	21.1	10.5
Low **	25.0	33.3	33.3	8.3

* Row total is 100.1% due to computer round off.

** Row total is 99.9% due to computer round off.

Table 39

The Need to Get More Parental Involvement in Education
Survey Responses to Item 26 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	30.0	60.0	10.0	0.0
Two	10.0	40.0	40.0	10.0
Three	26.7	46.7	13.3	13.3
Four*	23.5	17.6	52.9	5.9

* Row total is 99.9% due to computer round off.

Teachers' Educational Enrichment and Needs

Teachers frequently indicated that they were influenced by workshops, professional development, courses, and reading. Some teachers indicated that they felt confusion about implementing new ideas so they would search out books to clarify the process and address the problems they were experiencing. Others indicated they gained a great deal of new information or insights because of the courses they were taking for advanced degrees.

Some teachers also indicated years of experience influenced them in making changes. One teacher explained that as a beginning teacher she followed the teacher's guide very closely but as time went on she saw certain things weren't working and needed to change. She had learned to adopt and adapt many new ideas to make her teaching more effective.

There were six questions related to the teachers' educational enrichment and needs. These included reading professional journals, professional development within the school system, college courses, workshops, seminars, and conferences. Also included in this area are observing fellow teachers and educational discussions which influence other teachers to initiate changes in curriculum and instruction.

College Courses, Workshops, Seminars, Conferences. Teachers were concerned about staying current, especially with the move toward whole language and technology. Workshops provided them with new information, ideas, and helpful books. Principals also encouraged teachers to attend workshops so that system-wide changes could be implemented such as incorporating learning centers as an integral part of teaching.

One teacher indicated that she became aware of gender bias because of the research she had done in a course. She then evaluated her own teaching style and changed her teaching techniques to eliminate any biases that were occurring in her class.

Table 1 shows 24 responses for college courses, workshops, and conferences. Tables 2 and 3 show 69.2% of the teachers responded Greatly Influenced and 23.1% responded Influenced. Combining Greatly Influenced and Influenced resulted in a response of 92.3%. Table 40 shows all communities above 50% for Greatly Influenced. Economic Rural Centers show a high of 91.7% for Greatly Influenced and when Greatly Influenced and Influenced are combined the percentage rises to 100% along with Growth Communities. All the other communities have a combined percentage of 83.3% or higher. Table 41 shows Economic Rural Centers High and Low with 100% for Greatly Influenced and 75% for Economic Rural Centers Average. Urban High was the lowest percentage at 25% for Greatly Influenced. However, when Greatly Influenced and Influenced are combined, nine of the 13 schools responded 100%. Table 42 shows as MEAP scores decrease the influence of courses, workshops, seminars, and conferences increases. Schools with low MEAP scores responded 83.8% for Greatly Influenced and when Greatly Influenced and Influenced are combined the percentage rises to 100%. Table 43 shows grade four with the highest influence at 76.5% for Greatly Influenced but when Greatly Influenced and Influenced are combined, grade one shows a 100%. All other grades are 88.2% or higher.

Table 40

College Courses, Workshops, Seminars, Conferences
Survey Responses to Item 10 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	58.3	25.0	16.7	0.0
Economically Developed Suburbs	50.0	37.5	12.5	0.0
Growth Communities	69.2	30.8	0.0	0.0
Residential Suburbs	71.4	14.3	14.3	0.0
Economic Rural Centers	91.7	8.3	0.0	0.0

Table 41

College Courses, Workshops, Seminars, and Conferences
Survey Responses to Item 10 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	25.0	50.0	25.0	0.0
EDSH	50.0	50.0	0.0	0.0
GCH	80.0	20.0	0.0	0.0
RSH	75.0	0.0	25.0	0.0
ERCH	100.0	0.0	0.0	0.0
With Average MEAP scores				
UA	75.0	0.0	25.0	0.0
EDSA	50.0	25.0	25.0	0.0
GCA	50.0	50.0	0.0	0.0
RSA	66.7	33.3	0.0	0.0
ERCA	75.0	25.0	0.0	0.0
With Low MEAP Scores				
UL	75.0	25.0	0.0	0.0
GCL	75.0	25.0	0.0	0.0
ERCL	100.0	0.0	0.0	0.0

Table 42

College Courses, Workshops, Seminars, and Conferences
Survey Responses to Item 10 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	66.7	23.8	9.5	0.0
Average	63.2	26.3	10.5	0.0
Low	83.3	16.7	0.0	0.0

Table 43

College Courses, Workshops, Seminars, and Conferences
Survey Responses to Item 10 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	60.0	40.0	0.0	0.0
Two	70.0	20.0	10.0	0.0
Three*	66.7	26.7	6.7	0.0
Four*	76.5	11.8	11.8	0.0

* Row total is 100.1% due to computer round off.

An interest in Experimenting with New Ideas or Methods. Some teachers viewed new ideas as cyclical. One teacher commented that when she started teaching years ago, integrated teaching was the buzz word. Now it's back again.

One teacher thought there was a lot of pressure on teachers to do everything. They are supposed to do cooperative learning, inclusion, teams, etc. Also many teachers who initiate new ideas begin to lobby for other teachers to get involved with them. She thought children were the victims of these new ideas and methods.

Table 1 shows a response of 8 for new ideas, trends, and movements. Tables 2 and 3 show 69.2% of the teachers were Greatly Influenced and 25% were Influenced by an interest in experimenting with new ideas or methods. Combining Greatly Influenced and Influenced increased the percentage to 94.2%. Table 44 shows Growth Communities with a high of 84.6% followed by Economic Rural Centers with 83.3% for Greatly Influenced. Economically Developed Suburbs was lowest with 37.5% for Greatly Influenced but when Greatly Influenced and Influenced are combined the percentage rises to 100% along with Residential Suburbs and Economic Rural Centers. Tables 45 and 46 show that some of the schools with the lowest MEAP scores indicated the highest interest in experimenting with new ideas or methods. Table 46 shows the percentages increase as the MEAP scores decrease. However, when Greatly Influenced and Influenced are combined, all the percentages are above 90%. Table 47 shows similar percentages except for grade two which was about 10% lower but again when Greatly Influenced and Influenced are combined the percentages are all above 86%.

Table 44

An Interest in Experimenting with New Ideas or Methods
Survey Responses to Item 20 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	58.3	25.0	16.7	0.0
Economically Developed Suburbs	37.5	62.5	0.0	0.0
Growth Communities	84.6	7.7	7.7	0.0
Residential Suburbs	71.4	28.6	0.0	0.0
Economic Rural Centers	83.3	16.7	0.0	0.0

Table 45

An Interest in Experimenting with New Ideas or Methods
Survey Responses to Item 20 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. Numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	50.0	0.0	50.0	0.0
EDSH	25.0	75.0	0.0	0.0
GCH	80.0	20.0	0.0	0.0
RSH	75.0	25.0	0.0	0.0
ERCH	50.0	50.0	0.0	0.0
With Average MEAP Scores				
UA	75.0	25.0	0.0	0.0
EDSA	50.0	50.0	0.0	0.0
GCA	75.0	0.0	25.0	0.0
RSA	66.7	33.3	0.0	0.0
ERCA	100.0	0.0	0.0	0.0
With Low MEAP Scores				
UL	50.0	50.0	0.0	0.0
GCL	100.0	0.0	0.0	0.0
ERCL	100.0	0.0	0.0	0.0

Table 46

An Interest in Experimenting with New Ideas or Methods
Survey Responses to Item 20 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	57.1	33.3	9.5	0.0
Average*	73.7	21.1	5.3	0.0
Low	83.3	16.7	0.0	0.0

* Row total is 100.1% due to computer round off.

Table 47

An Interest in Experimenting with New Ideas or Methods
Survey Responses to Item 20 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	70.0	20.0	10.0	0.0
Two	60.0	40.0	0.0	0.0
Three*	73.3	13.3	13.3	0.0
Four	70.6	29.4	0.0	0.0

* Row total is 99.9% due to computer round off.

The Need to Revitalize Curriculum or Instruction in the Classroom. Table 1 shows a response of 5 for outdated materials, a response of 2 for adding spice to teaching and finding new ways, and a response of 2 for keeping students motivated. Tables 2 and 3 show 63.5% for Greatly Influenced and 32.7% for Influenced. When Greatly Influenced and Influenced are combined the percentage rises to 96.2%. Table 48 shows Residential Suburbs with a high of 85.7% for Greatly Influenced and a low of 46.2 in Growth Communities. When Greatly Influenced and Influenced are combined Urban, Economically Developed Suburbs, and Economic Rural Centers rise to 100% while Growth Communities are at 92.4 and Residential Suburbs are still at 85.7%. Table 49 shows Economically Developed Suburbs High and Residential Suburbs Average at 100% for Greatly Influenced. Urban High and Growth Community Average are at a low of 25%. When Greatly Influenced and Influenced are combined all schools rise to 100% except for Residential Suburbs High and Growth Community Average which are at 75%. Table 50 shows a decreasing pattern for MEAP scores for Greatly Influenced from 66.7% for High MEAP scores to 63.2% for Average MEAP scores to 58.3% for Low MEAP scores. When Greatly Influenced and Influenced are combined, all schools are above 94.8% and the Low MEAP scoring school is at 100%. Table 51 shows grade 4 at a high of 82.4% and grade two at a low of 50% for Greatly Influenced. When Greatly Influenced and Influenced are combined, grades one and two rise to 100% while grade three is a 93.3% and grade four is at 94.2%.

Table 48

The Need to Revitalize Curriculum or Instruction in the Classroom
Survey Responses to Item 18 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	50.0	50.0	0.0	0.0
Economically Developed Suburbs	75.0	25.0	0.0	0.0
Growth Communities*	46.2	46.2	0.0	7.7
Residential Suburbs	85.7	0.0	14.3	0.0
Economic Rural Centers	75.0	25.0	0.0	0.0

* Row total is 100.1% due to computer round off.

Table 49

The Need to Revitalize Curriculum or Instruction in the Classroom
Survey Responses to Item 18 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	25.0	75.0	0.0	0.0
EDSH	100.0	0.0	0.0	0.0
GCH	60.0	40.0	0.0	0.0
RSH	75.0	0.0	25.0	0.0
ERCH	75.0	25.0	0.0	0.0
With Average MEAP Scores				
UA	75.0	25.0	0.0	0.0
EDSA	50.0	50.0	0.0	0.0
GCA	25.0	50.0	0.0	25.0
RSA	100.0	0.0	0.0	0.0
ERCA	75.0	25.0	0.0	0.0
With Low MEAP Scores				
UL	50.0	50.0	0.0	0.0
GCL	50.0	50.0	0.0	0.0
ERCL	75.0	25.0	0.0	0.0

Table 50

The Need to Revitalize Curriculum or Instruction in the Classroom
Survey Responses to Item 18 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	66.7	28.6	4.8	0.0
Average*	63.2	31.6	0.0	5.3
Low	58.3	41.7	0.0	0.0

* Row total is 100.1% due to computer round off.

Table 51

The Need to Revitalize Curriculum or Instruction in the Classroom
Survey Responses to Item 18 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	60.0	40.0	0.0	0.0
Two	50.0	50.0	0.0	0.0
Three	53.3	40.0	0.0	6.7
Four*	82.4	11.8	5.9	0.0

* Row total is 100.1% due to computer round off.

Discussion With Other Teachers About Curriculum and Instruction. One teacher surmised that she initiated changes in curriculum and instruction because she had a good support system which included peers, administrators, friends, and the university. She commented that a hindrance to change is when you are the only one doing something. Effective change occurs when those around you, like a team of teachers, have the same educational philosophy. The principal must also be supportive. This teacher also discussed a comment that was stated by a college multicultural teacher which was "once you know , you can never not know again." She concluded that once she had an understanding of how kids learned and what prevented kids from learning, she could never close her eyes and go back to fifty worksheets again without feeling guilty.

Table 1 shows a response of 15 for other teachers as having an influence in initiating changes in curriculum and instruction. Tables 2 and 3 show 58.3% responded Greatly Influenced and 36.5% responded Influenced. If we combine these two figures, the percentage rises to 96.2%. Table 52 shows Economic Suburbs and Growth Communities with the highest percentage for Greatly Influenced, 62.5% and 61.5%. Economic Rural Centers are the lowest with 41.7%. However, when Greatly Influenced and Influenced are combined the percentage rises to at least 75% for all communities with Urban and Economically Developed Suburbs at 100%. Table 53 shows a range of 25% to 75% for Greatly Influenced among the schools which increases to 100% for the combined Greatly Influenced and Influenced except for four of the 13 schools in the study. Table 54 shows high and average MEAP scoring schools with 57.1% and 57.9 % for Greatly Influenced. The low scoring MEAP schools responded with 41.7% for Greatly Influenced. When Greatly Influenced and Influenced

were combined the percentages rose to 90.5% for the high, 89.5% for the average and 91.7% for the low scoring MEAP schools. Table 55 shows grade four with the highest percentage at 70.6% and grade two with lowest percentage at 30% for Greatly Influenced. However, when combining Greatly Influenced and Influenced the percentages rise to 86.7% or higher for all grades and grade one with the highest at 100%.

Table 52

Discussions With Other Teachers About Curriculum and Instruction
Survey Responses to Item 8 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	50.0	50.0	0.0	0.0
Economically Developed Suburbs	62.5	37.5	0.0	0.0
Growth Communities	61.5	30.8	7.7	0.0
Residential Suburbs	57.1	28.6	14.3	0.0
Economic Rural Centers	41.7	33.3	25.0	0.0

Table 53

Discussions With Other Teachers About Curriculum and Instruction
Survey Responses to Item 8 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	50.0	50.0	0.0	0.0
EDSH	75.0	25.0	0.0	0.0
GCH	60.0	40.0	0.0	0.0
RSH	75.0	25.0	0.0	0.0
ERCH	25.0	25.0	50.0	0.0
With Average MEAP Scores				
UA	50.0	50.0	0.0	0.0
EDSA	50.0	50.0	0.0	0.0
GCA	75.0	0.0	25.0	0.0
RSA*	33.3	33.3	33.3	0.0
ERCA	75.0	25.0	0.0	0.0
With Low MEAP Scores				
UL	50.0	50.0	0.0	0.0
GCL	50.0	50.0	0.0	0.0
ERCL	25.0	50.0	25.0	0.0

* Row total is 99.9% due to computer round off.

Table 54

Discussions With Other Teachers About Curriculum and Instruction
Survey Responses to Item 8 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High*	57.1	33.3	9.5	0.0
Average	57.9	31.6	10.5	0.0
Low	41.7	50.0	8.3	0.0

* Row total is 99.9% due to computer round off.

Table 55

Discussions With Other Teachers About Curriculum and Instruction
Survey Responses to Item 8 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	50.0	50.0	0.0	0.0
Two	30.0	60.0	10.0	0.0
Three*	53.3	33.3	13.3	0.0
Four	70.6	17.6	11.8	0.0

* Row total is 99.9% due to computer round off.

Learning About New Ideas, Methods, or Techniques from Other

Teachers. Professional associations such as reading and math associations are very helpful because they spread new ideas to teachers. Frequently classroom teachers are presenters at meetings and conventions. The physical environment of the school may also encourage teachers to learn from one another. Those teachers who work in schools where they have classrooms without walls have an opportunity to see what other teachers are doing. Also, team teachers and support teachers have an opportunity to see each other teach and to gain new ideas from each other. One teacher also indicated that having a student teacher gave her an opportunity to see new ideas, methods, and techniques that were being advocated by the teacher training colleges.

Table 1 indicates 15 responses for other teachers and 1 response for observing other teachers. Tables 2 indicates 46.2% of the teachers responded Greatly Influenced and 40.4% responded Influenced. When Greatly Influenced and Influenced are combined the percentage rises to 86.6%. Table 56 show Economic Rural Centers with 58.3% and Residential Suburbs with 57.1% for Greatly Influenced. The lowest response was 12.5% for Economically Developed Suburbs which was also the lowest percentage at 62.5% when Greatly Influenced and Influenced were combined. All the other communities were 83.4% or higher. Table 57 shows a range from 0% to 75% for Greatly Influenced. When Greatly Influenced and Influenced are combined, all the schools show at least 50%. Table 58 shows decreasing percentages as the MEAP scores decrease. Even when Greatly Influenced and Influenced are combined the same decreasing pattern exists. The teachers in schools with higher MEAP scores are more influenced by other teachers than those teachers in schools with lower MEAP scores. Table 59 shows fourth grade having the

highest response but when Greatly Influenced and Influenced are combined, all grades are above 80%.

Table 56

Learning About New Ideas, Methods, or Techniques from Other Teachers
Survey Responses to Item 25 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban*	41.7	41.7	16.7	0.0
Economically Developed Suburbs	12.5	50.0	37.5	0.0
Growth Communities	53.8	46.2	0.0	0.0
Residential Suburbs	57.1	28.6	14.3	0.0
Economic Rural Centers**	58.3	33.3	8.3	0.0

* Row total is 100.1% due to computer round off.

** Row total is 99.9% due to computer round off.

Table 57

Learning About New Ideas, Methods, or Techniques from Other Teachers
Survey Responses to Item 25 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	50.0	50.0	0.0	0.0
EDSH	25.0	25.0	50.0	0.0
GCH	60.0	40.0	0.0	0.0
RSH	75.0	25.0	0.0	0.0
ERCH	50.0	50.0	0.0	0.0
With Average MEAP Scores				
UA	75.0	25.0	0.0	0.0
EDSA	0.0	75.0	25.0	0.0
GCA	50.0	50.0	0.0	0.0
RSA*	33.3	33.3	33.3	0.0
ERCA	75.0	0.0	25.0	0.0
With Low MEAP Scores				
UL	0.0	50.0	50.0	0.0
GCL	50.0	50.0	0.0	0.0
ERCL	50.0	50.0	0.0	0.0

* Row total is 99.9% due to computer round off.

Table 58

Learning About New Ideas, Methods, or Techniques from Other Teachers
Survey Responses to Item 25 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	52.4	38.1	9.5	0.0
Average	47.4	36.8	15.8	0.0
Low	33.3	50.0	16.7	0.0

Table 59

Learning About New Ideas, Methods, or Techniques from Other Teachers
Survey Responses to Item 25 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	50.0	40.0	10.0	0.0
Two	30.0	60.0	10.0	0.0
Three	46.7	33.3	20.0	0.0
Four	52.9	35.3	11.8	0.0

The Need to Try Something New Because You are Dissatisfied With the Way Things are Going at the Present Time. One teacher indicated that if she didn't like the way something was working, she would try to find something that did work. If she wasn't happy with what was going on in the classroom, she felt her students wouldn't be happy either.

Table 1 shows 5 responses for becoming stagnant or bored and 3 responses for something is not working. Tables 2 and 3 show 40.4% responded Greatly Influenced and 48.1% responded Influenced. When Greatly Influenced and Influenced are combined the percentage rises to 88.5%. Table 60 shows Urban at 50% and Economic Rural Centers at 58.3% to be the highest responses for Greatly Influenced. When Greatly Influenced and Influenced are combined all communities are above 84.6%. Table 61 shows two of the three low scoring MEAP schools with a high of 75% for Greatly Influenced. All other schools are 50% or lower. When greatly Influenced and Influenced are combined nine of the 13 schools rose to 100% while the others are at 75%. However, all low scoring schools are at 100%. Table 62 shows the same pattern as above. As MEAP scores decreased the percentage responding Greatly Influenced increased. Table 63 shows fourth grade to be at a high of 52.9% and grade two at a low of 20% for Greatly Influenced. When Greatly Influenced and Influenced are combined, grade two rises to 100% and all others are above 73.3%.

Table 60

The Need to Try Something New Because You are Dissatisfied With the Way
Things are Going at the Present Time
Survey Responses to Item 24 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	50.0	41.7	8.3	0.0
Economically Developed Suburbs	37.5	50.0	12.5	0.0
Growth Communities	15.4	69.2	7.7	7.7
Residential Suburbs*	42.9	42.9	0.0	14.3
Economic Rural Centers**	58.3	33.3	8.3	0.0

* Row total is 100.1% due to computer round off.

** Row total is 99.9% due to computer round off.

Table 61

The Need to Try Something New Because You are Dissatisfied With the Way
 Things are Going at the Present Time
 Survey Responses to Item 24 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	25.0	50.0	25.0	0.0
EDSH	25.0	50.0	25.0	0.0
GCH	0.0	100.0	0.0	0.0
RSH	50.0	50.0	0.0	0.0
ERCH	50.0	50.0	0.0	0.0
With Average MEAP Scores				
UA	50.0	50.0	0.0	0.0
EDSA	50.0	50.0	0.0	0.0
GCA	25.0	25.0	25.0	25.0
RSA*	33.3	33.3	0.0	33.3
ERCA	50.0	25.0	25.0	0.0
With Low MEAP Scores				
UL	75.0	25.0	0.0	0.0
GCL	25.0	75.0	0.0	0.0
ERCL	75.0	25.0	0.0	0.0

* Row total is 99.9% due to computer round off.

Table 62

The Need to Try Something New Because You are Dissatisfied
With the Way Things are Going at the Present Time
Survey Responses to Item 24 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	28.6	61.9	9.5	0.0
Average*	42.1	36.8	10.5	10.5
Low	58.3	41.7	0.0	0.0

* Row total is 99.9% due to computer round off.

Table 63

The Need to Try Something New Because You are Dissatisfied
With the Way Things are Going at the Present Time
Survey Responses to Item 24 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	40.0	50.0	10.0	0.0
Two	20.0	80.0	0.0	0.0
Three*	40.0	33.3	13.3	13.3
Four	52.9	41.2	5.9	0.0

* Row total is 99.9% due to computer round off.

Classroom Observations of Other Teachers, Either Formal or Informal.

One teacher explained how she had an opportunity to observe another teacher. It was a program in which a teacher came in and modeled lessons. After the observation, the teacher began to evaluate what she was doing. She assessed those things she was doing well and made plans to try some innovative methods in the areas in which she felt she was having problems.

Table 1 shows only one teacher response for observing another teacher. However, numerous teachers stopped when completing the survey and said how they wished they had either the time or the opportunity to observe another teacher. Tables 2 and 3 show 34.6% for Greatly Influenced and 34.6% for Influenced. When Greatly Influenced and Influenced are combined the percentage rises to 69.2%. Table 64 shows Urban and Rural Economic Centers with a high of 50% for Greatly Influenced while all the other communities are 25% or lower. When Greatly Influenced and Influenced are combined both Urban and Economic Centers remain the communities with the highest percentages. Table 65 show Urban High, Residential Suburbs High, and Economic Rural Centers Average at a high of 75%. When Greatly Influenced and Influenced are combined only five of the 13 schools rise to 100% and the Economically Developed Suburb Average is a 0%. Table 66 shows schools to be in the range of 31.6% to 38.1% for Greatly Influenced. When Greatly Influenced and Influenced are combined, High MEAP scoring schools are at 90.5% while Average and Low MEAP scoring schools are at 52.7% and 57.3%.

Table 64

Classroom Observations of Other Teachers, Either Formal or Informal
Survey Responses to Item 2 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban*	50.0	33.3	8.3	8.3
Economically Developed Suburbs	25.0	25.0	50.0	0.0
Growth Communities**	23.1	46.2	30.8	0.0
Residential Suburbs*	14.3	42.9	28.6	14.3
Economic Rural Centers	50.0	25.0	16.7	8.3

* Row total is 99.9% due to computer round off.

* Row total is 100.1% due to computer round off.

Table 65

Classroom Observations of Other Teachers, Either Formal or Informal
Survey Responses to Item 2 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	75.0	25.0	0.0	0.0
EDSH	50.0	50.0	0.0	0.0
GCH	40.0	60.0	0.0	0.0
RSH	75.0	25.0	0.0	0.0
ERCH	25.0	50.0	25.0	0.0
With Average MEAP Scores				
UA	25.0	50.0	0.0	25.0
EDSA	0.0	0.0	100.0	0.0
GCA	25.0	25.0	50.0	0.0
RSA*	33.3	0.0	33.3	33.3
ERCA	75.0	25.0	0.0	0.0
With Low MEAP Scores				
UL	50.0	25.0	25.0	0.0
GCL	0.0	50.0	50.0	0.0
ERCL	50.0	0.0	25.0	25.0

* Row total is 99.9% due to computer round off.

Table 66

Classroom Observations of Other Teachers, Either Formal or Informal
Survey Responses to Item 2 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	38.1	52.4	9.5	0.0
Average	31.6	21.1	36.8	10.5
Low*	33.3	25.0	33.3	8.3

* Row total is 99.9% due to computer round off.

Table 67

Classroom Observations of Other Teachers, Either Formal or Informal
Survey Responses to Item 2 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	50.0	40.0	10.0	0.0
Two	20.0	60.0	20.0	0.0
Three	26.7	20.0	33.3	20.0
Four	41.2	29.4	29.4	0.0

Reading Professional Journals and Books. Table 1 shows a response of 14 for reading professional journals and books and a response of 4 for research. Many teachers said they were influenced by the reading they did. They were especially interested in research about children in the age range they teach. During the interviewing process many teachers had favorite authors about whom they spoke.

They also discussed how they would research a topic they found interesting. One teacher indicated that she became aware of gender bias because of the research she had done in a course. She then evaluated her own teaching style and changed her teaching techniques to eliminate any biases that were occurring in her class. Many teachers talked about the whole language approach, either saying they were following a particular approach from a book they had read or they were in the process of reading to find out more about the whole language process.

Tables 2 and 3 show a response of 23.1% for Greatly Influenced and 57.7% for Influenced. Table 68 shows all responses for Greatly Influenced to be 28.6% or lower and when Greatly Influenced and Influenced are combined all communities are above 71.5%. Table 69 shows all schools below 33.3% for Greatly Influenced and when Greatly Influenced and Influenced are combined all schools above 50%. Table 70 shows all percentages below 25% for Greatly Influenced but when Greatly Influenced and Influenced are combined, all percentages are above 75%. Table 71 shows grade four with a high of 41.2% for Greatly Influenced but when Greatly Influenced and Influenced are combined grade one is high with 100% while all others are above 60%.

Table 68

Reading Professional Journals and Books
Survey Responses to Item 1 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	16.7	58.3	25.0	0.0
Economically Developed Suburbs	25.0	62.5	12.5	0.0
Growth Communities	23.1	61.5	15.4	0.0
Residential Suburbs*	28.6	42.9	28.6	0.0
Economic Rural Centers	25.0	58.3	16.7	0.0

* Row total is 100.1% due to computer round off.

Table 69

Reading Professional Journals and Books
Survey Responses to Item 1 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	25.0	50.0	25.0	0.0
EDSH	25.0	50.0	25.0	0.0
GCH	20.0	60.0	20.0	0.0
RSH	25.0	50.0	25.0	0.0
ERCH	25.0	50.0	25.0	0.0
With Average MEAP Scores				
UA	0.0	50.0	50.0	0.0
EDSA	25.0	75.0	0.0	0.0
GCA	25.0	75.0	0.0	0.0
RSA*	33.3	33.3	33.3	0.0
ERCA	25.0	50.0	25.0	0.0
With Low MEAP Scores				
UL	25.0	75.0	0.0	0.0
GCL	25.0	50.0	25.0	0.0
ERCL	25.0	75.0	0.0	0.0

-----*

Row total is 99.9% due to computer round off.

Table 70

Reading Professional Journals and Books
Survey Responses to Item 1 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	23.8	52.4	23.8	0.0
Average*	21.1	57.9	21.1	0.0
Low	25.0	66.7	8.3	0.0

* Row total is 100.1% due to computer round off.

Table 71

Reading Professional Journals and Books
Survey Responses to Item 1 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	20.0	80.0	0.0	0.0
Two	10.0	50.0	40.0	0.0
Three*	13.3	73.3	13.3	0.0
Four	41.2	35.3	23.5	0.0

* Row total is 99.9% due to computer round off.

Professional Development Offered in Your Own School System. Table 1 shows 5 responses for professional development. Tables 2 and 3 show 21.2% for Greatly Influenced and 44.2% for Influenced. When Greatly Influenced and Influenced are combined the percentage rises to 64.4%. Table 72 shows Economic Rural Centers with a high of 41.7% and all other communities below 25% for Greatly Influenced. When Greatly Influenced and Influenced are combined, Economic Rural Centers are still high with 75% and Economically Developed Suburbs are low at 50%. Table 73 shows Economic Rural Centers Average with a high of 100% for Greatly Influenced. All other schools are below 50% and seven of the 13 schools are at 0%. When Greatly Influenced and Influenced are combined the percentages rise above 50% for all schools except for Residential Suburb Average which is at 33.3%. Table 74 shows all schools below 26.3% for Greatly Influenced but when Greatly Influenced and Influenced are combined there is a decreasing pattern. High MEAP scoring schools are at 71.4%, Average at 63.1% and Low at 58.3%. As MEAP scores go down, so does the influence of professional development.

Table 72

Professional Development Offered in Your Own School System
Survey Responses to Item 3 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban*	8.3	58.3	25.0	8.3
Economically Developed Suburbs	25.0	25.0	25.0	25.0
Growth Communities**	15.4	46.2	30.8	7.7
Residential Suburbs	14.3	57.1	28.6	0.0
Economic Rural Centers	41.7	33.3	25.0	0.0

* Row total is 99.9% due to computer round off.

** Row total is 100.1% due to computer round off.

Table 73

Professional Development Offered in Your Own School System
Survey Responses to Item 3 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>School</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	25.0	50.0	25.0	0.0
EDSH	50.0	0.0	25.0	25.0
GCH	40.0	40.0	20.0	0.0
RSH	0.0	100.0	0.0	0.0
ERCH	0.0	50.0	50.0	0.0
With Average MEAP Scores				
UA	0.0	75.0	0.0	25.0
EDSA	0.0	50.0	25.0	25.0
GCA	0.0	50.0	25.0	25.0
RSA	33.3	0.0	66.7	0.0
ERCA	100.0	0.0	0.0	0.0
With Low MEAP Scores				
UL	0.0	50.0	50.0	0.0
GCL	0.0	50.0	50.0	0.0
ERCL	25.0	50.0	25.0	0.0

Table 74

Professional Development Offered in Your Own School System
Survey Responses to Item 3 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	23.8	47.6	23.8	4.8
Average	26.3	36.8	21.1	15.8
Low	8.3	50.0	41.7	0.0

Table 75

Professional Development Offered in Your Own School System
Survey Responses to Item 3 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	40.0	60.0	0.0	0.0
Two	10.0	30.0	60.0	0.0
Three	20.0	40.0	33.3	6.7
Four*	17.6	47.1	17.6	17.6

* Row total is 99.9% due to computer round off.

Administrative Directives and Professional Influences

Although administrative directives received a high frequency of response on Table 1, it was one of lowest influences for Greatly Influenced. Both the new math standards and the discussions about reform and restructuring had a greater influence on teachers in the category of Greatly Influenced and Greatly Influenced and Influenced combined.

New Standards such as the Standards Proposed by the National Council of Teachers of Math. Table 1 shows only one teacher response for math standards. This teacher indicated that both math standards and all assessment programs cause you to realize you have to change your teaching to go along with the assessment.

Tables 2 and 3 show 38.5% responded Greatly Influenced and 38.5% Influenced which gives a combined influence of 77%. Table 76 shows Growth Communities with a high of 61.5% for Greatly Influenced and Urban at a low of 0%. When Greatly Influenced and Influenced are combined, Residential Suburbs rise to 100% followed by Growth Communities at 84.6% and Urban at the lowest percentage of 50%. Table 77 shows Growth Community High at 80% for Greatly Influenced and all three Urban schools at 0%. Even when Greatly Influenced and Influenced are combined, Urban schools along with Growth Community Low are still the lowest with a percentage of 50%. Table 78 shows that as the MEAP scores decrease so do the percentage for both Greatly Influenced and the combined percentage of Greatly Influenced and Influenced. Table 79 shows grade four at a high 52.9% and grade two at a low of 20%. When Greatly Influenced and Influenced are combined, grade three is at a high of 86.7%.

Table 76

New Standards such as the Standards Proposed
by the National Council of Teachers of Math
Survey Responses to Item 19 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	0.0	50.0	41.7	8.3
Economically Developed Suburbs	50.0	25.0	25.0	0.0
Growth Communities	61.5	23.1	15.4	0.0
Residential Suburbs	57.1	42.9	0.0	0.0
Economic Rural Centers*	33.3	50.0	8.3	8.3

* Row total is 99.9% due to computer round off.

Table 77

New Standards such as the Standards Proposed
by the National Council of Teachers of Math
Survey Responses to Item 19 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>School</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	0.0	50.0	25.0	25.0
EDSH	50.0	25.0	25.0	0.0
GCH	80.0	20.0	0.0	0.0
RSH	75.0	25.0	0.0	0.0
ERCH	0.0	100.0	0.0	0.0
With Average MEAP Scores				
UA	0.0	50.0	50.0	0.0
EDSA	50.0	25.0	25.0	0.0
GCA	50.0	50.0	0.0	0.0
RSA	75.0	25.0	0.0	0.0
ERCA				
With Low MEAP Scores				
UL	0.0	50.0	50.0	0.0
GCL	50.0	0.0	50.0	0.0
ERCL	50.0	25.0	25.0	0.0

Table 78

New Standards such as the Standards Proposed by the
National Council of Teachers of Math
Survey Responses to Item 19 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High*	42.9	42.9	9.5	4.8
Average	36.8	42.1	15.8	5.3
Low	33.3	25.0	41.7	0.0

* Row total is 100.1% due to computer round off.

Table 79

New Standards such as the Standards Proposed
by the National Council of Teachers of Math
Survey Responses to Item 19 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	30.0	40.0	20.0	10.0
Two	20.0	50.0	20.0	10.0
Three	40.0	46.7	13.3	0.0
Four*	52.9	23.5	23.5	0.0

* Row total is 99.9% due to computer round off.

The Current Debate About Reform and Restructuring of Education.

Table 1 shows only one teacher response about referring to a state-mandated curriculum. Tables 2 and 3 show 23.1% responded Greatly Influenced and 40.4% responded Influenced which gives a combined influence of 63.5%. Table 80 shows Economically Developed Suburbs with a high of 50% for Greatly Influenced and Urban at a low of 8.3%. When Greatly Influenced and Influenced are combined, Growth Communities rise to a high of 69.2%, Urban to 66.6% and Economically Developed Suburbs remain at 50%. Table 81 shows Economically Developed Suburbs High with a high of 75% for Greatly Influenced. All other schools are below 50% with four schools at 0%. When Greatly Influenced and Influenced are combined, eight schools rise to 75% but low percentages are seen for Economically Developed Suburb Average with 25% and Residential Suburb Average with 33.3%. Table 82 shows that as the MEAP scores decrease the percentages also decrease for Greatly Influenced. When Greatly Influenced and Influenced are combined, Low MEAP scoring schools actually show the highest percentage at 75% while High MEAP schools are at 66.7% and Average MEAP schools are at 52.6%. Table 83 shows grade four with a high of 52.9% for Greatly Influenced while the other grades are at 10% or lower. When Greatly Influenced and Influenced are combined, grade four still has the highest percentage at 76.4% followed by grade three at 66.7%, grade two at 60%, and grade one at 40%. The pattern shows the higher the grade the more interest in the debate about reform and restructuring of education.

Table 80

The Current Debate About Reform and Restructuring of Education
Survey Responses to Item 23 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban*	8.3	58.3	33.3	0.0
Economically Developed Suburbs	50.0	0.0	37.5	12.5
Growth Communities	15.4	53.8	30.8	0.0
Residential Suburbs**	42.9	14.3	28.6	14.3
Economic Rural Centers	16.7	50.0	25.0	8.3

* Row total is 99.9% due to computer round off.

* Row total is 100.1% due to computer round off.

Table 81

The Current Debate About Reform and Restructuring of Education
Survey Responses to Item 23 by School and MEAP Score

Participants indicated to what degree the following item influenced teachers in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	25.0	25.0	50.0	0.0
EDSH	75.0	0.0	25.0	0.0
GCH	0.0	60.0	40.0	0.0
RSH	50.0	25.0	25.0	0.0
ERCH	50.0	25.0	25.0	0.0
With Average MEAP Scores				
UA	0.0	75.0	25.0	0.0
EDSA	25.0	0.0	50.0	25.0
GCA	25.0	50.0	25.0	0.0
RSA*	33.3	0.0	33.3	33.3
ERCA	0.0	50.0	25.0	25.0
With Low MEAP Scores				
UL	0.0	75.0	25.0	0.0
GCL	25.0	50.0	25.0	0.0
ERCL	0.0	75.0	25.0	0.0

* Row total is 99.9% due to computer round off.

Table 82

The Current Debate About Reform and Restructuring of Education
Survey Responses to Item 23 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	38.1	28.6	33.3	0.0
Average	15.8	36.8	31.6	15.8
Low	8.3	66.7	25.0	0.0

Table 83

The Current Debate About Reform and Restructuring of Education
Survey Responses to Item 23 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	10.0	30.0	60.0	0.0
Two	10.0	50.0	40.0	0.0
Three	6.7	60.0	20.0	13.3
Four *	52.9	23.5	17.6	5.9

* Row total is 99.9% due to computer round off.

Directives from Administration to Make Changes in Curriculum

and/or Instruction. Some teachers were in agreement with the philosophy of change which was suggested or required by the administration. Other teachers indicated they were skeptical but gave it a shot and found that it was working well and they in fact liked the changes. Others were not in agreement, but they had no choice. One teacher said that when change is expected by the administration you have to be professional and take on the responsibility.

Some principals are understanding and give teachers ample time to make the adjustments. They invite speakers in to talk with the teachers and encourage the teachers to attend workshops before a change is actually expected to be implemented. In some schools a few teachers would pilot a program and then make recommendations to the principal.

Other teachers were not so kind to the administration. One teacher suggested that the curriculum was driven by the administration looking for a new game to play. Sometimes curriculum directors as well as principals have their own agenda and they also want teachers to do it all. Another teacher indicated that although the decision to change the curriculum was dictated by the administration, she still made her own personal changes to meet the individual needs of the students.

In one school system a new superintendent formed a curriculum committee to coordinate the curriculum among the elementary, middle, and high schools. Teachers felt positive about this change because everyone was doing their own thing and they weren't sure students received all the skills they needed before they got to the middle school.

Table 1 shows administrative influence to initiate teachers to make changes in curriculum and instruction ranks in the top five responses made by teachers. Tables 2 and 3 show 13.5% of the teachers responded Greatly Influenced and 38.5% responded Influenced which gives a total of 52% of the teachers who responded positively to administrative influence. Table 84 shows all Kinds of Communities responded 25% or less under Greatly Influenced and if Greatly Influenced and Influenced are combined the percentages decrease in influence from Urban at 66.7% to Economically Developed Suburbs at 62.5% to Growth Communities at 53.9% to Residential Suburbs at 42.9% to Economic Rural Centers at 33.3%. Table 85 shows eight of the 13 schools responded 0% under Greatly Influenced, four schools responded 25%, and only one school responded 75%. Even when Greatly Influenced and Influenced are combined no school had any percentage greater than 75%. Table 86 shows responses by MEAP score were all under 21.1% for Greatly Influenced. When Greatly Influenced and Influenced were combined, it shows as the MEAP score decreases the level of administrative influence increased. High MEAP scoring schools indicated a combined response of 42.8%, Average MEAP schools were 57.9%, and Low MEAP scoring schools were 58.3%. Table 87 shows administrative influence to be under 30% for all grades one through four for Greatly Influenced and under 70 % when Greatly Influenced and Influenced are combined. Grade two is the most influenced and grade four is the least influenced under Greatly Influenced. Grade two indicates the most administrative influence at 70% and grade one the least at 30% for combined responses of Greatly Influenced and Influenced.

Table 84

Directives from Administration to Make Changes in
Curriculum and/or Instruction
Survey Responses to Item 17 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	0.0	66.7	33.3	0.0
Economically Developed Suburbs	25.0	37.5	25.0	12.5
Growth Communities*	7.7	46.2	15.4	30.8
Residential Suburbs*	14.3	28.6	28.6	28.6
Economic Rural Centers	25.0	8.3	25.0	41.7

* Row total is 100.1% due to computer round off.

Table 85

Directives from Administration to Make Changes in
Curriculum and/or Instruction
Survey Responses to Item 17 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. Numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	0.0	50.0	50.0	0.0
EDSH	25.0	50.0	25.0	0.0
GCH	0.0	40.0	40.0	20.0
RSH	25.0	25.0	50.0	0.0
ERCH	0.0	0.0	25.0	75.0
With Average MEAP Scores				
UA	0.0	75.0	25.0	0.0
EDSA	25.0	25.0	25.0	25.0
GCA	0.0	50.0	0.0	50.0
RSA	0.0	33.3	0.0	66.7
ERCA	75.0	0.0	0.0	25.0
With Low MEAP Scores				
UL	0.0	75.0	25.0	0.0
GCL	25.0	50.0	0.0	25.0
ERCL	0.0	25.0	50.0	25.0

Table 86

Directives from Administration to Make Changes
in Curriculum and/or Instruction
Survey Responses to Item 17 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High*	9.5	33.3	38.1	19.0
Average	21.1	36.8	10.5	31.6
Low	8.3	50.0	25.0	16.7

* Row total is 99.9% due to computer round off.

Table 87

Directives from Administration to Make Changes
in Curriculum and/or Instruction
Survey Responses to Item 17 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	10.0	20.0	40.0	30.0
Two	30.0	40.0	20.0	10.0
Three	13.3	46.7	13.3	26.7
Four	5.9	41.2	29.4	23.5

Testing

Teachers did offer testing as an influence for changes in some of the schools but the response of testing occurred only in schools that had done well on the MEAP. The survey included five questions about testing. Questions seven and fourteen were about the Massachusetts Educational Assessment Program (MEAP) and questions five and nine were about the standardized tests given by the school system. Question 11 was about personally made assessment tests.

Except for question 11, the influence of personally made assessment tests, the category of testing fared the lowest among teachers as an influence in making changes in curriculum and instruction. The majority of teachers did not express a positive influence for MEAP test results or discussions about MEAP as a factor in initiating changes in curriculum and instruction as indicated in Table 2. The combined percentages for Greatly Influenced and Influenced totaled only 28.9% for MEAP test results and 34.7% for discussions about the MEAP. However, teachers in Economically Developed Suburbs and Residential Suburbs, as indicated in Tables 3 and 4, responded positively to the questions about MEAP. The combined positive response to MEAP Test results were 75% and 57.2% respectively. Discussions about MEAP influenced 75% of teachers in Economically Developed Suburbs and 71.5 % of the teachers in Residential Suburbs.

Results from Your Own Personally Made Assessment Tests. Table 1 shows no responses for teacher-made tests. Tables 3 and 4 show 36.5% responded Greatly Influenced and 55.8% responded Influenced which gives a combined response of 92.3%. Table 88 shows Residential Suburbs with a high of 42.9% followed by Urban and Economic Rural Centers with 41.7% for Greatly

Influenced. Economically Developed Suburbs are at a low of 12.5% for Greatly Influenced but when Greatly Influenced and Influenced are combined Economically Developed Suburbs are at 100% along with Residential Suburbs. Urban and Economic Rural Centers rise to 91.7 and Growth Communities to 84.6%. Table 89 shows all schools below 50% for Greatly Influenced but when Greatly Influenced and Influenced are combined all schools rise to 100% except for Urban Average and Economic Rural Center Low which are at 75% and Growth Community Low which is at 50%. Table 90 shows as MEAP scores decrease so do the percentages for Greatly Influenced and Influenced. When Greatly Influenced and Influenced are combined, High scoring MEAP schools are 100%, Average MEAP at 94.7%, and Low scoring MEAP schools are at 75%. Table 91 shows grade four at a high of 58.8% for Greatly Influenced and grade two at a low of 10%. When Greatly Influenced and Influenced are combined, there is an increasing pattern of influence as the grades rise. Grade one is at 80%, grade two at 90%, grade three at 93.3%, and grade four at 100%.

Table 88

Results from Your Own Personally Made Assessment Tests
Survey Responses to Item 11 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	41.7	50.0	8.3	0.0
Economically Developed Suburbs	12.5	87.5	0.0	0.0
Growth Communities*	38.5	46.2	15.4	0.0
Residential Suburbs	42.9	57.1	0.0	0.0
Economic Rural Centers	41.7	50.0	8.3	0.0

* Row total is 100.1% due to computer round off.

Table 89

Results from Your Own Personally Made Assessment Tests
Survey Response to Item 11 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

Schools	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	25.0	75.0	0.0	0.0
EDSH	25.0	75.0	0.0	0.0
GCH	40.0	60.0	0.0	0.0
RSH	50.0	50.0	0.0	0.0
ERCH	50.0	50.0	0.0	0.0
With Average MEAP Scores				
UA	50.0	25.0	25.0	0.0
EDSA	0.0	100.0	0.0	0.0
GCA	50.0	50.0	0.0	0.0
RSA*	33.3	66.6	0.0	0.0
ERCA	50.0	50.0	0.0	0.0
With Low MEAP Scores				
UL	50.0	50.0	0.0	0.0
GCL	25.0	25.0	50.0	0.0
ERCL	25.0	50.0	25.0	0.0

* Row total is 99.9% due to computer round off.

Table 90

Results from Your Own Personally Made Assessment Tests
Survey Responses to Item 11 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	38.1	61.9	0.0	0.0
Average	36.8	57.9	5.3	0.0
Low	33.3	41.7	25.0	0.0

Table 91

Results from Your Own Personally Made Assessment Tests
Survey Responses to Item 11 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	30.0	50.0	20.0	0.0
Two	10.0	80.0	10.0	0.0
Three	33.3	60.0	6.7	0.0
Four	58.8	41.2	0.0	0.0

Test Results from the Massachusetts Education Assessment Program

(MEAP). One school conducted an intensive study of test scores in relation to curriculum and involved all the teachers in a concerted effort to improve learning and test scores. Two other schools had less intensive programs but were also interested in elevated test scores. These programs are described in more detail in the discussion of how the MEAP has been helpful to teachers in initiating changes in curriculum and instruction under objective two in this chapter.

Table 1 shows a response of 8 for assessments with 5 respondents actually naming the Massachusetts Educational Assessment Program (MEAP). Tables 2 and 3 show 15.4% responded Greatly Influenced and 13.5% responded Influenced with a combined percentage of 28.9%. This item had the highest percentage for No Influence which is at 30.8%. Table 93 shows Economically Developed Suburbs with a high of 75% for Greatly Influenced while Residential Suburbs are at 28.6% and all the others are at 0%. When Greatly Influenced and Influenced are combined Economically Developed Suburbs are still at a high of 75% while Residential Suburbs have risen to 57.2%, Urban to 33.3%, Growth Communities to 7.7%, and Economic Rural Centers remain at 0%. Table 93 shows Economically Developed Suburbs High are at a high of 100% for Greatly Influenced while Economically Developed Average are at 50%, Residential Average are at 33.3%, and Residential High are at 25%. Nine of the 13 schools' responses is at 0%. When Greatly Influenced and Influenced are combined, Economically Developed Suburb High is at 100%, Residential Suburb High is at 75%, and Urban High is at 50% along with Economically Developed Suburb Average and Urban Low.

Residential Suburb Average is at 33.3% and Growth Community Low is at 25%. Six of the 13 schools are at 0%. Table 94 shows all schools under 23.8% for Greatly Influenced. High MEAP schools are at 23.8%, Average MEAP at 15.8%, and Low MEAP at 0%. When Greatly Influenced and Influenced are combined High MEAP school is at 42.8%, Average is at 15.8%, and Low MEAP is at 25%. Table 95 shows grade four with the highest response of 41.2% for Greatly Influenced while grade three is at 6.7% and grades one and two are at 0%. When Greatly Influenced and Influenced are combined grade four is at 53%, grades two and three at 20% and grade one at 10%.

Table 92

Test Results from the Massachusetts Education Assessment Program (MEAP)
Survey Responses to Item 7 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban*	0.0	33.3	33.3	33.3
Economically Developed Suburbs	75.0	0.0	0.0	25.0
Growth Communities	0.0	7.7	69.2	23.1
Residential Suburbs**	28.6	28.6	28.6	14.3
Economic Rural Centers	0.0	0.0	50.0	50.0

* Row total is 99.9% due to computer round off.

** Row total is 100.1% due to computer round off.

Table 93

Test Results from the Massachusetts Educational Assessment Program (MEAP)
Survey Responses to Item 7 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	0.0	50.0	50.0	0.0
EDSH	100.0	0.0	0.0	0.0
GCH	0.0	0.0	80.0	20.0
RSH	25.0	50.0	25.0	0.0
ERCH	0.0	0.0	50.0	50.0
With Average MEAP Scores				
UA	0.0	0.0	50.0	50.0
EDSA	50.0	0.0	0.0	50.0
GCA	0.0	0.0	75.0	25.0
RSA*	33.3	0.0	33.3	33.3
ERCA	0.0	0.0	75.0	25.0
With Low MEAP Scores				
UL	0.0	50.0	50.0	0.0
GCL	0.0	25.0	50.0	25.0
ERCL	0.0	0.0	25.0	75.0

* Row total is 99.9% due to computer round off.

Table 94

Test Results from the Massachusetts Educational Assessment Program (MEAP)
Survey Responses to Item 7 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	23.8	19.0	42.9	14.3
Average	15.8	0.0	47.4	36.8
Low	0.0	25.0	25.0	50.0

Table 95

Test Results from the Massachusetts Educational Assessment Program (MEAP)
Survey Responses to Item 7 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	0.0	10.0	30.0	60.0
Two	0.0	20.0	50.0	30.0
Three	6.7	13.3	46.7	33.3
Four*	41.2	11.8	35.3	11.8

* Row total is 100.1% due to computer round off.

Results from Standardized Test Scores from Your Own School System.

Table 1 shows a response of 8 for assessments but five of those specifically mentioned or added reference to the MEAP test. Tables 2 and 3 show a response of 13.5% for Greatly Influenced and 9.6% for Influenced which gives a combined response of 23.1%. Table 96 shows Economically Developed Suburbs with a high of 37.5% for Greatly Influenced. Residential Suburbs are 14.3%, Urban and Economic Rural Centers are 8.3%, and Growth Communities are 7.7%. When Greatly Influenced and Influenced are combined, Economically Developed Suburbs are still at a high of 37.5%. Urban and Economic Rural Centers are at 25% while Growth Communities are at 15.4% and Residential Suburbs are still at 14.3%. Table 97 shows all schools to be under 50% and seven of the 13 schools are at 0% for Greatly Influenced. When Greatly Influenced and Influenced are combined all schools are under 50% with five schools at 0%. Table 98 shows High MEAP scoring schools at 14.2%, Average at 15.8%, and Low MEAP scoring schools at 8.3% for Greatly Influenced. When Greatly Influenced and Influenced are combined, High MEAP scoring schools are at 23.7%, Average are at 15.8%, and Low MEAP scoring schools are at 33.3%. Table 99 shows grade four with a high of 23.5% for Greatly Influenced while all the other grades are under 10%. When Greatly Influenced and Influenced are combined grade four rises to 35.3%, grade two rises to 30%, grade three to 13.4% and grade one remains at 10%.

Several teachers mentioned that either their school system no longer gave standardized test or their grade level was not given a standardized test. Therefore, this item might have received lower percentages because of this fact.

Many teachers who did give standardized tests were not influenced by them because they didn't think they matched their curriculum or they didn't feel as though they should teach to the test.

Table 96

Results from Standardized Test Scores from Your Own School System
Survey Responses to Item 5 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	8.3	16.7	66.7	8.3
Economically Developed Suburbs	37.5	0.0	50.0	12.5
Growth Communities	7.7	7.7	53.8	30.8
Residential Suburbs*	14.3	0.0	42.9	42.9
Economic Rural Centers	8.3	16.7	33.3	41.7

* Row total is 100.1% due to computer round off.

Table 97

Results from Standardized Test Scores from Your Own School System
Survey Responses to Item 5 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	25.0	0.0	75.0	0.0
EDSH	50.0	0.0	50.0	0.0
GCH	0.0	0.0	80.0	20.0
RSH	0.0	0.0	50.0	50.0
ERCH	0.0	50.0	0.0	50.0
With Average MEAP Scores				
UA	0.0	0.0	75.0	25.0
EDSA	25.0	0.0	50.0	25.0
GCA	0.0	0.0	50.0	50.0
RSA*	33.3	0.0	33.3	33.3
ERCA	25.0	0.0	75.0	0.0
With Low MEAP Scores				
UL	0.0	50.0	50.0	0.0
GCL	25.0	25.0	25.0	25.0
ERCL	0.0	0.0	25.0	75.0

* Row total is 99.9% due to computer round off.

Table 98

Results from Standardized Test Scores from Your Own School System
Survey Responses to Item 5 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High*	14.2	9.5	52.4	23.8
Average	15.8	0.0	57.9	26.3
Low*	8.3	25.0	33.3	33.3

* Row total is 99.9% due to computer round off.

Table 99

Results from Standardized Test Scores from Your Own School System
Survey Responses to Item 5 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	10.0	0.0	50.0	40.0
Two	10.0	20.0	40.0	30.0
Three*	6.7	6.7	60.0	26.7
Four	23.5	11.8	47.1	17.6

* Row total is 100.1% due to computer round off.

School Discussions About Test Results from the Massachusetts

Educational Assessment Program (MEAP). One school conducted an intensive study of test scores in relation to curriculum and involved all the teachers in a concerted effort to improve learning and test scores. Two other schools had less intensive programs but were also interested in elevated test scores. These programs are described in more detail in the discussion of how the MEAP has been helpful to teachers in initiating changes in curriculum and instruction under objective two in this chapter.

Table 1 shows a response of 8 for assessments, five of which specifically mentioned or added a reference to MEAP. Tables 2 and 3 show a response of 13.5% for Greatly Influenced and 21.2% for Influenced which gives a combined response of 34.7%. Table 100 shows Economically Developed Suburbs with a high of 62.5% for Greatly Influenced. Residential Suburbs are at 28.6% and all other communities are at 0%. When Greatly Influenced and Influenced are combined Economically Developed Suburbs are still high with 75% followed by Residential Suburbs at 71.5%. Urban is at 33.3%, Growth Communities are at 15.4%, and Economic Rural Centers are at 8.3%. Table 101 shows Economically Developed Suburbs High at 75% followed by Economically Developed Suburbs Average at 50% for Greatly Influenced. Residential Suburbs High is at 25% along with Growth Communities Average. The other eight schools responded with 0%. When Greatly Influenced and Influenced are combined, Economically Developed Suburbs Rise to 100% while Residential Suburbs High and Growth Communities Average rise to 75%. Rising to 50% are Urban High, Economically Developed Suburbs Average, and Urban Low. Rising to 25% are Economic Rural Centers High and Growth Communities Low. Four of the 13 schools are at 0%. Table 102 shows High MEAP schools at 19%,

Average MEAP schools at 15.8% and Low MEAP schools at 0% for Greatly Influenced. When Greatly Influenced and Influenced are combined, High MEAP schools are at 47.6%, Average are at 16.3%, and Low scoring MEAP schools are at 25%. Table 103 shows grade four at 35.3%, grade three at 6.7% and grades one and two at 0% for Greatly Influenced. When Greatly Influenced and Influenced are combined, grade four rises to 52.9%, grade three to 40%, grade two to 20%, and grade one to 10%. As grade levels rise from one through four, so does the influence of the MEAP upon teachers in initiating changes in curriculum and instruction.

One school conducted an intensive study of test scores in relation to curriculum and involved all the teachers in a concerted effort to improve learning and test scores. Two other schools had less intensive programs but were also interested in elevated test scores. These programs are described in more detail in the discussion of how the MEAP has been helpful to teachers in initiating changes in curriculum and instruction under objective two in this chapter.

Table 100
 School Discussions About Test Results from the Massachusetts
 Educational Assessment Program (MEAP)
 Survey Responses to Item 14 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban*	0.0	33.3	58.3	8.3
Economically Developed Suburbs	62.5	12.5	12.5	12.5
Growth Communities	0.0	15.4	53.8	30.8
Residential Suburbs**	28.6	42.9	28.6	0.0
Economic Rural Centers	0.0	8.3	50.0	41.7

* Row total is 99.9% due to computer round off.

* Row total is 100.1% due to computer round off.

Table 101

School Discussions About Test Results from the Massachusetts Educational
Assessment Program (MEAP)
Survey Responses to item 14 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	0.0	50.0	50.0	0.0
EDSH	75.0	25.0	0.0	0.0
GCH	0.0	0.0	80.0	20.0
RSH	25.0	50.0	25.0	0.0
ERCH	0.0	25.0	75.0	0.0
With Average MEAP Scores				
UA	0.0	0.0	100.0	0.0
EDSA	50.0	0.0	25.0	25.0
GCA	25.0	50.0	25.0	0.0
RSA	0.0	0.0	50.0	50.0
ERCA	0.0	0.0	50.0	50.0
With Low MEAP Scores				
UL	0.0	50.0	25.0	25.0
GCL	0.0	25.0	25.0	50.0
ERCL	0.0	0.0	25.0	75.0

Table 102

School Discussions About Test Results from the Massachusetts
Educational Assessment Program (MEAP)
Survey Responses to Item 14 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	19.0	28.6	47.6	4.8
Average	15.8	10.5	52.6	21.1
Low	0.0	25.0	25.0	50.0

Table 103

School Discussions About Test Results from the Massachusetts
Educational Assessment Program (MEAP)
Survey Responses to Item 14 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	0.0	10.0	30.0	60.0
Two	0.0	20.0	60.0	20.0
Three	6.7	33.3	46.7	13.3
Four	35.3	17.6	41.2	5.9

School Discussions About the Test Results from Standardized Tests

Administered by the School System. Table 1 shows a response of 8 for assessments and 5 of those specifically mentioned or added MEAP. Tables 2 and 3 show a response of 7.7% for Greatly Influenced and 19.2% for Influenced which give a combined response of 26.9%. Table 104 shows Economically Developed Suburbs with a high of 37.5% for Greatly Influenced. Urban was at 8.3% and all the other communities were 0%. When Greatly Influenced and Influenced are combined, Economically Developed Suburbs are still at 37.5% while Urban rises to 33.3%, Growth Communities rise to 30.8%, Residential Suburbs rise to 28.6%, and Economic Rural Centers rise to 8.3%. Table 105 shows Economically Developed Suburb High at 50% and Urban High and Economically Developed Suburb Average at 25% for Greatly Influenced. Ten out of the 13 schools responded 0% for Greatly Influenced. When Greatly Influenced and Influenced are combined, Growth Community Low rises to 75% while seven of the schools are 50% or under and five of the schools are at 0%. Table 106 shows High MEAP scoring schools with 14.3%, Average with 5.3%, and Low with 0%. When Greatly Influenced and Influenced are combined, High MEAP scoring schools rise to 33.3%, Average to 10.6%, and Low to 41.7%. Table 107 shows Grade four at 11.8%, grade three at 6.7%, grade two at 0%, and grade one at 10% for Greatly Influenced. When Greatly Influenced and Influenced are combined the percentage for grade four is 23.6%, grade three is 40%, grade two is 30% and grade one is still at 10%.

Several teachers mentioned that either their school system no longer gave standardized tests or their grade level was not given standardized tests. Therefore, this item might have received lower percentages because of that

fact. Many teachers who did give standardized tests said they were not influenced by them because they didn't think they matched their curriculum or they didn't feel as though they should teach to the test.

Table 104

School Discussions About the Test Results from Standardized Tests
Administered by the School System
Survey Responses to Item 9 by Kind of Community

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Kind of Community</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
Urban	8.3	25.0	66.7	0.0
Economically Developed Suburbs	37.5	0.0	50.0	12.5
Growth Communities	0.0	30.8	69.2	0.0
Residential Suburbs*	0.0	28.6	28.6	42.9
Economic Rural Centers	0.0	8.3	50.0	41.7

* Row total is 100.1% due to computer round off.

Table 105

School Discussions About the Test Results from Standardized Tests
Administered by the School System
Survey Responses to Item 9 by School and MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Schools</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
With High MEAP Scores				
UH	25.0	25.0	50.0	0.0
EDS	50.0	0.0	50.0	0.0
GCH	0.0	0.0	100.0	0.0
RSH	0.0	50.0	25.0	25.0
ERCH	0.0	25.0	25.0	50.0
With Average MEAP Scores				
UA	0.0	0.0	100.0	0.0
EDSA	25.0	0.0	50.0	25.0
GCA	0.0	25.0	75.0	0.0
RSA	0.0	0.0	33.3	66.7
ERCA	0.0	0.0	100.0	0.0
With Low MEAP Scores				
UL	0.0	50.0	50.0	0.0
GCL	0.0	75.0	25.0	0.0
ERCL	0.0	0.0	25.0	75.0

Table 106

School Discussions About the Test Results from Standardized Tests
Administered by the School System
Survey Responses to Item 9 by MEAP Score

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>MEAP Scores</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
High	14.3	19.0	52.4	14.3
Average*	5.3	5.3	73.7	15.8
Low	0.0	41.7	33.3	25.0

* Row total is 100.1% due to computer round off.

Table 107

School Discussions About the Test Results from Standardized Tests
Administered by the School System
Survey Responses to Item 9 by Grade Level

Participants indicated to what degree the following item influenced them in initiating changes in curriculum and instruction in their classrooms. The numbers below are listed as percentages.

<u>Grade Level</u>	<u>Greatly Influenced</u>	<u>Influenced</u>	<u>Somewhat Influenced</u>	<u>No Influence</u>
One	10.0	0.0	80.0	10.0
Two	0.0	30.0	60.0	10.0
Three	6.7	33.3	46.7	13.3
Four*	11.8	11.8	47.1	29.4

* Row total is 100.1% due to computer round off.

Summary

Student Needs. The items categorized under student needs show the most influence for teachers as an initiative to make changes in curriculum and instruction. Meeting the individual needs of each child and making learning more enjoyable and interesting were the two items which received the highest percentage on the survey. According to table 3, both items show that 88.5% of the teachers responded Greatly Influenced and when Greatly Influenced and Influenced are combined the percentage rises to 100%. Table 1 shows students needs as one of the highest free-response items from teachers as an initiative to make changes in curriculum and instruction. Whether teachers were discussing high-level students or low-level students, they were all concerned about meeting the individual needs of the children.

Many teachers indicated the type of student had changed over the years and this necessitated the need to change curriculum and instruction. Children were coming to school with fewer academic skills, lower motivation, and decreased parent support. Many teachers also spoke about the decline of the family as contributing to some the students' academic problems.

Teachers' Educational Enrichment and Needs. The two items which ranked highest under teacher enrichment and needs were college courses, workshops, seminars, and conferences, and an interest in experimenting with new ideas or methods. Table 3 shows both items with a teacher response of 69.2% for Greatly Influenced and above 90% for Greatly Influenced and Influenced combined. During the free-response interview with teachers, workshops, conferences, and courses came out as the most frequent response. The lowest response in this category was professional development offered in

your own school system which Table 3 shows a response of 21.2% for Greatly Influenced and 64.4% for Greatly Influenced and Influenced combined.

Administrative Directives and Professional Influences. According to the survey, directives from the administration show the lowest response in this category which is 13.5% for Greatly Influenced and 52.% for Greatly Influenced and Influenced combined. However, during the free-response interview, administrative influence was one of the top responses among teachers. Urban and Economically Developed Suburbs show the highest response for Greatly Influenced and Influenced combined as shown on Table 84. All schools in these two kinds of communities either had specific programs set up to improve test scores or were aware of other schools within their community which had these improvement programs and they were now feeling the pressure to improve their test scores. Teachers in the Economic Rural Center School Average, which responded 75% for Greatly Influenced, spoke about the changes they had made in their school to include more teaching around centers.

Testing. Teacher-made tests proved to be the most influential of any of the testing items. Table 3 shows 36.5% of the teachers were Greatly Influenced and when Greatly Influenced and Influenced were combined 92.3% were influenced by teacher-made tests as an initiative to make changes in curriculum and instruction. No other testing item rose above 34.7% for the combined percentage of Greatly Influenced and Influenced.

Standardized testing was an area where some teachers were influenced by administration or the desire for a positive view from the community. However, the majority expressed little influence by standardized tests as indicated in Tables 2 and 3. The reasons included no interest in teaching to

the test, student needs or community needs were not reflected in the test, tests were given in later grades so they had no influence upon them, or in some instances schools had done away with standardized tests often because they were too expensive.

The Massachusetts Educational Assessment Program (MEAP) also had little influence on teachers except for about 50% of the teachers in grade four. Since the test is given in grade four, teachers in earlier grades felt little responsibility for preparing students for the test and were often not aware or concerned about test results. Economically Developed Suburbs and Residential Suburbs showed the highest influence in both test results and discussions about MEAP. Teachers indicated the test matched their curriculum or their philosophy of education. There was also some pressure by administration to keep up test scores so the communities would be satisfied with the schools. These two school communities also provided teachers with workshops or training in problem-solving and critical thinking.

Research Question 2:

How has the Massachusetts Educational Assessment Program
been helpful to teachers in initiating changes
in curriculum and instruction?

The data for this question were collected from the third part of the teacher interview. After the teacher completed the survey, the researcher quickly scanned for the responses to item 7 and item 14. If the teacher indicated a positive response to either item 7 or 14, the researcher asked the teacher how the MEAP had been helpful in initiating changes in curriculum and instruction. Frequently, as teachers began discussing the Massachusetts Educational

Assessment Program (MEAP), they spoke about the test in both positive and negative terms. Also included in the data for this question will be information which teachers offered during the initial free-response interview as well as information offered during the completion of the written survey. Several teachers stopped when responding to items 7 and 14 about the MEAP and commented about the MEAP test. The teachers spoke about their personal opinion of the test or how their school was preparing for the test. The teacher responses are organized by Kind of Community and within each Kind of Community by High, Average, and Low MEAP scoring schools.

Urban High

In the high scoring Urban School 75% of the teachers indicated MEAP or testing as an influence to initiate changes in curriculum and instruction. On the survey 50% of the teachers responded they were influenced by the MEAP while the other 50% were somewhat influenced. During the interview, teachers explained the changes they initiated in curriculum and instruction in relation to the MEAP were because of pressure to increase MEAP scores. At one time this school had the lowest MEAP score in the city. The children attending this school are from a poor economic environment. The local community problems include drug abuse, physical abuse, sexual abuse, and broken family structures. There is also a high incidence of attention deficit problems and children on medication.

This Urban school decided to take positive action and do something about the test scores and the student learning. After the students were dismissed in June, the entire school staff returned for one paid week to review their entire curriculum. Major comparisons were done by reviewing the test scores from the previous five years and analyzing the curriculum to see what changes were

needed. Some changes required a different instructional focus. Teachers were asked to change the types of questions they asked students. The questions should encourage children to think and require children to write more than just a short answer. Teachers were asked to teach critical thinking skills, writing process, test taking skills, and cooperative learning. When areas of weakness were identified, the curriculum was adjusted, adapted, or enriched to increase student learning. Workshops during the school year were planned to help teachers gain the skills they needed to help their students prepare for the test.

The school system also built continuity into their new programs by requiring grade level meeting. Teachers from two different grade levels would get together at meetings. First grade teachers would dialogue with second grade teachers. Then at another meeting, second grade teachers would dialogue with third grade teachers. They discussed classroom activities, specific topics covered at each grade level, the focus of each grade level's program, and classroom expectations.

Lower grade teachers were made to understand that the accomplishments of their students in the early grades would influence the test scores in later years. Therefore teachers felt a responsibility and personal pressure to complete the curriculum as directed. Third and fourth grade teachers tended to feel much more of the pressure than first and second teachers about the test scores but there was still the feeling of test ownership among all the teachers.

Teachers also made a personal commitment to be available for parents at all times. Teachers gave out their home telephone numbers so parents could call them at any time they needed help or advice. Chapter One services provided workshops for parents to help them gain skills to work more effectively with their children. Teachers were available to drive parents to the meetings.

One teacher discussed a new idea that was in the planning stages. This encompassed a teacher-home connection where the teachers would actually visit the homes of their students and work with the students and parents together.

In the two years that this Urban High school worked to increase their test scores, they went from the lowest scoring school to the highest scoring school in the city. This did not make the teachers of this school overjoyed because they were then accused of cheating by the other city schools.

Urban Average

None of the teachers indicated MEAP during the initial interview and the survey responses of the teachers indicated only somewhat influenced and no influence. Teachers indicated there was an administrative push to bring up test scores but it was not as organized and as in depth as the high MEAP scoring school. One teacher did indicate it was interesting to see which students did well on the test, but the test should not be used as a criteria for change in the whole school system or the whole fourth grade.

Teachers did explain that about four months before the test was given they had one intensive workshop on writing in which they were encouraged to use more thinking-type and more essay-type questions instead of the usual cut-and-dry questions and answers. Also, the fourth grade teachers met with their coordinator and principal about administering the MEAP test. They discussed the possibility of having some students take the test in a small group situation if the teachers thought the students might have difficulty with the test.

Urban Low

In the low MEAP scoring school 50% of the teachers indicated they were influenced by the MEAP while the other 50% indicated no influence or

somewhat influenced. The low MEAP scoring school also had one workshop on the MEAP test like the average scoring school. One teacher did indicate that she attended a summer workshop at the High scoring MEAP school. She was amazed at the MEAP expectations in math for critical thinking. This teacher was also in agreement that students need to learn how to think critically because they need that in everyday life, not just to pass a MEAP test. However, she indicated that the MEAP influence was only slight because the MEAP is not given at her grade level. Another teacher mentioned that the MEAP did influence her but the only information she received came at the one workshop on the MEAP. She also indicated that it was unfortunate that the workshop occurred only a few months ago instead of three years ago as it did at one of the other schools. Teaching the children how to take the test, not teaching the children the test, was important so that the children would not be floored when they encountered the test. Another teacher thought the MEAP was beneficial since it gave information on the strengths and weaknesses of the children.

Economically Developed Suburb High

In the initial interview with the teachers 50% indicated MEAP as an influence in making changes in curriculum and instruction. On the survey, every teacher responded Greatly Influenced except for one response of Influenced. Teachers in the Economically Developed Suburb school were excited and enthusiastic about teaching the skills the students needed for the test. They agreed with the philosophy of the test and felt it was addressing the needs of their students, especially the bright children who needed to be challenged.

The teachers indicated that their school had always been a school involved in writing. However, the MEAP showed teachers how important writing was to their students. The test has been an impetus for more teachers to

get involved in learning about teaching thinking skills and the writing process. Even though the school scored well on the previous MEAP test, the teachers still feel pressure to keep up the scores by continuing to concentrate on critical thinking, problems-solving, and writing. The school is looking at new science and social studies texts and will not even consider them if they don't have open-ended questions.

Economically Developed Suburb Average

In the initial interview 50% of the teachers offered MEAP as an influence for initiating changes in curriculum and instruction. On the survey 50% of the teachers indicated Greatly Influenced and 50% indicated No Influence except for one response of Somewhat Influenced. All fourth grade teachers offered MEAP as an influence during the free-response interview and also indicated MEAP as a Great Influence on the survey.

The teachers in the average MEAP scoring Economically Developed Suburb school spoke about two meetings they had about the MEAP test. In one meeting, all the fourth grade teachers met with someone from the State Department of Education to discuss the test and how to prepare the students for taking it. The teachers were given practice problems to work on with their classes. In another meeting the third and fourth grade teachers met with each other to talk about the test. The fourth grade teachers shared the information they had gained about the MEAP and expressed their frustration about having the burden of the test falling upon them. Fourth grade teachers wanted it known, especially with the publication of the test results, that the test was assessing the curriculum from kindergarten through grade 4.

The fourth grade teachers mentioned MEAP as an influence for initiating change in curriculum and instruction and indicated they were in agreement with

and embraced the philosophy of the test. They felt critical thinking and problem-solving was the kind of learning that was important for students. It was the direction in which teachers should be headed whether the students did well on the MEAP or not. One teacher indicated that she was more influenced by MEAP than the standardized tests because the MEAP was a more valid test of a student's learning.

The workshop on the MEAP was beneficial to the fourth grade teachers because they were able to obtain sample questions and materials with which to work. The teachers developed a better understanding of the test and were now more knowledgeable about its purpose. They exhibited a positive attitude toward the test but felt that suddenly it was impacting their curriculum far too much. One teacher expressed the need for the curriculum to change from the first grade up so that fourth grade doesn't have to deal with a type of band aid approach toward the test.

The fourth grade teachers in this school decided to create their own test preparation program for their students. Each teacher had different ideas or techniques that would help the students develop better test-taking strategies so they divided up the different subject areas among the teachers. They planned a one-week program during which the students would rotate each day to a different classroom for an hour of instruction with a different teacher. One teacher would talk to the kids about main ideas and supporting details and another person would talk about the importance of jotting down your ideas before you write. In this way the children would get many different viewpoints and different angles on test-taking. They would have an opportunity to get every teacher's pep talk.

Economically Developed Suburb Low

In the study only two Economically Developed Suburb schools are represented. The selection was based on MEAP scores by Kind of Community. In reviewing MEAP scores for Economically Developed Suburbs only high and average MEAP scores could be found for the schools in this Kind of Community. Therefore no Economically Developed Suburb Low information is included in this study.

Growth Community High

In the high MEAP scoring school there was only one teacher who indicated the MEAP as an influence during the interview and that was a fourth grade teacher. The survey responses indicated 80% for Somewhat Influenced and 20% for No Influence. During the discussion of the MEAP another teacher indicated that she was indirectly influenced by test results. It is interesting to note that the parents in this school are pushing for more testing of their children to insure that they are, in fact, learning. Teachers indicated that there was a push by administration toward a workbook curriculum or at least to follow the scope and sequence of the workbook so as to insure that all teachers would cover the same material.

The other teachers said they were not affected by tests. The teachers in this school indicated their school was a creative school which was already involved in doing a lot of writing process and critical thinking. Since their school did well on the state tests, there was no need to change. Among the comments that teachers gave was that the test might possibly help them to design curriculum by looking at isolated skills but they preferred not to look at isolated skills. Another teacher was resistant to the test but did like the open-ended questions. This person thought the style of questions was thought-provoking.

Their math program was not affected by the test but one teacher was incorporating more word problems and open-ended questions into the present program. In science, this school has a hands-on program but one that is not heavy on the factual scientific knowledge. The teacher thought it was important for students to take the scientific knowledge and use it to communicate effectively. This teacher was also making sure that the concepts were covered.

Among the benefits of the state test was the idea of practicing test-taking in preparation for the College Boards and therefore it could be considered a valuable academic experience. Another teacher indicated that it gave her the opportunity to learn about the academic needs of the children in the classroom.

Growth Community Average

In the Average MEAP scoring school only the fourth grade teacher mentioned assessment as a driving force for the curriculum during the interviews. Survey responses indicated 62.5% for Somewhat Influenced, 25% for No Influence, and 12.5% for Influenced. The fourth grade teacher mentioned that she was already using journals and science logs but the open-ended assessment questions caused her to change her teaching to help students develop an understanding of open-ended situations. She indicated that both the math standards and all the assessment programs caused her to think about changing her teaching to go along with the assessment. She explained even though some of the test results were low, the tests were not held over their heads. Since it was a whole grade level or school wide test, she felt the scores were not a reflection upon her teaching and she felt she was doing a fine job. She indicated she was staying ahead of others and had made many changes before they showed up on the assessment. The other teachers were not as familiar with the test and could not list any benefits. They were aware of their

lower scores but tended to give rationalizations as to why their school might have scored lower.

Growth Community Low

None of the teachers in the low MEAP scoring school mentioned MEAP as an influence during the interview process. Survey responses indicated 75% responded Somewhat Influenced and No Influence and 25% responded Influenced. Only the fourth grade teacher was knowledgeable about the test itself and the scores. This teacher felt it was an interesting test and did indicate that she did change curriculum and instruction because of the test. An example she gave dealt with graphing. She indicated that she had always taught graphs by having her students interpret them. After becoming familiar with the test, she now has students take the information and create graphs. She felt that students were frequently thrown off by the format of the test and therefore made changes so that the students would be more comfortable with the test format. She did think the MEAP was a valid test and thought teachers should be using the MEAP type questions in their regular curriculum.

Residential Suburb High

During the free-response interview none of the teachers offered the MEAP as an influence in initiating changes in curriculum or instruction. However, on the survey the High MEAP school indicated 25% for Greatly Influenced, 50% for Influenced, and 25% for Somewhat Influenced. Teachers in this school indicated there was recent concern over the MEAP. There were meetings, discussions, and a speaker from the State Department of Education talking about open-ended type questions. Administrators were concerned about how the community viewed their test scores. Third and fourth grade teachers were more knowledgeable about the MEAP test but all teachers had become aware

of the importance of the test to the school department. Whether teachers were greatly influenced or not by the test, they were in agreement with the philosophy of the test. They like the format which encouraged thinking skills rather than rote learning. Many of the teachers had already incorporated thinking skills in their curriculum, so they didn't feel they were changing because of the MEAP. Earlier grade teachers were also not as influenced because the test was not given at their grade level. Other teachers indicated the open-ended questions on the MEAP pushes them not to look only for correct answers from students but ask how did they get the answers.

Residential Suburb Average

During the initial part of the interview no teachers offered MEAP as in influence in initiating changes in curriculum and instruction. On the survey one third of the teachers indicated Greatly Influenced, one third also indicated Somewhat Influenced, and one sixth each for Influenced and No Influence.

Some teachers indicated that the MEAP test drove curriculum, instruction, and assessment. They said it could be used as a tool to identify needs which should be addressed. The test could also be used for self-evaluation for constantly refining educational goals. The MEAP promotes a different style of writing which requires teachers to develop strategies in the different content areas. The open-ended questions encourage teachers to help students to look at the process and not just the answers. This test encourages students to use the thinking process to interpret and communicate through writing and not just to look for set answers.

The average MEAP scoring Residential Suburb school indicated there was concern that they did not score as well as the other two schools in their district. There were meetings and discussions about the test scores and

considerations about what should be taught at different grade levels. There was a feeling that the burden of the test should not rest only with the third and fourth grade teachers. One teacher indicated that the assessment does drive the curriculum and instructional practices and there is some teaching to the test but the MEAP was a good test to teach to.

At the end of the previous school year and again in September the teaching staff in this school were broken up into four vertical teams which consisted of a kindergarten, first, second, third, and fourth grade teacher. Each vertical team was given a particular item from the MEAP test about which the teachers would discuss the kinds of things that could be done at each grade level to prepare the students to answer certain types of MEAP questions. At another type of meeting, the grade level meeting, the teachers met to discuss the expectations of what students should be able to accomplish by the end of each grade level. The information from each grade level meeting was then disseminated to all the other teachers so all staff would know about the expectations for each grade level in the school.

The MEAP was also viewed by one teacher as a tool for evaluating how good a job teachers and students are doing. The test can give teachers direction in changing their curriculum and instruction to help students do better in certain areas of the test.

Also helpful in initiating changes were sample materials concerning the MEAP. The questions in different content areas and examples of student responses were helpful to teachers in adjusting their curriculum.

Residential Suburb Low

There was no Residential Suburb school which scored low on the MEAP. Therefore no information is included about a low scoring Residential Suburb School.

Economic Rural Center High

The high MEAP scoring Rural School did not offer MEAP as an influence during the initial part of the interview. On the survey 62.5% of the teachers indicated Somewhat Influenced, 25% indicated No Influence, and 12.5% indicated Influenced. Most teachers were well aware that they had done well on the last MEAP test, but there was concern among the teachers about the upcoming MEAP test. They were worried that the present class would not score as well and even talked to the administration about their concerns.

Some of the teachers indicated that the test was beneficial to them. They understood the value of the test and recognized that it did help them to make some changes. One teacher said that it forced changes in curriculum and instruction. This teacher was in agreement with the test because children need to reason and think logically and organize their thoughts. Another teacher who was not directly involved in administering the test explained that she had attended a K-12 teachers' meeting with the State Department of Education during which the MEAP test was discussed. Sample questions were distributed to the teachers in order to develop an understanding of the open-ended questions on the test. The teacher indicated that she tried one of questions with her class and discovered that her class needed more practice with this type of question, but she was disappointed that she did not have any type of reference or resource that contained more examples for her to use with her class. This teacher had grown up in a state where state exams were given every year so

she had very positive feelings toward the MEAP test for the students of Massachusetts.

Economic Rural Center Average

The average MEAP scoring Economic Rural Center School did not offer MEAP as an influence during the free-response interview. On the survey 62.5% of the teachers indicated Somewhat Influenced and 37.5% indicated No Influence. There was a discussion of the test at a general school meeting. The conclusion was that the tests were not testing the way they were teaching.

Economic Rural Center Low

The low MEAP scoring Economic Rural Center School did not offer MEAP as an influence during the initial interview. On the survey 75% responded No Influence and 25% responded Somewhat Influenced. The teachers were really not familiar with the MEAP. Some teachers indicated it was a test given in the older grades and they knew teachers and administrators get upset about it. The teachers all said the MEAP had no influence upon them in their teaching.

Analysis

One of the objectives of the Massachusetts Educational Assessment Program was to encourage teachers and school systems to initiate changes in curriculum and instruction. The researcher found there were several schools which were positively influenced by the Massachusetts Educational Assessment Program (MEAP). Economically Developed Suburb Schools, Residential Suburb Schools, and the high MEAP scoring Urban School all had developed, either formally or informally, some kind of test preparation program or teacher instruction to improve MEAP scores. Other schools indicated

changes in curriculum and instruction for individual teachers, usually at the fourth grade level.

Teachers who indicated they made changes in curriculum and instruction were in agreement with the philosophy of the test. They believed students should be doing more critical thinking and learning to answer open-ended questions. The test had given them the impetus to make the needed changes.

The majority of teachers who made changes in curriculum and instruction because of the MEAP were in the fourth grade. However, in those schools where formal programs were developed to improve test scores, teachers at all grade levels, one through four, had initiated some changes. Many lower-grade teachers were not influenced by the MEAP because it was not given at their grade level.

The Urban High teachers showed commitment school-wide for improving test scores and student learning through changes in curriculum and instruction. Administration provided time, training, and materials for the teachers to accomplish the goal. All teachers showed test ownership by working together for improved test scores and student learning. The teachers also involved the parents as part of their improvement plan by forming positive relationships with them and teaching the parents to work with their children. Teachers at all grade levels were familiar with the MEAP and understood the skills which their students needed to master. The Urban High school shows that it is possible for a test to positively impact a school when the test is viewed as a tool or guideline for improvement and the entire school staff are also committed to work with each other for the goal of improving student learning.

The Urban High teachers seemed to view the plan for improving test scores as a great undertaking and a challenge. Also influencing these Urban

High teachers were the negative reactions from other schools. These teachers indicated that there was disbelief among the other city schools that their school could possibly go from the lowest scoring school to the highest scoring school without some sort of cheating. It is also interesting to note that this Urban school, which had spent so much time and energy improving test scores, indicated 0.0% for Greatly Influenced, 50% for Influenced and 50.0% for Somewhat Influenced on both items 7 and 14 which dealt with the test results and discussions of the Massachusetts Educational Assessment Program.

One of the benefits of the MEAP mentioned by many fourth grade teachers dealt with identifying the strengths and weaknesses of their students. These teachers also mentioned that they were in agreement with the thinking skills which were on the MEAP test. However, only a few schools actually used the information for making significant changes in curriculum and instruction. Urban High, Economically Developed Suburb High and Average, Residential High and Average were the schools which developed school-wide or grade level changes in curriculum and instruction in response to the MEAP. In all of these schools there was a strong administrative push to either raise or maintain high test scores. Teachers were also offered workshops, training, or released time to acquire the necessary skills to improve student learning. Most of these schools also provided time for the teachers to meet with one another as well as teachers from other grade levels to discuss the MEAP, grade-level expectations, or ideas for initiating changes in curriculum and instruction.

The schools mentioned above, the Urban High, the Economically Developed Suburb High and Average, and the Residential Suburb High and Average also had the greatest sense of test ownership. The majority of the teachers in the those schools were familiar with the MEAP, not just the fourth

grade teachers. Some lower grade teachers would say they were not as influenced by the MEAP as the fourth grade teachers but they were familiar with the test and the expectations the fourth grade teachers had for their students.

The above schools also tended to have more long term plans for curricular and instructional change based on the MEAP. The Urban High school was the most intensive of the schools with two, one week paid summer sessions with all teachers in attendance to review curriculum and instruction in relation to the tests given in their school. Other schools had workshops, speakers, or discussions beginning in September.

Teachers who had the opportunity to view the MEAP or who had practice with sample questions from the MEAP indicated they were in agreement with the philosophy of the test which put more focus on thinking skills. Many of these teachers indicated they were now asking more open-ended type questions. The teachers were also evaluating their curriculum and updating those curriculum areas which lacked critical thinking and writing skills.

Research Question 3:

How has the Massachusetts Educational Assessment Program
fallen short in helping teachers to initiate changes
in curriculum and instruction?

The data for this question were collected from the third part of the teacher interview. After the teacher completed the survey, the researcher quickly scanned for the responses to item 7 and item 14. If the teacher indicated a negative response to either item 7 or 14, the researcher asked the teacher how the MEAP had fallen short in helping him/her to initiate changes in curriculum and instruction. Frequently, as teachers began discussing the Massachusetts Educational Assessment Program, they spoke about the test in both positive

and negative terms. Also included in the data for this question will be information which teachers offered during the initial free-response interview as well as information offered during the completion of the written survey. Several teachers stopped when responding to items 7 and 14 about the MEAP and commented about the test, about their personal opinion of the test, or how their school was preparing for the test. The teacher responses are organized by Kind of Community and within each Kind of Community by High, Average, and Low MEAP scoring schools.

Urban High

The Urban School which scored high was definitely influenced by the MEAP but the initial move for change came from the administration. Distraction-free time was provided for the teachers to review the test scores and evaluate the various curricula of the school system so that weakness could be addressed. Workshops, training, and cross-grade level dialogue was provided to help teachers institute the required changes.

All teachers commented on the stress that was felt by the teachers in getting the students ready for the test. Lower grade teachers did not feel the same amount of stress that third and fourth grade teachers felt since the students they were teaching had two or more years before taking the test. However, all teachers were very aware of the attitude toward testing and the MEAP scores.

Another pressure mentioned by teachers was that the test was used to compare schools and was actually pitting one school against another. Teachers were also upset about the media publicizing the test scores which further created the competition among the schools. One teacher stated that the original

use of the test, to improve curriculum, has been left far behind. It has now become a teacher report card.

Teachers also mentioned that some students do not test well. They feel the panic of taking a test. Although the teachers have really concentrated on helping students develop good test-taking strategies, testing is still a traumatic situation for many youngsters.

Another concern is that a particular curriculum like science may not match up to what is being asked on the MEAP. Children could be learning a lot of science, but if the questions on the test aren't about what they have been studying in their school, the children will do poorly on that part of the test. One teacher thought it would be better for the State Department of Education to tell the teachers the five or six areas on which the students would be tested in both science and social studies. In that way the students could be prepared for the test and then the rest of the time the students and the teachers could choose what they wanted to study and learn about for the rest of the year.

Some teachers also thought that the intense interest in getting the students ready to take the tests was detrimental to the students. Too much time was being used to focus on certain skills which left little opportunity to do a lot of creative writing.

Urban Average

The teachers in the average MEAP scoring Urban School indicated that the MEAP had little influence upon them. Teachers felt there was too much emphasis on test results which do not take into account what the teachers are doing in the classrooms. The testing seems unfair and puts a lot of pressure on upper-grade teachers. Lower-grade teachers are aware of the pressure but

don't feel it as much because they are not directly involved with the students. One teacher indicated it was very unfair for the newspaper to print test results because this put undue and unfair pressure on the teachers. The publicity was pitting school against school, teacher against teacher, classroom against classroom, and child against child. The children are also sensing the negative feeling toward the test because when one teacher announced to the students that they would be taking the MEAP soon, the students became extremely nervous.

Urban Low

The low MEAP scoring Urban School, like the other schools in the urban district, indicated they felt pressure from the media. One teacher commented that the media tends to label certain schools and she thought that was very unfair. The pressure to do well on tests often went counter to some teachers' philosophies of education which centered on individual developmental progress which was of more importance than preparing the students for a frustrating test.

Lack of quick and pertinent feedback was a concern for one of the teachers. She indicated that there was no feedback on certain items. She would never know how her individual students did or if your class as a whole missed the point of a certain question. They would just take the test in March and then it would disappear until the scores were released sometime in October. The lack of useful feedback makes the test of little benefit.

Lower-grade teachers were not influenced by the test because the test was not given at their grade level. They had never even seen a copy of the test. However, one teacher did attend a workshop and was able to see the type of

questions fourth grade students were expected to answer. She indicated it was mind boggling. This experience gave her a better understanding of the fourth grade expectations.

Economically Developed Suburb High

Teachers looked positively upon the MEAP since the type of questions asked on the test coincided with their educational philosophy. The only negative comment they had were about the pressure they felt to keep up the test scores.

Economically Developed Suburb Average

The average MEAP scoring Economically Developed Suburb school agreed that critical thinking, problem solving , and open-ended questions were an important way to learn. Some teachers felt they were already doing that so there was no need to change. One teacher said she did not want to teach to the tests. Other teachers were concerned that the MEAP was forcing them to change their curriculum to be in line with the test.

Economically Developed Suburb Low

In the study only two Economically Developed Suburb schools are represented. The selection was based on MEAP scores by Kind of Community. In reviewing MEAP scores for Economically Developed Suburbs only high and average MEAP scores could be found for the schools in this Kind of Community. Therefore no Economically Developed Suburb Low information is included in this study.

Growth Community High

Lower-grade teachers were not familiar with the MEAP but had overheard conversations about the test. There has been a push by administration to put more testing into the system along with workbooks or at least require teachers

to create lessons that cover all the workbook topics. This had come about from parents wanting more assurances that their children are learning.

The fourth grade teacher indicated they were asked to prepare students for the test. The time required for test preparations and then administering the test destroys the continuity of the present curriculum.

Some teachers were not influenced by the test because they have a resistance to tests and teaching to the test. Other teachers had no knowledge of the test and therefore it was no influence.

Teachers also felt that it is a frustrating experience for students who might have weak reading skills to have to complete the test. The test does not take into account the different reading levels for science, social studies, and math. They have to be able to read the word problem and the directions. The test is creating a situation in which students are not going to feel good about themselves. Also, those students who are exempt from the test must leave the room and feel isolated from the rest of the class. The act of leaving the classroom points out their differences.

The student identification part of the MEAP also requires students to pick out the cultural group to which they belong. It is a difficult decision for some students to decide to which cultural group they belong or to which one they would like to belong.

Growth Community Average

The Average MEAP scoring Growth Community School was aware of its lower scores compared to other communities but the teachers felt it was unfair to be compared to higher scoring schools because of varying students' needs. They indicated their students were coming from a variety of backgrounds and the teachers needed to meet the children's needs first.

Lower-grade teachers did not get an opportunity to see the test and therefore had misconceptions about what the test was like. However, they said they didn't think seeing the test would make them change their teaching because they wouldn't want to drill them on the same questions as on the test. They didn't teach that way. The administration told them about the low test scores and said they needed to improve.

A teacher who had previously taught fourth grade indicated that the fourth grade teachers had several meetings about the results and brainstormed what they could do to improve them but there wasn't total agreement between the teachers and the test. They didn't feel the test was a fair judge of the children's growth in education and they were not going to change teaching methods to accommodate a particular mode of testing. Some of the teachers indicated that they felt the state should set guidelines for curriculum so there was equity among all communities. The way it is now with each school or each fourth grade teacher is on his/her own. Teachers couldn't understand how the same test could be given to such a wide varying population of students without strict guidelines. Another feeling expressed by teachers was that the state was giving the test, telling schools what was wrong with their students, and then telling the schools to fix it but without any real direction or help from the state. Teachers were feeling overwhelmed because everything was supposed to be fixed at once and change takes a long time.

Discussions about the test scores seemed to occur only when the test results are first released. Teachers spoke about the meeting they had attended with the administration going over all the test scores from fourth and eighth grades. The principal used graphs and charts to explain the test scores. The

teachers hadn't seen a copy of the test before the meeting but they were given some sample questions at that time to take with them. This information helped them to be more aware of the test expectations. The test questions were moving to a thinking curriculum instead of a rote curriculum. Teachers indicated it didn't necessarily change their way of teaching.

One teacher explained that the test doesn't necessarily change teaching because administration does not make them accountable for the test scores. When they had low test scores, the administration did not tell them they were bad teachers or that their curriculum had to change. Even with the prospect of introducing some new standardized testing for the fourth grade, the teachers were not worried about it nor were they preparing their students for the test.

Growth Community Low

The low MEAP scoring Growth Community School was not familiar with the test except for the fourth grade teacher. Teachers could not recall ever having a meeting to discuss the MEAP test or the results. Most of the teachers had misconceptions of how well their school had done on the test since most thought their school had done well.

The fourth grade teacher discussed her concerns about the fairness of the test. She had heard there were preparatory type sessions for teachers across the state but she never received any information about them. Since training was not available to her, she thought her students were at a disadvantage over those students whose teachers or school districts had received some type of training or information. She indicated that she was not interested in teaching to the test but since the test involves problem-solving and creative thinking-type strategies, she would like to help prepare her students.

Another problem was the tests were not used to really benefit the students. She felt tests should be given at the beginning of the year in order to identify strengths and weakness so the test could provide direction for the teacher instead of being given at the end of the year when they will be put in a desk drawer and forgotten. Discussions about the MEAP test results only occurred when the results were initially released. No follow-up discussions involving other teachers occurred.

Small communities are also at a disadvantage because they do not have the business tax base to provide more money for the schools. There is an educational inequity in what different communities can provide for their students which then has an impact on the students' education and test scores

Residential Suburb High

The high MEAP scoring Residential Suburb school talked about a workshop which was given to the staff about the MEAP but there was no follow-up instruction or training for teachers on how to incorporate these testing skills into the regular curriculum. Some teachers felt they were not trained to teach the way the MEAP test wants these children to be taught.

Additionally, it was felt that the test should not be a concern of just the fourth grade teachers. There needs to be some structure so that children are exposed to all the necessary concepts and skills needed to do well on this test starting in preschool and working all the way up to fourth grade. You can't teach everything the child needs to know in one year.

The MEAP is causing teachers to go away from imaginative and creative student writing to a writing that is more content-oriented. It is limiting the

freedom children have to write about things that interest them personally. The fun is being taken out of the writing program.

Teachers also indicated that children are not prepared for this type of testing situation and it causes a great deal of anxiety among the students. Children express concern that they can find the answer but they can't go about explaining how they got it. The children get frustrated and upset.

This test is better than a multiple choice test which relies only on memory but there is a lot of pressure to get the students ready for the MEAP. Teachers did not want to teach to the test. Fourth grade seems to get the brunt of the pressure and there is the feeling that you can't prepare the students for this type of test in one year.

One teacher also commented about the possibility of the test being biased. She felt the students in the city were not going to do as well as students in the suburbs. The test seemed to be geared to those in the suburbs.

Residential Suburb Average

The average MEAP scoring Residential Suburb school indicated it did not score as well as the other two schools in their district. The administration showed concern about the test scores and teachers were led to believe they needed to do better. One teacher indicated that not having an individual identification of students' test scores prevented her from having a clear picture of what it was that she needs to do to improve learning. The generalized information she received was not enough.

Another teacher who had previously taught in another school system indicated that the test may be culturally biased and racist. Many immigrant children experience language problems while trying to complete the test.

The test is asking the child to use reasoning, creative thinking, and creative problem-solving but the child may not have the background information or experience to write about the questions. For example, a child might be asked to discuss what's wrong with his or her country before he or she has ever studied about the country.

Fourth grade teachers also get the brunt of the criticism because their names are attached to the test scores. It is also conceivable to see teachers asking to transfer out of fourth grade in the future so they can avoid the pressure of the testing publicity and the pressure of preparing students to take the test.

Residential Suburb Low

There was no Residential Suburb school which scored low on the MEAP. Therefore, no information is included about a low scoring Residential Suburb School.

Economic Rural Center High

The teachers in the high MEAP scoring Rural school had concerns about the use of the test scores. Some felt that it was going to be used as an evaluation tool to grade the effectiveness of teachers and then used in contract negotiations. They felt the reputation of the teaching staff was at stake.

Another concern was that the test should not be the only tool for assessing the curriculum. Too much stock is being put in one test. What happens if the students are not ready to take the test on that day? Family problems the night before or no breakfast in the morning could affect the child's ability to do well on the test.

The curriculum among various communities is not equal. Sometimes in order to answer an open-ended question, the children are asked to apply

knowledge about a particular subject that they have not yet been taught. In this Economic Rural Center school a full-time program of science and social studies does not begin until fourth grade. Therefore, their students will be at a disadvantage over other school systems which have programs that start earlier. It would be much more fair if the state set up curriculum guidelines for this test so all the students would have an equal chance to do well.

Economic Rural Center Average

The average MEAP scoring Economic Rural Center School was not affected by the MEAP test results. Some teachers were not at all familiar with the test and other teachers indicated that they were not affected by tests and did not teach to the tests. These teachers felt there were other ways of understanding and evaluating a child such as observing what a child does on an individual basis.

Economic Rural Center Low

The low MEAP scoring Rural school was not influenced by the test nor the results of the tests. The teachers were not familiar with what was covered on the test and only remembered slightly some publicity in the newspaper. A fourth grade teacher commented that when the results of the last MEAP test were released, the fourth grade teachers were called into a meeting with the principal to discuss why some of the scores were low. The teacher mentioned that she thought all the teachers should have been present for the meeting since she did not have the students for a whole year when the test was taken. She thought everyone should have equal responsibility. One teacher also recalled getting a student from another part of the state who was exempt from taking the test. The teacher wondered if that was how some communities got their scores up.

Analysis

The teachers from the thirteen schools in the study talked about a variety of problems associated with the test. One of the major problems centered on assuming responsibility for the test. Frequently lower grade teachers were not familiar with the Massachusetts Educational Assessment Program (MEAP). If they were familiar with the MEAP, they did not feel they were responsible for preparing the students for taking the test.

The pressure that teachers get from the administration to improve or maintain test scores is very high. Frequently it is only the teachers of the fourth grade who gets the brunt of the criticism. Often the administration will call a meeting with only the fourth grade teachers present and ask them why the scores are low and what they can do to improve them. Lower grade teachers are aware of the pressure with which fourth grade teachers must deal but they usually do not feel they must change their curriculum and instruction because the test is so far away from them.

Negative press is also another problem which bothers fourth grade teachers. Their names are attached to the scores so that it appears that they are not preparing the students well enough to take the test. It is, however, a reflection on all the previous teachers. Publication of test scores also sets up comparisons among schools within a community which causes further stress upon fourth grade teachers to improve test scores.

Many teachers do not like teaching to the test and therefore resist any pressure or suggestion to do so. Other teachers feel the MEAP is killing the fun and creativity in school. The test makes them concentrate on writing in content areas and teaching students test-taking skills.

Some teachers believe there is an inequity in educational resources and teaching training for the MEAP. Wealthier communities can provide more for their students than poor communities. Also, some school systems provide their teachers with more opportunities for workshops and professional development.

Many teachers felt there was a mismatch between the MEAP and what was actually taught in the schools. Their students may be learning about a variety of topics which may not appear on the MEAP. Therefore, the test is showing what they don't know and not what they do know. Teachers thought it would be advisable if they were informed about which topics would be on the test so their students would have a fair chance.

For the most part lower grade teachers were not familiar with the test. Some teachers were aware that the MEAP was given and that fourth grade teachers were worried about it. However, lower grade teachers had no idea what was on the test or what type of questions were asked. Since they lacked information about the test, they felt no need to change their curriculum and instruction which left test preparation totally in the hands of the fourth grade teachers.

Chapter Summary

This chapter presented data obtained from teachers in thirteen schools through interviews and surveys. Three types of data were described and analyzed. The first detailed the perceived influences that prompted teachers to initiate changes in curriculum and instruction. The data from the surveys were presented in tabular form according to Kind of Community, school with MEAP score, MEAP score, and grade level. The data from the interviews were presented in narrative form. The second type of data described how the Massachusetts Educational Assessment Program (MEAP) has been helpful to

teachers in initiating changes in curriculum and instruction. The third type of data describes how the Massachusetts Educational Assessment Program (MEAP) has fallen short in helping teachers to initiate changes in curriculum and instruction. The following chapter summarizes the research findings by objectives. The findings are then related to issues of educational change and change in relations to the Massachusetts Educational Assessment Program (MEAP). The chapter concludes with recommendations for further study.

CHAPTER V

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this chapter is threefold. First, the findings are summarized. Second, the chapter describes implications associated with the research questions which were guiding the study. Third, the chapter presents recommendations for further research.

Summary of the Study

The purpose of this study was to determine the perceived influences that prompt teachers to initiate changes in curriculum and instruction. Second, the study was to determine how the Massachusetts Educational Assessment Program (MEAP) was helpful to teachers in initiating changes in curriculum and instruction. Third, the study was to determine how the Massachusetts Educational Assessment Program (MEAP) had fallen short in helping teachers to initiate changes in curriculum and instruction.

The population of this study consisted of fifty-two teachers in grades one through four from thirteen schools. The schools represented five out of the seven different Kinds of Communities in Massachusetts. Two Kinds of Communities were not included in the study because MEAP scores were not generated for those schools since they had a grade level population of less than 40. For each Kind of Community, three schools were selected by MEAP score. Three Kinds of Communities had schools representing high, average, and low MEAP scores. Two Kinds of Communities had only two schools represented in the study since there were no schools with low MEAP scores.

Data were collected by the researcher through interviews and surveys. The first part of the teacher interview was free-response and consisted of

asking the teachers to respond about the influences which prompted them to initiate changes in curriculum and instruction. Second, the teachers were asked to complete a survey of twenty-six influences which might have prompted them to initiate changes. Third, the teachers were asked how the Massachusetts Educational Assessment Program (MEAP) had been helpful to them in initiating changes in curriculum and instruction or how the Massachusetts Educational Assessment Program (MEAP) had fallen short in helping them to initiate changes in curriculum and instruction.

Data collected from the interviews and surveys were displayed in tabular form by Kind of Community, school with MEAP score, MEAP score, and grade level. Data from the interviews were analyzed for themes and organized by types of influences such as student needs, teachers' educational enrichment and needs, administrative directives and professional influences, and testing. Data from the interviews about the MEAP were analyzed to identify themes.

Major Findings and Implications for Research Objective 1:

To identify the major perceived influences that prompt teachers to initiate changes in curriculum and instruction

The major findings for research question one along with the implications for initiating changes in curriculum and instruction will be presented for each item which appeared on the teacher survey. Additional information gathered from the free-response interview will also be included under major findings. The items are categorized by student needs, teachers' educational enrichment and needs, administrative directives and professional influences, and testing. A summary will follow each category.

Meeting the Individual Needs of Each Child

Meeting the individual needs of each child was one of two top influences that prompted teachers to initiate changes in curriculum and instruction. Both on the survey and in the free-response interview, teachers indicated students' needs as a prime influence for making changes.

Implications. Administrators and change agents who are encouraging teachers to make changes in curriculum or instruction must take into consideration the teachers' concern for meeting the needs of individual students. Teachers need to be convinced that proposed changes would benefit their students and address the needs of the students as perceived by the teacher.

Making Learning More Enjoyable and Interesting

Making learning more enjoyable and interesting ranked as one of the top two responses on the survey. In the open-ended interview, teachers did not specifically mention making learning more enjoyable and interesting. However, responses such as keeping them motivated, adding spice to teaching, finding new ways, children's interests, new ideas, trends and movements may fit into this category. If all of these responses are totaled, making learning more enjoyable and interesting would also rank near the top for the open-ended interview responses.

Implications. Although teachers did not specifically mention making learning more enjoyable and interesting in the free-response interview, they certainly believe that it is important, according to the survey. For innovations to be successful the teacher would have to perceive that the students would not only benefit from the innovation but that the students would also enjoy it.

The Move Toward Teaching Children in More Authentic Ways such as Using Projects Rather Than Using the Text

The move toward teaching children in more authentic ways such as using projects rather than using the text was 63.5% for Greatly Influenced and 96.2% for Greatly Influenced and Influenced combined. In the open-ended survey, there were 10 responses for hands-on, manipulative, and authentic learning. Teachers expressed concern for students who had learning difficulties, had behavior problems, or had come from broken families with decreased parent support. The free-response interview revealed 10 responses for changes in family and society and 7 responses for changes in children. There were 8 responses for inclusion and mainstreaming and 5 responses for discipline and behavioral problems including attention deficit disorder. Teachers mentioned that involving children in more active kinds of learning experiences helped to meet the needs of students who had learning and family problems.

Implications. Before an innovation is directed toward teachers, the administration or the innovator should take into consideration the types of students the teachers encounter in the classroom. The teachers' concerns about the students' learning abilities and family life should be addressed. In order to have a good success rate for implementation of an innovation, it is necessary that the teachers view the innovation as being of benefit to the various types of students in the classroom.

Preparing Students for the Future

Only two responses of preparing students for the future were offered during the free-response interview. On the survey 63.5% responded Greatly Influenced and when Greatly Influenced and Influenced were combined, the percentage was 98.1%. Teachers discussed future needs of students when

they talked about including more critical thinking skills in their classrooms because of testing and the new educational movements. Some teachers acknowledged there must be a change in the focus of education to prepare students for the twenty-first century.

Implications. Teachers are aware they must help students prepare for an ever-changing world. Innovations which highlight future skills for students may be more readily implemented by teachers.

The Need to Develop More Cooperative Skills in Learning

On the open-ended survey one teacher specifically mentioned cooperative learning as an influence that prompted her to make changes while other teachers mentioned workshops, which might have been on cooperative learning, as an influence that prompted them to initiate changes in curriculum and instruction. Other teachers stressed they used cooperative learning to address the individual needs of students especially for those with learning problems and in cases of reduced parent support. The survey shows 59.6% of the teachers responded Greatly Influenced and 96.1% for Greatly Influenced and Influenced combined. Some teachers also mentioned cooperative skills as being important for the future needs of students.

Implications. It appears that teachers view cooperative learning as a technique to address other student concerns such as ability level of students, learning difficulties, and decreased parent support. Innovators might take this into consideration and incorporate a cooperative learning aspect to an innovation.

The Move Toward More Mainstreaming of Special Education Students into the Regular Classroom

On the survey 36.3% of the teachers indicated Greatly Influenced and 65.1% indicated Greatly Influenced and Influenced combined. During the free-response interview 8 teachers made a reference to inclusion and mainstreaming as an initiative to make changes in curriculum and instruction. Some teachers stated there was a push for more inclusion in their classrooms and therefore they were working closely with special education teachers. Other teachers commented that they knew inclusion was coming and they had concerns about making accommodations in the classroom.

Implications. As inclusion becomes more prevalent it is important for administrators and special education teachers to help the regular classroom teacher become comfortable with the addition of learning disabled and physically challenged students in the classroom. It will be important for teachers to have or acquire teaching techniques that will meet the individual needs of each student since that was one of the major reasons for initiating changes in curriculum and instruction among teachers.

Wanting to Include a More Multicultural Aspect to the Curriculum

The survey shows 26.9% of the teachers indicated Greatly Influenced and 69.2% for Greatly Influenced and Influenced combined. During the free-response interview two teachers indicated Multiculturalism as an initiative to make changes in curriculum and instruction. Schools which had a more multicultural population tended to have higher percentages under Greatly Influenced on Table 29. The teachers in one school which did not have a culturally diverse population indicated the highest percentage under Greatly

Influenced. They said it was important for their students to learn about other cultures since their students had little exposure to different cultures within the school.

Implications. As schools become more culturally diverse, there may be more interest in incorporating a more multicultural aspect to the curriculum.

The Need to Develop More Cultural Understanding

On the survey teachers responded 26.9% for Greatly Influenced and 75% for Greatly Influenced and Influenced combined. These percentages are similar to the percentages above for wanting to include a more multicultural aspect to the curriculum. Tables 29 and 33 show eleven out of the thirteen schools indicated similar percentages for Greatly Influenced on both tables.

Implications. Schools with more culturally diverse populations were more interested in developing more cultural understanding. As schools become more culturally diverse there may be more stress placed upon changing curriculum and instruction to meet the needs of a diverse population. However, our country is becoming more culturally diverse and our connections with the rest of the world are growing through increased trade with other countries. On the survey teachers did indicate a fairly high percentage for preparing students for the future. If we view the future of the United States as becoming more multicultural, then it is important for innovators to help teachers realize the incorporation of multicultural understandings into the curriculum is necessary for meeting the future needs of students.

The Need to Get More Parental Involvement in Education

On the survey teacher response was 23.1% for Greatly Influenced and 61.6% for Greatly Influenced and Influenced combined. During the free-response interview 10 teachers indicated changes in family and society and 5

teachers indicated parents as an influence that prompted them to initiate changes in curriculum and instruction. In some situations parents were becoming more demanding and requesting that more standardized testing be done to insure their children were learning. Other teachers indicated there was a decrease of parent involvement which meant teaching strategies changed to compensate for lack of help with homework. One school had developed an elaborate program to increase parent involvement while other schools had intermittent events or programs for parents. Overall, parent involvement had not been a great influence in prompting teachers to initiate changes in curriculum and instruction.

Since the majority of the teachers in this study had many years of experience, they were able to compare changes in families and children over the years. Several teachers indicated the family structure was changing and there were differences in the children who were in school now compared with the children in the past. Teachers were initiating changes to accommodate the differences usually on an individual basis.

Implications. Instead of individual teachers trying to increase parent involvement in a scattered fashion, it may be necessary for schools to work as a whole. Schools need to evaluate the particular needs of their school in relation to parent involvement and then create a unified program to meet those needs.

College Courses, Workshops, Seminars, Conferences

College courses, workshops, and conferences ranked as a top response during the free-response interview as well as coming in very high on the survey. It is interesting to compare the workshop influence with professional development offered in the teachers' school systems. For Greatly Influenced, workshops, conferences and course received a 69.2% while professional

development received a 21.2%. When Greatly Influenced and Influenced are combined, workshops, conferences and courses received 92.3% while professional development received a 64.4%. The free-response interview also revealed a huge difference in responses. Workshops, conferences, and courses received 24 responses and professional development received five.

Implications. Administrators and change agents might consider introducing new ideas by encouraging their teachers to first attend workshops and conferences rather than through professional development. Once teachers are excited with the new ideas, more intense professional development could be done in the school system. Administrators might also want to ascertain why teachers are not as influenced by professional development within their own school systems and address the teachers' concerns.

An Interest in Experimenting with New Ideas or Methods

On the survey teachers responded 69.2% for Greatly Influenced and 94.2% when Greatly Influenced and Influenced are combined. During the free-response interviews, a total of 11 responses were given by teachers indicating an interest in new ideas, trends, and movements as well as wanting to try something new. During the interviews teachers mentioned trying new ideas like the writing process, whole language, critical thinking skills, math manipulatives, and hands-on science.

Implications. If the previous findings are taken into account, teachers are interested in experimenting with new ideas that meet students' needs as well as making learning enjoyable and interesting.

The Need to Revitalize the Curriculum or Instruction in the Classroom

On the survey teachers responded 63.5% for Greatly Influenced and 96.2% for Greatly Influenced and Influenced combined. During the free-response interview, there were 5 responses for becoming stagnant and bored and 5 responses for outdated materials. The majority of teachers in the study had over twenty years experience. Many teachers commented about the cyclical patterns in education. They would explain that many present innovations are in fact what they did 20 years ago but now it has a different name and a little different twist.

Implications. The years of experience for teachers in many schools is very high. These teachers may have been teaching the same grade or using the same materials for years. Innovators must take into consideration the many years of teacher experience before introducing a new idea. Some teachers may be insulted by a reintroduction of old methods under the disguise of a new name. Other teachers may be tired of their present curriculum and teaching methods and need to try something new, but it will be important for innovators to investigate what teachers are already familiar with before presenting an innovation. It will be important to utilize teachers' experience for successful innovation.

Discussions with Other Teachers About Curriculum and Instruction

On the survey teachers responded 58.3% for Greatly Influenced and 96.1% for Greatly Influenced and Influenced combined. During the free-response interview there was a response of 15 for other teachers, 1 for observing other teachers, and 1 for having a student teacher which makes this one of the top five responses by teachers. It is interesting to compare these percentages with professional development offered in the teachers' own school

systems which was 21% for Greatly Influenced and 64.4% for Greatly Influenced and Influenced combined. Teachers are far more responsive to each other than professional development speakers as a prompt to initiate changes in curriculum and instruction.

Implications. As stated above, one of the major influences for initiating changes in curriculum and instruction is college courses, workshops, seminars, and conferences. If discussions with other teachers is also another high influence among teachers for initiating changes, then providing time for teachers to come together and share their ideas and experiences will increase each teacher's storehouse of ideas for meeting the individual needs of the students.

Learning About New Ideas, Methods, or Techniques from Other Teachers

On the survey teachers responded 46.2% for Greatly Influenced and 86.6% for Greatly Influenced and Influenced combined. During the free-response interview 8 teachers responded new ideas, trends, and movements.

Implications. In reviewing the items above it would appear that teachers frequently get new methods, ideas, and techniques from college courses, workshops, seminars, and conferences as well as from each other.

Administrators might want to regularly provide a forum for teachers to meet with each other for exchanging their ideas.

The Need to Try Something New Because You are Dissatisfied

With the Way Things are Going at the Present Time

On the survey teachers responded 40.4% for Greatly Influenced and 88.5% for Greatly Influenced and Influenced combined. During the free-response interview 3 teachers responded they initiated changes when

something was not working. While completing the survey several teachers said they liked trying new things but not necessarily because they were dissatisfied.

Implications. Teachers are influenced by the need to try something new when they are dissatisfied with the way things are going. This reinforces one of the main influences for teachers and that was meeting the individual needs of each student.

Classroom Observations of Other Teachers. Either Formal or Informal

On the survey 34.6% responded Greatly Influenced and 69.2% responded Greatly Influenced and Influenced combined. During the free-response interview only one teacher responded observing another teacher and one teacher responded having a student teacher. While completing the survey teachers would stop and comment that they wish they had an opportunity to observe other teachers. Those teachers who were in physical environments like classrooms without walls did have an opportunity to see other teachers interacting with students.

Implications. Results from the free-response interview on Table 1 show the influence of other teachers to be high. If teachers regularly had the opportunity to also observe other teachers, the percentages for this influence might also rise. Principals and innovators could utilize teacher observation as an effective method for introducing and implementing innovations.

Reading Professional Journals and Books

On the survey 23.1% of the teachers responded Greatly Influenced and 80.8% responded Greatly Influenced and Influenced combined. During the free-response interview, 14 teachers responded reading journals, books, and newspapers and another 4 teachers responded research. This response ranked high for the interview. Teachers are influenced by reading but

workshops and the influence of other teachers ranked much higher for Greatly Influenced.

Implications. Hearing about new ideas and methods from workshops and teachers seems to have a greater impact on classroom teachers than reading about ideas and methods in journals and books.

Professional Development Offered in Your Own School System

On the survey teachers responded 21.2% for Greatly Influenced and 64.4% for Greatly Influenced and Influenced combined. During the free-response interview, 5 teachers gave a response of professional development. Professional development within the teachers' own school system received the lowest percentage of teacher-related items on the survey. Workshops, courses, seminars, and conferences as well as other teachers had a much greater impact on teachers than professional development.

Implications. Professional development within the school may not be the most effective method of introducing an innovation. Principals and innovators should utilize multiple avenues for introducing and implementing new ideas, not just professional development programs within the school.

New Standards such as the Standards Proposed by the National Council of Teachers of Math

On the survey 38.5% of the teachers responded Greatly Influenced and 77% responded Greatly Influenced and Influenced combined. During the free-response interview only one teacher mentioned math standards. New standards are not a great influence in prompting teachers to initiate changes in curriculum and instruction. However, the combined percentage of 77% is higher than the percentages for professional development and observing other teachers.

Implications. This category has much lower percentages than items under students' needs or teachers' educational enrichment and needs. Teachers are far more influenced by meeting the individual needs of students than by the new standards in initiating changes in curriculum and instruction.

The Current Debate About Reform and Restructuring of Education

On the survey 23.1% responded Greatly Influenced and 61.6% responded Greatly Influenced and Influenced combined. During the free-response interview only one person responded state-mandated curriculum.

Implication. Teachers are not yet involved in many of the proposed reform and restructuring measures and therefore teachers are not greatly influenced in initiating changes in curriculum and instruction because of reform and restructuring.

Directives from Administration to Make Changes in Curriculum and /or Instruction

On the survey 13.5% responded Greatly Influenced and 52% responded Greatly Influenced and Influenced combined. However, during the free-response interview administrative influence came out near the top with 16 responses. Some principals encouraged or directed teachers to make changes while other principals supported teachers in their desire to try new ideas or methods in the classroom. Teachers were positive about administrative directives when they were in agreement with the philosophy of the new idea and often said they would have implemented the idea on their own anyway. Other teachers were more resistant to suggestions and believed they had more knowledge about their students' needs.

Implications. Directives from administration might be more effective if time is taken to convince teachers that the innovation will meet the needs of their

students at the present time or will be important to their students for future success. Teachers might then be more receptive to suggestions or directives from administration.

Results from Your Own Personally Made Assessment Tests

On the survey 36.5% of the teachers indicated Greatly Influenced and 92.3% indicated Greatly Influenced and Influenced combined. Personally made assessment tests shows the highest percentage of the five testing items on the survey. During the free-response interview there were 9 responses for testing and assessments but the teachers did not specifically mention personal assessments.

Implications. Teachers find using their own personally made assessment tests more useful in initiating changes in curriculum and instruction than standardized tests or the Massachusetts Educational Assessment Program (MEAP). External testing does not always match the curriculum and teachers and must wait too long for the results to be returned to them. Therefore, personally made tests proved to be far more effective in making curricular and instructional changes.

Test Results from the Massachusetts Educational Assessment Program (MEAP)

On the survey teacher response was 15.4% for Greatly Influenced and 28.9% for Greatly Influenced and Influenced combined. During the interview 9 teachers indicated testing as an influence and 5 specifically mentioned the MEAP. This item was one of five receiving the lowest percentages of the 26 items on the survey. Teachers in grade four were the most influenced by the test.

Implications. The Massachusetts Educational Assessment Program (MEAP) does not have a large impact on teachers as a prompt to initiate changes in curriculum and instruction. For the test to have more of an impact it would be essential that all teachers in all grade levels become familiar with the test and its purpose.

Results from Standardized Test Scores from Your Own School System

On the survey teacher response was 13.5% for Greatly Influenced and 23.1% for Greatly Influenced and Influenced combined. Teachers were not greatly influenced by standardized tests because in some schools there were no testing programs. These programs had been discontinued because of testing philosophy or budget cuts. Where testing programs were in place, some teachers were not influenced because the test was not given at their grade level. Teachers also felt that standardized tests do not match their curriculum.

Implications. Tests will not be an influence for teachers unless there is a match between the test and the curriculum. Teachers who do not feel responsible for the test scores will not change curriculum and instruction to improve test scores.

School Discussions About Test Results from the Massachusetts Educational Assessment Program (MEAP)

On the survey teacher response was 13.5% for Greatly Influenced and 34.7% for Greatly Influenced and Influenced combined. During the interview there was a response of 9 for assessments and 5 of those specifically mentioned MEAP. Teachers in grade four were most influenced by the MEAP because it was given at their grade level and they were made to feel accountable for the test scores. Discussions about the test were frequently conducted with just fourth grade teachers.

Implications. Teachers at all grade levels will not change curriculum and instruction because of discussions of MEAP unless everyone is made to feel accountable for preparing the students for the test. All teachers need to be made aware of the test and the results and all teachers need to be invited to the meetings about MEAP.

School Discussions About the Test Results from Standardized Tests

Administered by the School System

On the survey teacher response was 7.7% for Greatly Influenced and 26.9% for Greatly Influenced and Influenced combined. This item received the lowest percentage from teachers. These low percentages may also be a result of the elimination of standardized tests in many schools. Also, there was a feeling among many teachers that the tests do not match the curriculum and they are taken at the end of the year so they are an evaluation rather than a direction for instructional changes.

Implications. For standardized tests to be more effective in prompting teachers to make changes, there needs to be more consistency between the curriculum and the test. Teachers prefer tests at the beginning of the year so that the tests can give them direction for making instructional decisions.

Major Findings and Implications for Research Objective 2:

To determine how the Massachusetts Educational Assessment Program has been helpful to teachers in initiating changes in curriculum and instruction

Interview data and information from the teacher survey was utilized to establish the major findings for research question two. Once teachers began talking about the MEAP, they frequently discussed both the positives and negatives of the test.

Change in Philosophy

The MEAP has resulted in teachers looking at both what they teach and how they teach their students. The introduction of open-ended questions on the MEAP helped teachers to rethink what they were doing in the classroom as well as evaluate their students' future needs. Curriculum changes included the introduction of more open-ended type questions in their present curriculum as well as including more classroom discussions and practice with writing skills.

Implications. Testing can be an effective method of encouraging changes in curriculum and instruction particularly if teachers agree with the philosophy of the test. Administrators and change agents must analyze tests to ensure a curriculum match. Teachers must then become familiar with the objectives of the test as well as with the interpretation of the test results.

Workshops and Training

The MEAP results are not as helpful to teachers as the workshops and the training they receive either from the State Department or from a speaker. Once teachers were in agreement with the philosophy of the test, they were much more willing to make changes in the curriculum and instruction. However, teachers still felt the changes they were making in curriculum were important skills for their students and not just making changes to improve test scores.

Implications. Teachers are interested in meeting the needs of their students. When teachers view the MEAP as having a positive influence on improving student learning, the MEAP will have a direct impact on curricular and instructional changes. The more teachers become familiar with the purpose, philosophy, and the results of the MEAP, the more teachers are willing to consider changes in curriculum and instruction to improve student learning. If the State Department wants the MEAP to have more impact upon teachers, it

will have to spend more time educating all teachers about the MEAP and the skills necessary to do well on the test.

Administrative Interest

Administrative support was very visible in those schools that did well on the MEAP. Schools where administration was more involved with the results of the MEAP also experienced more teacher interest in changing curriculum and instruction. The administration, whether it was system-wide or school-wide, set goals for the students and the teachers. They then created opportunities for the teachers to gain the skills they needed through meetings, workshops, and professional development so that MEAP scores could be improved or maintained. These schools also developed either formal or informal programs for their schools.

Implications. Administration is an important factor in prompting teachers to initiate changes in curriculum and instruction with reference to the MEAP. If the administration and teachers don't value the MEAP, the results will be meaningless to them and no change will ever take place. The State Department of Education might be able to encourage more curricular and instructional change by helping the administrators to understand the value of the test.

Curriculum Updated

The results of the MEAP were an impetus for some schools to analyze their present curriculum. Weakness were identified so that curriculum could be updated or enriched. Individual teachers who were knowledgeable about the MEAP and agreed with the basic philosophy of the test realized their students needed more practice with problem-solving, critical thinking, writing process,

and open-ended questions. These teachers began changing their instruction and curriculum along the same direction as the MEAP.

Implications. As teachers become more aware of the test expectation they tended to evaluate what they are doing in the classroom. Teachers' self-evaluations are the first step in the process of initiating changes in curriculum and instruction. The more teachers become familiar with the MEAP, the greater the probability of initiating changes in curriculum and instruction.

Test Ownership

In a few of the schools there was test ownership among all the teachers in the school, not just fourth grade teachers. Lower grade teachers indicated that what went on in their classrooms would eventually impact the fourth grade scores. They realized that the fourth grade teachers couldn't do all the test preparation in one year. It was also recognized that the test scores reflected the job that all the teachers had done in the school and not just the fourth grade teachers.

Implications. If improvements in MEAP scores are desired, then it is essential to develop the concept of test ownership among all teachers. When all teachers feel responsible for the test, the greatest amount of curricular and instructional change will occur. This will also be important when the future state assessments are developed and instituted. It is not only the responsibility of the fourth, eighth, and tenth grade teachers to prepare students for the exams.

Commitment by all Teachers

Commitment by all teachers was another area that showed up in schools that did well on the MEAP. In most high scoring schools all teachers in grades one through four were knowledgeable about the MEAP and the skills necessary to do well on the test. There was a sense of test ownership among

all the teachers. The first grade teacher knew that her work with the students would ultimately affect the test results in fourth grade. Everyone was working together on a common goal. There was a feeling of team work because all teachers were invited to participate in meetings about the MEAP.

Implications. It is important for administrators to provide teachers with the time they need to work together so they can develop some common goals for improved student learning. Teamwork can not occur unless teachers have the time to meet and work together. Teachers need to share the responsibilities for educating all students.

Improvement of MEAP Scores

One school in the study had received the lowest test scores in the community. The teachers, along with strong administrative support, analyzed their curriculum and implemented curricular and instructional changes throughout all the grades. Teachers were given training and materials to help them accomplish their goal of improving student learning and test scores. After two years of intensive work, their school received the highest MEAP score in the community. This was the result of long-range planning and the entire school working together to prepare the students for the MEAP.

Implications. Through school-wide effort and commitment by all teachers along with strong administrative support in the areas of time, training, and materials, it is possible to raise test scores.

Major Findings and Implications for Research Objective 3:

To determine how the Massachusetts Educational Assessment Program has fallen short in helping teachers to initiate changes in curriculum and instruction

Interview data and information from the teacher survey was utilized to establish the major findings for research question three. Once teachers began

talking about the MEAP, they frequently discussed both the positives and negatives of the test.

Misuse of Test Scores

Misuse of the test scores seems to be prevalent in many school communities. The first problem is that many teachers and administrators are not even aware of the purpose of the test. Administrators often view it as an evaluation of their school community and are upset when the scores are not high. Fourth grade teachers are frequently called into meetings to answer for the low test scores. Teachers are then asked to brainstorm how they can improve their scores. It is left up to the teachers to do what they can without any extra help in the area of materials, workshops, or support groups. Many times the test scores will be forgotten until the administration gets a notice that MEAP will be given again. Fourth grade teachers will then be instructed to prepare their students for the test. Administrators view the test as something to pass rather than a tool for curriculum analysis and long-range planning to improve learning.

Implications. No meaningful long-range changes will occur in curriculum and instruction if the MEAP is not used as tool to improve education. There is a distinct difference between viewing the test as something to pass and viewing the test as an impetus to analyze the present curriculum and evaluate for future needs. If the administrator misinterprets the purpose of the test and dictates change for the purpose of improving test scores, student learning will not necessarily be increased. The State Department needs to work with administrators to help them to be effective leaders for curriculum change for improved student learning and not improved scores. Schools which look only

to pass the test make short-term changes and then revert back to their old teaching styles and curriculum until it is time to give the MEAP again.

Lack of Test Ownership

One of the major findings has to do with test ownership. In reviewing the tables on grade level influence, it becomes apparent that as the grade level rises so does the influence of the MEAP upon curricular and instructional changes. Teachers in the lower-grade classes frequently do not worry about the test-taking, low scores on tests, preparing students for the tests, and the pressure from the administration about low test scores. Many teachers are aware of the test pressure upon fourth grade teachers but do not feel any pressure or responsibility to make changes in their classroom based on test scores. The brunt of most of the criticism falls upon the fourth grade teachers. Most often it is only the fourth grade teachers who are made to feel accountable for the low test scores. They are also responsible for preparing the students for the test, often starting two or three months before the test is to be given.

Implications. If only the fourth grade has the responsibility for preparing the students for the MEAP, it will always be a cram session of critical thinking and problem-solving skills. Teachers will view the MEAP negatively since they will feel an enormous amount of pressure to raise or maintain test scores.

There will be no long range change in curriculum and instruction to increase student learning because the MEAP is not used as a tool for the whole school system to use. All teachers need to be involved in the process of improving student learning.

Lack of Familiarity of the MEAP

Not only is there little test ownership among the majority of lower grade teachers, except for in some of the higher-scoring MEAP schools, but there is

little understanding of the MEAP test. Teachers were often not familiar with where the test came from, when the test was given, what type of questions and skill expectations were on the test, how their school had scored on the test, and the purpose of the test. Frequently teachers would begin talking about the MEAP as if they were familiar with the test but what they were really talking about were standardized tests like the the IOWA, the California Achievement Test, or the California Test of Basic Skills.

Most fourth grade teachers were very familiar with the test but the researcher found that many were not familiar with the purpose of the test. Some teachers thought students received individual scores on the test and these were put on their permanent records. Another problem was that teachers frequently changed grade levels. Therefore a second grade teacher who was not familiar with the test might be assigned to teach a fourth grade. The teacher might know the test was coming up but have no understanding of the MEAP.

Implications. The MEAP can not be viewed as a valuable tool for making curricular and instructional changes if the teachers are not familiar with the test or the purpose of the test. There needs to be much more information or instruction offered to all teachers, not just fourth grade teachers, and administrators in order for the MEAP to really impact curriculum and instruction in schools.

Pressure from the Media

There is a great deal of misuse of the test by the administration with respect to the media. Schools within a community and schools in different communities are compared according to their MEAP scores. Principals and other administrators feel the pressure to increase test scores and in turn pass that pressure on to the fourth grade teachers. Frequently, there are meetings,

especially with the fourth grade teachers, when the test scores are first released. Teachers are called upon to explain why the test scores are not higher. They are frequently asked to brainstorm ideas for improving the test scores. Often no mention will be made about the MEAP by the administrators until it is time to administer them again. Fourth grade teachers are then reminded about getting their test scores up. Teachers complain that schools and communities are pitted against each other because of the MEAP scores. Fourth grade teachers do not like their names associated with low test scores.

Implications. If administrators view the main purpose of the MEAP as an evaluation of their school system and not as a tool for analysis, then the media pressure will continue to haunt them. Administrators will seek to improve scores but not necessarily seek to improve learning to meet the needs of the students. Administrators are interested in good public relations by having good test scores but do not give the teachers the resources and support they need to make effective changes in the curriculum to increase student learning.

Lack of Timely and Pertinent Feedback

Lack of timely and pertinent test feedback is another area of concern. Some teachers indicated that they didn't know how to interpret the data while other teachers indicated that the information they received was of little value to them. However, for the majority of the teachers there was no feedback except a little discussion of test scores at teachers' meetings or a discussion of test scores in the newspaper. The teachers often did not know what the scores really meant. Also, the release of the test scores came about six months after the tests were given. Teachers indicated that they no longer had those students so the results meant nothing to them for curricular or instructional change.

Implications. Since teachers are not truly familiar with the test or the purpose of the test, test scores also have little value for them. When teachers said that the scores can't help them because they don't have those students any more, they are missing the intent of the MEAP. If MEAP results are to have any impact on teachers, the State Department of Education must offer more explanations about how to use the MEAP results to both teachers and administrators. This information should be given on a regular basis since there are always changes in teacher assignments and administrators.

Lack of Workshops, Training, and Materials

Teachers who attended workshops or meetings offered by the State Department were often amazed at what fourth grade students were expected to do on the test. Some teachers took the sample questions and tried them out with their own classes. They enjoyed doing this and wanted more examples, but there was no resource book available to them. Some teachers also indicated they would like more training in critical thinking and open-ended questions.

Implications. Teachers will be more willing to try new ideas in their classrooms if they are provided with the materials and training they need. The State Department of Education and each school system must provide more educational opportunities for teachers in relation to desired curricular and instructional changes

Recommendation for Administrators

The MEAP was developed to encourage teachers and schools to make changes in curriculum and instruction. It is, therefore, essential that the purpose of the test be made clear to all teachers, guidance personnel, administrators, and parents. The Massachusetts State Department of Education should be

invited to speak with all teachers, not just fourth grade teachers, and administrators to help them understand the test, be able to interpret the test scores, and give them some guidance or direction for initiating changes in curriculum and instruction.

The administration needs to give support to teachers in making changes in curriculum and instruction. It is not enough to tell teachers to make changes. Changes should be made after an analysis of the students' needs. Teachers should be given support in the form of materials, workshops, and training when teachers deem that it is necessary.

No one group of teachers should be totally responsible for preparing students for a test. All teachers should feel a responsibility to educate students by addressing their individual needs. Without involving all teachers and staff in a meaningful way, no coordinated, systematic change will ever occur. The MEAP will be useless if lower grade teachers continue to do their own thing.

If fourth grade teachers continue to think that the test score is far more important than increasing the learning of their students, no long-term educational changes will result. As one teacher put it, the quick changes are the band aid approach. Meaningful increased student learning will never materialize if the administration is only concerned with elevated test scores. The education of the students will be fragmented by each teacher doing his or her own thing and the fourth grade teacher frantically trying to cram in knowledge and skills in a short period of time so students will do well on the test. All teachers must feel that they are part of the planning process so they begin to accept ownership of the curriculum. Without teachers accepting a common goal of helping the students to increase their learning, there will be few educational gains.

Administration must also be involved in the planning process of change. It is not enough for the administration to say increase test scores or make curriculum and instructional changes to bring up test scores. The administration must provide time for teachers to evaluate curriculum and instruction, investigate new programs, techniques, or ideas, and allow teachers the time to experiment and gain skills and new teaching techniques.

Recommendations for the Massachusetts State Department of Education

Improving the feedback mechanism is essential for the effectiveness of any testing program in the future. All teachers need to be informed about test results, not just the teachers in the grade levels where the test is administered. Helping the teachers to develop skills at interpretation of the test data is extremely important if the test is to be of any value to the teachers, the school system, or the state for the purpose of making changes in curriculum and instruction. When test results are distributed, they should be accompanied by practical suggestions or a sample detailed plan of action which teachers or a school system could use for addressing problem areas indicated by the test. It is also extremely important that test be used for the purposes for which it was intended and therefore when test results are released, the State Department should state exactly how the test results are to be used by teachers and the school.

Schools may benefit from other schools. Information about how some schools set about addressing the weaknesses in their curriculum and instruction may be helpful to other school districts. Since teachers are influenced by other teachers, it would be beneficial for teachers to be given the opportunity to visit other schools and observe how teachers are changing

curriculum and instruction for increased student learning. The State Department of Education could create a school connection network which would allow schools to act as resources for each other.

The State Department of Education should provide speakers, workshops, or courses on particular educational topics so that all schools have equal access to important educational techniques. For instance, providing a series of workshops to all schools in Massachusetts on developing and integrating open-ended questions into the present curriculum, on critical thinking skills, and on the writing process would give each school system an equal opportunity to improve the quality of teaching. The workshops or courses could be developed by the State Department of Education and then assigned to the state colleges and universities for instruction. Teachers could then attend the workshops or courses at the closest college or university to them. If these workshops and courses are provided free of cost by the state, then all teachers would have equal access to the knowledge and skills expected by the State Department of Education and all communities would be more equitable in what they offer their teachers and their students. This may also be a way ensuring quality professional development for all teachers since there tends to be an inequity in the funds spent on education among the various communities in Massachusetts. This will be especially important for communities when it will be required that the students pass the new assessment test in order to qualify for a diploma.

A public relations campaign on the use of testing to improve education and not for the purpose of judging teachers, schools, and school system should be instituted. This campaign should help to improve teachers' attitudes toward the value of testing as a tool for educational improvements.

A committee should be established to safeguard the individuality of school districts. Mandated tests may lead to mandated curriculum which may lead to monochromatic schools. Few new educational advancements will ever take place if teachers and school systems feel stifled by mandated testing. There needs to be free time to experiment and allow the creativity of children to direct part of the curriculum.

Although not advocating a state-mandated curriculum, teachers would find that it would be beneficial if the state issued a guide which included topics which would appear on the test, especially in science and social studies. In this way school systems could make sure that those topics are covered by the time the students reach the grade in which they will be tested. The test would then be evaluating students' abilities in critical thinking and writing process and not whether they covered a particular topic such light or sound by the time the test was administered. The remainder of each school year could then be devoted to the topics of interest for each particular school district. Some schools which are near educational or historical sites may want to study them as part of their individual curriculum, such as studying about the Quabbin, Plymouth Plantation, Old Sturbridge Village, Old Deerfield Village, the writers of Concord, etc.

The State Department of Education needs to work more closely with teachers in all schools and all grades, not just those grades designated by the test. The process of encouraging change in curriculum and instruction must start with convincing teachers that this change is worthwhile and will truly benefit the students. Without convincing all grade level teachers of the benefits of open-ended questions, critical thinking, and problem solving, little change will take place in the classroom.

Recommendations for Further Research

Three recommendations for further research are advanced.

1. Since teachers indicated that meeting the individual needs of their students was one of the most frequent reasons for initiating changes in curriculum and instruction, it would be valuable to conduct a study to identify the individual needs of students and types of changes that teachers initiated to meet those individual needs. The information could then be used to compare how teachers respond to the individual needs of students as well as developing a compendium of techniques for meeting the particular needs of students.
2. Professional development within a teacher's school system was quite low as an influence for initiating changes in curriculum and instruction while workshops, conferences, and courses scored very high. Since professional development is one of the ways of introducing new ideas into the school system, It might be worthwhile to investigate why teachers are not influenced to a great extent by professional development and what can be done to improve it.
3. Since many fourth grade teachers indicated there was pressure upon them to increase test scores, it would be valuable to study how the principals view the Massachusetts Educational Assessment Program. What do principals think is the purpose of the MEAP? How do principals react to the publication of the test scores? Who do they think should be responsible for improving test scores? Should their school worry about improving test scores? How do they view their role in relationship to the MEAP? How do they help and support their teachers in relation to the MEAP?

Closure

The present study contributes to the understanding of the influences that prompt teachers to initiate changes in curriculum and instruction. Further, the

study examined the Massachusetts Educational Assessment Program as an influence which might prompt teachers to initiate changes in curriculum and instruction. Additionally, teachers were asked how the Massachusetts Educational Assessment Program had been helpful or how it had fallen short in helping them to initiate changes in curriculum and instruction in their classrooms.

The findings of this study show teachers are concerned about the individual needs of their students. Also, changes in family and society as well as changes in children have impacted the curriculum and instruction. Teachers are most influenced by workshops, conferences, and courses as well as by other teachers. Testing, both standardized and the Massachusetts Educational Assessment Program (MEAP), had little influence in most schools. Frequently teachers were not knowledgeable about the MEAP because they did not give the test at their grade level. Other teachers did not like teaching to the test or felt that it did not match their curriculum. Schools which did well on the MEAP usually had some type of student preparation program and teacher training program. Also, administrators in schools that did well on the MEAP usually offered support to the teachers in the form of training or released time to allow for planning. Commitment by all teachers was another area that showed up in schools that did well on the MEAP. In those high-scoring schools all teachers in grades one through four were knowledgeable about the MEAP and the skills necessary to do well on the test. There was a sense of test ownership among all the teachers. Everyone was working together for a common goal.

In most high-scoring schools the test results were important to the administration. For some school districts it was a matter of good publicity for the community. Teachers were aware that they had to keep up the high scores.

The move toward more accountability through testing is counter to what most teachers feel is important in education and that is the individual student. Each school and each teacher was concerned about their particular community needs. It might be reaching the high-level talented student or meeting the needs of a special needs student or meeting the needs of a student with family or emotional problems. Whatever the situation, the students come first, not the test or the scores.

APPENDIX A

**KIND OF COMMUNITY CLASSIFICATIONS WITH MEAP READING
SCORE COMBINATION CODE FOR EACH SCHOOL IN THE SAMPLE**

AND

1992 MEAP READING SCORES FOR SAMPLE SCHOOLS

KIND OF COMMUNITY CLASSIFICATIONS WITH MEAP READING
SCORE COMBINATION CODE FOR EACH SCHOOL IN THE SAMPLE

School	KOC Classification	MEAP Reading Score
School 1	Urbanized Center	High
School 2	Urbanized Center	Average
School 3	Urbanized Center	Low
School 4	Economically Developed Suburb	High
School 5	Economically Developed Suburb	Average
School 6	Growth Community	High
School 7	Growth Community	Average
School 8	Growth Community	Low
School 9	Residential Suburb	High
School 10	Residential Suburb	Average
School 11	Rural Economic Center	High
School 12	Rural Economic Center	Average
School 13	Rural Economic Center	Low

1992 MEAP READING SCORES FOR SAMPLE SCHOOLS

	Below				
	<u>Level 1</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Level 4</u>
Urbanized High	2%	10%	26%	52%	10%
Urbanized Average	3%	30%	44%	18%	4%
Urbanized Low	14%	42%	27%	16%	1%
Economically Developed Suburb High	3%	14%	33%	43%	7%
Economically Developed Suburb Average	4%	31%	39%	24%	2%
Growth Community High	7%	13%	45%	31%	5%
Growth Community Average	13%	37%	25%	21%	3%
Growth Community Low	4%	49%	31%	16%	0%
Residential Suburb High	4%	18%	42%	36%	0%
Residential Suburb Average	5%	32%	23%	36%	5%
Economic Rural Center High	2%	22%	44%	28%	4%
Economic Rural Center Average	13%	31%	33%	20%	3%
Economic Rural Center Low	11%	49%	24%	14%	1%

APPENDIX B

SAMPLE OF FORM LETTER TO SUPERINTENDENTS

Sylvia Abar

31 Gary Dr.
Westfield, MA 01085

Home: (413)562-7300
Work: (413) 283-4300

January 3, 1994
Mr. Warren Pelton
Superintendent of Schools
Converse St.
Palmer, MA 01069

Dear Mr. Pelton:

I am a doctoral student at the University of Massachusetts who is presently working on my dissertation under the direction of Dr. Robert Sinclair.

My dissertation focuses on "The Influences That Prompt Teachers to Initiate Changes in Curriculum and Instruction." There have been numerous changes in education in the past decade as well as many reform movements which have suggested and directed educational changes. Specifically, I am interested in the influences that prompt educational change.

As part of my research I would like to interview a few teachers in your school system in grades one through four. The interviews would be conducted during the school day and would last approximately twenty to thirty minutes. To insure that no educational time is lost for your students, I will reimburse your school system for the cost of a substitute teacher who could travel with me from classroom to classroom to monitor each class while the regular teacher is being interviewed.

In the study each school name would be assigned a pseudonym and teachers would be referred to by grade level and not by their name.

I hope you and your teachers will be interested in participating in this endeavor. Thank you for your consideration.

Sincerely,

Sylvia Abar

APPENDIX C

TEACHER BACKGROUND INFORMATION

TEACHER BACKGROUND INFORMATION

<u>Teacher</u>	<u>Date Interviewed</u>	<u>Grade Level</u>	<u>Years of Experience</u>	<u>Highest Degree</u>
1	2/7/94	1	2	Bachelors
2	2/7/94	2	22	Masters
3	2/7/94	3	17	Bachelors
4	2/7/94	4	37	Masters +
5	2/11/94	1	20	Masters
6	2/11/94	2	22	Bachelors +
7	2/11/94	3	23	Masters +
8	2/11/94	4	25	Masters +
9	2/15/94	1	20	Bachelors
10	2/15/94	2	4	Masters
11	2/15/94	3	6	Masters
12	2/15/94	4	26	Masters/ ABD
13	2/17/94	4	29	Masters +
14	2/17/94	3	27	Masters
15	2/17/94	4	27	CAGS
16	2/17/94	4	26	Masters
17	2/17/94	3	5	Masters
18	2/17/94	3	6	Bachelors
19	2/17/94	4	7	Masters
20	2/17/94	4	12	Masters
21	3/2/94	2	25	Masters
22	3/2/94	3	10	Masters
23	3/2/94	4	24	CAGS +60
24	3/2/94	1	27	Masters +
25	3/2/94	2	12	Masters
26	3/2/94	3	29	Masters
27	3/2/94	4	29	CAGS
28	3/15/94	1	12	Masters
29	3/15/94	2	22	Masters
30	3/15/94	3	24	Bachelors
31	3/15/94	4	20	Bachelors
32	3/16/94	1	21	Masters
33	3/16/94	2	26	Bachelors
34	3/16/94	3	7	Masters
35	3/16/94	4	8	Masters
36	3/16/94	1	1	Bachelors
37	3/16/94	2	25	Bachelors
38	3/16/94	3	7	Bachelors

(Continued, next page)

TEACHER BACKGROUND INFORMATION, continued

<u>Teacher</u>	<u>Date Interviewed</u>	<u>Grade Level</u>	<u>Years of Experience</u>	<u>Highest Degree</u>
39	3/16/94	4	23	Masters
40	3/18/94	2	30	Masters
41	3/18/94	3	11	Bachelors +
42	3/18/94	4	20	Masters
43	3/18/94	4	24	Masters +
44	3/29/94	1	22	Masters +
45	3/29/94	2	19	Bachelors
46	3/29/94	3	20	Bachelors
47	3/29/94	4	20	Bachelors
48	5/2/94	1	8	Masters
49	5/4/94	2	23	Masters +
50	5/4/94	4	22	Masters +
51	5/5/94	1	14	Masters
52	5/11/94	3	26	CAGS

APPENDIX D

SAMPLES OF THANK YOU LETTERS

Sylvia Abar

31 Gary Dr.
Westfield, MA 01085

Home: (413)562-7300
Work: (413) 283-4300

January 3, 1994
Mr. Warren Pelton
Superintendent of Schools
Converse St.
Palmer, MA 01069

Dear Mr. Pelton:

Thank you for the opportunity to interview teachers from your school system. Their responses will be a valuable contribution to my research.

Mr. Ricci was most cooperative and accommodating. The teachers I interviewed were very open and forthcoming with their responses. Once again, thank you for your cooperation.

Sincerely,

Sylvia H. Abar

Sylvia Abar

31 Gary Dr.
Westfield, MA 01085

Home: (413)562-7300
Work: (413) 283-4300

March 31, 1994
Mr. Lawrence Ricci
Old Mill Pond School
107 Main St.
Palmer, MA 01069

Dear Mr. Ricci:

Thank you for allowing me to visit your school and interview some of your teachers. You were very accommodating and your teachers were extremely cooperative. I am sure your school's contribution will be a significant component of my research.

Sincerely,

Sylvia H. Abar

Sylvia Abar

31 Gary Dr.
Westfield, MA 01085

Home: (413)562-7300
Work: (413) 283-4300

March 31, 1994
Mr. Dulude
Old Mill Pond School
107 Main St.
Palmer, MA 01069

Dear Mr. Dulude:

Thank you for taking time from your busy teaching schedule to participate in my research. I appreciated your cordiality, comments, and cooperation. Your efforts were essential to completing my research.

Sincerely,

Sylvia Abar

APPENDIX E

TEACHER RESPONSES FOR INSTRUMENT DEVELOPMENT

TEACHER RESPONSES FOR INSTRUMENT DEVELOPMENT

Changed philosophy of education in the ways children learn and schools are run.

Strong feeling that children learn better in more authentic ways than using the text. It is more important for students to learn in project oriented ways than to use the textbooks.

Issues of reform and restructuring of education.

Keeping all children in the classroom instead of sending them to a resource room.

Changes are made yearly according to individual personalities and abilities of students.

Keeping up with current events.

Cultural events.

Forced changes.

To provide better service for their children because of their needs

Know about new ideas

Classes, seminars, further education.

Burn out. Tired of the way you are doing something.

Changes made because of the changing standards like the math standards from the National Council of Teachers of Math.

To make changes for our students in anticipation of what they will need in the future.

To make learning more fun, interesting, and enjoyable.

Administration tells you to

(Continued, next page)

TEACHER RESPONSES FOR INSTRUMENT DEVELOPMENT, continued

If a new curriculum is accepted by the school committee, you teach it

Watching what's going on in the classrooms around you
You try to keep up with what the other teachers are doing

Courses

Educational journals

Being exposed to things and ideas that might work better than what you are now doing

Conferences

Talking with other teachers

Parent pressure

Changes in the expectation level you have for your students

Testing results that conflict with your opinion of the child's actual level

Lack of support from administration, especially in special education

Like to experiment with new things

Don't want the children to be bored

I want them to learn more easily

APPENDIX F
SURVEY INSTRUMENT

SURVEY INSTRUMENT

To what degree did each of the following influence your decision to make changes in curriculum and instruction in your classroom

<u>Greatly Influenced</u> 1	<u>Influenced</u> 2	<u>Somewhat Influenced</u> 3	<u>No Influence</u> 4	
Reading professional journals and books	1	2	3	4
Classroom observations of other teachers, either formal or informal	1	2	3	4
Professional development offered in your own school system	1	2	3	4
The move toward more mainstreaming of special education students into the regular classroom	1	2	3	4
Results from standardized test scores by your own school system	1	2	3	4
Wanting to include a more multicultural aspect to the curriculum	1	2	3	4
Test results from the Massachusetts Educational Assessment Program (MEAP)	1	2	3	4
Discussions with other teachers about curriculum and instruction	1	2	3	4

(Continued, next page)

Survey, continued

<u>Greatly Influenced</u> 1	<u>Influenced</u> 2	<u>Somewhat Influenced</u> 3	<u>No Influence</u> 4		
		1	2	3	4
The need to revitalize curriculum or instruction in the classroom					
		1	2	3	4
New standards such as the standards proposed by the National Council of Teachers of Math					
		1	2	3	4
An interest in experimenting with new ideas or methods					
		1	2	3	4
Preparing students for the future					
		1	2	3	4
Making learning more enjoyable and interesting					
		1	2	3	4
The current debate about reform restructuring of education					
		1	2	3	4
The need to try something new because you are dissatisfied with the way things are going at the present time					
		1	2	3	4
Learning about new ideas, methods, or techniques from other teachers					
		1	2	3	4
The need to get more parental involvement in education					

APPENDIX G
CONSENT FORM

Study of the Perceived Influences That Prompt Teachers To
Initiate changes in Curriculum and Instruction

Consent for Voluntary Participation

I volunteer to participate in this study and understand that:

1. I will be interviewed by Sylvia H. Abar using a combination of guided interview questions and a short survey form. The purpose of the interview is to ascertain the influences that prompt teachers to initiate changes in curriculum and instruction.
2. The information I will be giving in response to the interview questions and the survey form will be my own perceptions related to the influences that prompt teachers to change.
3. My name and school's name will not be used in any part of the study. The school will be referred to by a pseudonym. I do understand that I may be identified by grade level such as "the fourth grade teachers....in comparison to the first grade teachers."
4. I may withdraw from part or all of this study at any time.
5. The results from this interview and survey will be included in Sylvia H. Abar's doctoral dissertation and may be included in manuscripts submitted to professional journals for publication.
6. I am free to participate or not to participate without prejudice.
7. I have the right to review material prior to the final oral exam or other publication.

Researcher's signature

Date

Participant's signature

Date

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